The First Fintech Bank’s Arrival

From Book to Bank in 12 Months

Second Edition

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286 P.S. 22 business books that blew my mind
The bank of tomorrow doesn’t deliver products, it delivers the utility of banking through exceptional experiences. In The First Fintech Bank’s Arrival Slava explains that fintechs should not be seen as just startups that tackle say a digital bank account, payments or lending, but the logical unbundling of traditional banking into better designed day-to-day experiences. Do yourself a favor and get a copy today!

FinTech has quickly become the hot bed for innovative business models, which often attempt to build a collaboration between (old economy) banking institutions and (new economy) startups. But more often than not, such collaborations feel like a distant reality. The First Fintech Bank’s Arrival shows that the future of banking is here and it walks you through the process of creating an exceptional customer experience. Slava doesn’t just illuminate on his years of fintech experience, but appeals to compelling use cases and market analytics to bring you to the collision of innovation and banking. This book is a winner!

This book is candid, compelling, and carefully researched, providing a fascinating description of Slava and his team’s experience. It is also a great source of up-to-date references. A must read and must have for bankers, entrepreneurs, and anyone interested in FinTech and banking.
From Book to Bank in 12 Months

General overview of your company’s financials & the most important info: transaction history, invoices, P&L, to-do list, current balances, etc.

Fintech bankings means a number of apps will be integrated. Each app provides certain functionality (like E-Invoicing) and a number of widgets that can be added to the Dashboard. Thus, each product line we add can be represented on the Dashboard too.
Having summarized my limited 5-year experience in fintech and intuitive guesses on the next industry trends almost a year ago in September of 2017, I presented my first book “The First Fintech Bank’s Arrival.” It was somewhat overly ambitious on my part since I’m no writer and I have never viewed myself as one and still don’t (and those who know me personally know that I cannot even string a sentence together correctly in English). When people say “the first book” they casually hint at the second and third book. I hope that in my case I will not bore readers anymore and won’t clutter the information space with new scribble. So I’m a dilettante in everything - I’m always interested in something new, I’m asking an infinite number of questions, and I’m not afraid to share the answers found. I have never laid any claim to any fundamental novelty or significance of my ideas; rather, I share my experience with the hope of saving time and energy of other dilettantes like myself.

Quite to my surprise, the book received a positive response: more than 11,000 followers on our Facebook page, followed by invitations to present the book at 15 events in across eight countries (Singapore, the Philippines, Portugal, Belarus, Spain, USA, Dubai, and China), even some fintech experts, bank heads and regulators found it useful and recommended it to others to read. Especially flattering and humbling were the invitations from two prestigious business schools - INSEAD and Wharton! And I’m very grateful to them all and those who asked me questions personally or online.

Many times, I heard the same question: “Why don’t you want to build the bank you wrote about yourself?” The world knows only a handful of coaches who can play well on the field themselves, so at first, I could not garner enough audacity to change investor shoes into startup sneakers and run out onto the field. One can say that our project was born from the question “What if?” - although at that time it was not yet conceived.

In October and November 2017 (a month or two after the book was published), my colleagues and I were attacked not only by applicants for investments or advisory services representing hundreds (nope, thousands) of newly-born ICO startups, but also by several “happy” dozen of the “lucky” ones who had already successfully “raised millions in investments” through a new way to raise capital (and unfortunately, often deceiving investors in return), and had faced the problem that their banks do not open accounts or freeze and close accounts of their companies. Their common question sounded very stupid to me at that time: “Do you know any bank, anyone, from anywhere, that could open an account for us?” It was late 2017, amidst tons of rapturous articles both about the bright prospects of blockchain technology in general, and the success of specific companies
in particular, such a question came up from “the most progressive innova-
tors.” At first, I did not take it seriously. I thought that brilliant physicists (i.e. successful newly-born ICO millionaires) might not know how to cook soup (i.e. open a bank account). But the more often I heard this question the more I realized that this was not a joke.

I gathered a small team and we spent the autumn of 2017 focusing on the validation of the problem. We asked a lot of large and small, technologically advanced and unadvanced banks from different countries whether they opened accounts for this kind of customers (no), and if “not”, then why and under what conditions could they open accounts for them. It would seem that a relatively small number of players have accumulated a total of several billion dollars, which they can not normally put in a bank account and use them for their business development - these potential customers are yours for the taking. But it turned out that even though banks want their billions, they can not accept them. I will not list here all the problems, causes and other obstacles “why not“ - if you are interested, I can devote a separate text to all these meetings and insights received.

I believe one of the most productive meetings I had was the one with Carlos Torres, CEO of the BBVA banking group, which took place on November 1, 2017, in my office. He summarized the essence of the problem very well and, at the same time, the prospects for its solution. I suppose this was the moment when my team and I decided to build such a bank ourselves (since no one else for some reason has done it). That’s how “dilettante for life” turned into a “startup willy-nilly.”

Frankly speaking, while we have been dealing with the problem of bank rejection of crypto-related companies, we have found out that a large number of people and businesses were bereft of love (or more precisely, understanding) by banks. Foreigners, charity funds (true story) almost all freelancers and other representatives of the GIG economy, as well as legal marijuana sellers, refugees, unbanked clients, politically exposed persons, the several tens of thousands of resident companies of the popular e-Residency project can only open accounts involving 1-2 banks, and other key unbanked customer segments (which I promise to disclose later).Initially, our project had the working title, ‘The Bubble Bank,” since all the new players were called nothing but a “bubble,” we decided to manifestly call the bank accordingly. We spent November and December 2017 analyzing different ways to solve the problem: a partnership based on the license of a friendly bank, a rapid receival of a banking license in a country with a weak economy (and often with low requirements for the origin of capital, and therefore, a friendly regime for crypto and anything in general), a purchase of a small European bank and a change of its
business model for a new segment of customers ... we tried to come up with every idea, but just ran into walls.

In the end, we realized that if we don’t want this bank to be established “quick and dirty” (in order to make a fast buck and skip on the island to lay down under the palm tree), but rather want it to be done qualitatively and for a long time, we should begin with the most difficult market in terms of regulation - the USA. In the beginning, we thought that we could “take a shortcut” to the market by purchasing a small bank and changing its business model. We even reviewed more than 20 banks in different states for these purposes. But quickly enough we realized that the bank in America is not about having money to acquire it (this is the smallest problem), but about WHO acquires it and WHY (what will we do with it). If you want to serve these kind of businesses, then a bank acquisition will not save you time, energy, or money. There was only one way out: to apply for a new banking license. And here it is necessary to understand that regulators all over the world, and especially in the US, are not trying to issue more new licenses but, on the contrary, are trying to reduce their number (for understandable and rational reasons).

Everyone tried to talk me out of this by making all kinds of arguments: it is very difficult in general, and it’s impossible to serve such customers; “no digital bank has its own license in the US, so what are you trying to do?”; you are a foreigner, on top of all, Russian (“Are you reading the news in the US?”). Frankly, when looking at the overall picture I shared the skepticism of “well-wishers”: the number of “cons” was ten times higher than all permissible norms in comparison with possible prospects. But my natural dilettantism took my curiosity - “Why not give it a try? What if it works out?”. After all, if we decompose this hopeless path into concrete steps, then each of them is quite understandable and surmountable.

I will not bother with all the stories of where, how and with whom we looked for approaches to begin climbing this mountain. As a result, on January 15, 2018, we landed in the city of San Juan in Puerto Rico, an independent US territory whose banking system belongs to the Federal Reserve in New York. We immediately fell in love with Puerto Rico - both in terms of everyday life, the social and cultural environment, business opportunities, and the value that we can bring back to the society here. We are: myself (almost 35), my VC partner, Igor (32) and Jeremy (24).

We decided to name the bank Arival for a number of reasons. This is the reference to the title of the book (“The First Fintech Bank’s Arrival”), with which everything began and the spirit (approach) of which is laid in the foundation of the bank. At the same time, it’s “arrival of the first fintech bank” and “a rival for traditional banks”, which reject many clients (not only
crypto), in addition to not willing to understand them and deal with them. In addition, “the new arrivals” are renegades and conquistadors in new industries, creating new businesses and approaches, a new wave of entrepreneurs that appear with the advent of new technologies.

525 years ago, on November 19, 1493, Christopher Columbus (already in the rank of admiral, and vice-king of newly discovered lands) discovered the island of Puerto Rico during his second voyage consisting of 17 vessels with a crew of more than 1,500 people. Adventurers, pirates, dreamers, someone greedy for gold, someone craving fame, someone dreaming of a new better world, someone carrying a new faith - a lot of people, who for positive or negative reasons did not like the old life, discovered America, the New World. Today, we are the bank in the US to serve US-based and foreign businesses, which exist in the digital borderless world and do not want to depend on geographic limitations. Inspired by United States history and spirit, we believe the modern world needs a “E-USA country-in-the-cloud approach.”

Subsequently, we were joined by a very strong CTO with a well-coordinated team that worked with many of the largest fintech companies, an art director who came up with the name, brand and all the identity, and a Chief Compliance Officer, who, on the one hand, was experienced enough to understand both theoretically and practically what should be done, and, on the other hand, with an “open mind” to look at the process without blinders and stereotypes, and to find opportunities how to build the process of compliance even better and more convenient.

When you establish a new bank, you think about the future customers as much as possible, about their problems and how you will solve them, what technologies to use, how to make it convenient for customers and, at the same time, different from other players. But when you apply for a license, the main issue that will bother the (or any) regulator is how your compliance will be organized, and how you will do KYC and AML. And this is understandable - you see the world through the eyes of new opportunities, and the regulator wants to ensure that you will not become an accomplice (intentionally or unintentionally) to “dirty money” financial transactions and able to protect the money of your business clients.

Although only the lazy did not say that we will never find answers within the framework of compliance that will satisfy the regulator, we approached this task not as “forced encumbrance” but as one of the main bank “features” and made it our passion and succeeded in this well. Together with our partners from A.ID (compliance-as-a-service startup), Promontory Group (very big and sophisticated compliance advisor, consultant and auditor), DLA Piper (big international legal firm) we created a vision, new
approaches and ways to apply the newest technologies in order to verify and assess our customers’ risks at the highest possible level, as no other bank does. At the same time, we managed to make the entire process so convenient, transparent, adequate, and replicable in the future that our customers wouldn’t go crazy about it and would also see value in it now and later. But I’ll talk about this somehow later and independently (in case you are wondering).

Understanding and building the compliance required a huge amount of our time, nerves and money. At various stages, we involved a large number of compliance specialists from different countries. But it was worth it! Now we understand that having such a compliance creates a foothold not only to attract and serve crypto clients now, but also to enter new niches of “non-standard” customers that are underserved by traditional banks because of their misunderstanding.

The next goal is to obtain a full-fledged License for operational activities. I hope that we will successfully reach it; although of course, nobody is immune to failure and no one has any prior guarantees from the regulator, especially when you are doing something first on the market.

We are now approaching the first key milestone in the development of Arival Bank – the initial approval from the regulator: The Official Banking Permit (otherwise known as “Permit to Organize”).

How did we manage to get to this point and find a common language with George Joyner (the Commissioner) and his team? I might be wrong - and it’s better to ask him directly - but here’s my opinion about the possible reasons. First, he is advanced in terms of knowledge and understanding of new technologies. Secondly, we initially focused not on innovation or disruption of the market, but on the fact that we understand what a bank is, what banking regulation is, what compliance is and that in our case we must do it even deeper and better than the rest. Thirdly, we do not represent the crypto-world or own crypto-assets, and we have no conflict of interests in this matter. Fourth, we know well not only fintech in general (not in theory, but in practice!) but also digital banking (as investors in a number of successful digital banks). Fifth, our bank started not with a banal greed for gain from the current situation of market asymmetry, but with a dream of an ideal, better bank, which was reflected initially in the book and appreciated by experts from different countries. Sixth, with our investments and researches, we have earned a reputation in the fintech world sufficient to attract other fintech startups as partners to design such a bank.

And most importantly, we are not building a crypto bank for crypto clients. We are building a new bank in America for a new generation of entrepre-
neurs from the US and other countries and to start with we decided to fo-
cus on crypto-related businesses. But in general, our vision is much further
and wider. The American market has once produced the phenomenon of
digital banks, but in recent years it has lost in terms of innovation to other
countries, especially in the digital banking for businesses. In fact, if/when
we get a banking license, it will not only be the first banking license in the
world given out to work with such business clients as crypto-related com-
panies, but it will be the first digital bank in the US with its own license!

As far as our approach to a product range is concerned, we do not want
to create products ourselves. We want to aggregate the best fintech solu-
tions under one roof. Just imagine that you could use, for example, Square,
Stripe, LendingClub, TransferWise, AngelList, Robinhood, Kickstarter as
one service. And you have more than seven of them - you will have twelve
services available, and all are tailored for businesses instead of retail cus-
tomers. And you do not need to register and log into each of them sep-
arátely, the data is integrated and complementary, the accounts are com-
bined, and one support service for all inquiries ... isn’t it fascinating? On
one hand, this is a return to the origins of banking, when the bank itself is
only responsible for storing money in the account, and on the other hand,
it reflects the essence of what fintech does: delivering new client experi-
ence instead of new products, technologies, prices or types of transac-
tions. We already have exciting things to showcase and share about our
product, but it’s better to do it independently.

This story is neither about a new unicorn, nor about the market revolution,
nor the fact that we are against someone and want to take some market
from other players. This story is about a small group of ordinary guys who
met customers who found it painful and uncomfortable to deal with the
current market offer and these guys started asking questions. After not
finding answers, they began to do something themselves, gradually and
step by step.

This is the story of a team who were told they were
destined to fail, but continued pushing through.
The best part? It’s just the beginning and I plan to
share every bit of it with you all.
It’s a Revolution, Not an Evolution

by Jim Marous
Co-Publisher, The Financial Brand

Digital banking may very well be a global movement rather than a US or European phenomenon. Even so, why are European banks making more progress than the US market?

Although challenger bank activity has been growing worldwide, the influx of mobile-only banking options has been lackluster in the U.S.

A theory is often times useless without practice. This year, America fell outside the top 10 in terms of the most innovative countries. To be frank, I would argue that America could be ranked even lower.

Of course I am biased, but our lack of innovation is not due to the lack of innovative minds in the US. We tend to move in lock-step and we approach digital banking as if it were an evolution - not a revolution. The reason is because we have a very old financial services industry filled with old banking minds. In such an environment, innovative movement is not a formal part of the process.

The most innovative banks in the US are smaller banks or banks owned by foreign companies. Some smaller notable digital banks in the US include Moven & Simple. It is also easy to see what banks like BBVA are doing in terms of US presence (partnered with Azlo), but they are not US-based. Interestingly so, most, if not all neobanks in the US don’t have their own banking license. Instead, they leverage a partner’s banking license to operate and deliver their services (such as Moven with TD and Azlo with BBVA).

The biggest opportunity in the US banking market might very well be in the SME space. Digital banking for small to medium-sized businesses allow banks an opportunity to capture businesses who are underserved in terms of product accessibility and financial tools compared to retail consumers and bigger corporates. Historically speaking, small businesses have always been the backbone of the US economy. More than 28 million small businesses exist in the United States.

Many award-winning digital banks come from Europe and even developing countries like Turkey, Poland, or Italy. The fact that there is not established (historic) banking environments in these countries provides a real opportunity to thrive and innovate. In the US, roughly 75% of banks had their back offices built in the 1970s. It is extremely difficult to build innovation over traditional foundations. Imagine installing a turbo inside an old gas powered car.

In Europe, the level of competition can be felt. Think of it as the race to space: who will innovate more aggressively and introduce the next compelling platform? In the US, the competition is unfortunately not as apparent. European countries can innovate easier considering they play on a
smaller playing field. In the US, there are more than 7,000 small banks. It is very hard for them to keep up on compliance let alone innovate.

In the US and beyond, I think the biggest risk and barrier in digital banking is complacency. So often, we get buried in the to-dos and actually don’t do anything. Digital banking is more important than just an attractive interface and being device agnostic. First and foremost, banks need to learn how to use data to build better digital account opening engagement and ongoing experiences with customer journeys. This starts with corporate culture. A strong corporate culture showcases a genuine understanding of customers and how you can make their life easier. When you look at the ability to move forward as an industry - it goes back to the ability to use data to make a better customer experience.

Fintech banking could be the perfect fit for the US market and digital banking for SMEs. Small businesses need banking products and services tailored specifically to their day-to-day business needs. Many traditional banks fail to meet the expectations of their SME customers due to a variety of factors that could include: user experience, pricing, or merely the quality of their product. Using an open-API banking approach, fintech banking enables access to top quality fintech products on a very user-centric level by integrating them into one platform. Currently, most businesses could utilize anywhere from 10 to 30 different financial service providers to meet their needs. This ultimately creates a chaotic experience filled with different logins, data that is not aggregated, and the movement of money that is not transparent. Fintech banking solves this by bringing the best of the best fintechs into one banking interface for customers.

The fintech banking concept allows banks to go back to the very essence of banking: storing money on an account. The idea is not to reinvent the wheel or compete with other fintechs, but rather develop meaningful partnerships to produce a relationship with customers long-term. Customers will always want more and more. Banks may not be able to keep up, but fintechs can.

By implementing fintech banking, banks can focus on using digital technology and data to genuinely build better experiences for their customers. Imagine logging into one banking platform and having the ability to access some of your favorite products and services - inside one interface.

No need to open more accounts, logins, or anything of the sort with other providers. This is more or less like something you could experience with Uber or Amazon, but in the banking realm. Digital banking needs to be simple and intuitive. How many taps does it take to order an Uber ride?
Moreover, I remember when Amazon introduced preferential pricing with Amazon Prime. You are only a few clicks away from ordering your favorite product and banking should be no different. The issue isn’t if banks are reliable - most are reliable and trustworthy. The issue is how reliable their customer experience is.

I’ve said this before and I will say it again: The future of digital banking belongs to data, advanced analytics, and digital technologies. Fintech banking could pave the path for all three to intertwine on a very productive level. I dream of the day when digital banks use voice to transact, interact, and deploy services. Imagine ALEXA or SIRI waking you up saying, “Good morning Jim, here are your financial holding and portfolio updates. Don’t forget, you have lunch with Stuart at 2PM. Do you want me to order you the Uber? Also, the forecast looks rainy today so do bring an umbrella. By the way, your wife wants lasagna tonight - shall I order the ingredients?”

Digital banking will either be the center of a consumer’s life or a sidebar that is driven by Apple, Amazon, or Google. Whereas autonomous vehicles correlate with the goal of accident avoidance, the future of digital banking correlates to the avoidance of mistakes on the financial side. Instead of telling you what happened to your accounts, smart banking could tell you what you should be doing to your accounts in the future and how it will make your life easier.

Moving forward, the digital banking competitive landscape in the U.S. seems to be heating up after years of inactivity compared to other markets worldwide. In 2017, Berlin-based mobile bank, N26 (originally known as Number 26) announced plans to enter the U.S. market, showing interest in its first non-EU market. According to N26, the offering for U.S. customers will be similar to the products available in the European market in addition to new services tailored for US customers. In June of 2018, British mobile-bank, Revolut shared its plans of applying for a US banking license. Revolut, has 2 million customers and recently raised $250M at a $1.7B valuation and plans to partner with a US banking partner in the summer of 2018. Square, the payments company launched by Twitter CEO, Jack Dorsey is also on the path to applying for a US banking license.

We are certainly hitting the next wave of digital banking in the US. Will the introduction of new digital banking solutions accelerate the growth of fintechs and help create robust product offerings using open-API based banking?

We are at the final countdown of digital banking in a market prime for its transformation.
It’s sort of exciting... breaking the rules?

by Natalia Vodianova

Supermodel, Philanthropist, Elbi co-founder

— Hermione Granger, Harry Potter and the Order of the Phoenix

Natalia is a Russian entrepreneur, philanthropist and supermodel. She has achieved global success as a runway, editorial and advertising campaign model and according to Forbes, is one of the top 10 highest earning supermodels in the world. Natalia is universally well known for her philanthropy. Apart from supporting the NSPCC, Women for Women, and RED, she is the founder and president of the ‘Naked Heart Foundation,’ a charity organisation that strives to provide a safe and inspiring environment in which every child living in urban Russia can play as well as providing care for children with special needs and their families. Since establishing the Foundation, Natalia and the Naked Heart Foundation have raised €50 million for charity. Most recently, Natalia co-founded Elbi, a platform that brings innovation to charity and philanthropy, making charitable giving more appealing to a millennial audience. It removes the barriers to charitable giving, making it simple, fun and rewarding for people to make a difference – while giving great causes much needed visibility and support. By connecting digital do-gooders with charities, Elbi has so far helped more than 2500 causes, run by 60+ charities, in 88 countries across 5 continents.
You might guess that charity is not the easiest job: it requires a certain calling and passion. But most likely, you never knew that it is just as hard when it comes to charity sector relationships with banks and payment services.

We at the Elbi charity mobile app (and “Naked Hearts” foundation before that) have faced these problems multiple times. We’ve been spending a lot of time and effort to explain to these institutions who we are, what we do, whom we help.

A little less than a year ago, in January 2018, Apple agreed to meet us halfway and provided Elbi with Apple Pay to give our users the opportunity to donate to over 60 charity organizations in 80 countries around the world with a single touch of the Love Button. It was a real breakthrough, but we still have a lot of work ahead of us.

One of the challenges being “how do we reduce costs and increase the speed of charity transactions?”

Let’s say a U.S. citizen has decided to donate $100 to educational programs for girls in India via Elbi. Here comes the first round of commissions fees - for conversion and transfer. Neither Elbi, nor Apple charge fees for donation via the app, but both the user’s bank and the ‘Stripe’ company that accepts the money transfer from the charity fund’s side take their fees, and we just have to deal with it. Then, Stripe transfers money to our partner fund, chosen by the benefactor. It brings with it yet another set of commission fees. Only then does the ultimate recipient gets their money from this fund - for instance, a school in the state of Rajasthan - and it’s a good thing if they don’t then also charge the school for withdrawing cash.

The donation makes a long journey, and middlemen take a ‘bite’ of it in commission fees on each step - and it hurts even more that it’s not charity organizations who do this, but banks and payment systems.

Throughout the years, I and my co-founder - Timon Afinsky have been attentively following and communicating with entrepreneurs from the blockchain industry. We have heard many interesting ideas in this space, but each had its own obstacles.

For example, we have been offered to either tokenize money to move tokens inside the chain, or do the final settlement (a direct money transfer from the benefactor to the one in need) only upon fund withdrawal from the system. There is an alternative to use existing cryptocurrencies as a universal means of payment. But after exploring this topic further, we couldn’t help noticing a fundamental problem with this: banks and payment services don’t like to serve crypto-related companies even more than charity funds (and blockchain-related companies as well - they don’t see any difference), and keep closing their bank accounts around the world en masse.
It’s sort of exciting... breaking the rules?

The issue stays the same: it is hard to track the source of funds with too many participants from all over the world at the same time. It’s no wonder that it causes idiosyncrasy in banks’ compliance departments :)).

When someone wants to donate money to a charity fund in cryptocurrency, the best option for the fund is not to mess with it and decline the donation, to avoid nightmare inspections from the bank’s control service.

The next scenario for the use of blockchain in charity we are thinking about is tokenization of tangible (but non-monetary) and intangible assets. We often get requests from people who are not ready to donate money, but are willing to help others providing goods and services they work with. Technically, it is not that easy – goods need to be taken off the donor’s bank balance sheet, registered on the organization’s balance sheet, distributed among benefactors. Then, we need to transparently track the distribution chain and ultimate usage. In this regard, we are taking part in a great experiment with fashion brands and our internal loyalty points for good deeds - LoveCoins. But we are still far from reaching the goal we have set, it requires troops of super hero blockchain, logistics and accounting professionals to create the best mechanism.

The third scenario is reporting and transparency improvement for charity organizations. When giving away money to a fund, donors want to know exactly who and how they helped - reading an annual report about all the people the fund supported is not engaging and doesn’t give a sense of involvement.

Meanwhile, a year ago I read a book called ‘The First Fintech Bank’s Arrival’ by a fintech investor I know, Slava Solodkiy. Even though we constantly follow new technologies and have started to get the hang of financial services, I found a lot of new information in this book. Turns out, several fintech startups in different countries have significantly succeeded in making their service more convenient, cheaper and faster than traditional banks, each in their own vertical. I was especially interested in the chapter about fintech for unbanked clients - I couldn’t imagine there there are so many technologies and teams that provide financial services in places with no drinking water, let alone banks! At the same time, fragmented startups in various countries can’t join forces to rival old market players and replace them. This is what the book is about: the next step in fintech, when separate mono players start to assemble fully-fledged new structures to create a new generation of fintech banks.

Right after the book was released, I was sitting with Slava at The Lowell, an old New York hotel that opened its doors several years before the Great Depression in the 1930s. We discussed his vision on how existing fintech
and blockchain startups can change the world, and help charity organizations along the way. We found interesting ideas on how to raise efficiency here and there, but saw barriers in their implementation and utilization at the same time.

Sometime later, Slava and his team decided to ‘change shoes’ from fintech investors to fintech entrepreneurs - and to launch the bank he has described in his book. In the bank’s first phase he is going to focus on the first niche of “rejected” clients – crypto and blockchain businesses. From the beginning, Slava asked me - how to get this bank’s DNA right from the start: socially responsible, diverse and empathic (or humane, if you prefer this word).

In the end, we decided to join forces and to create a joint product between Arival and Elbi, specially for charity organizations. With a friendly and simple onboarding process created with our understanding of how this industry works, and high-tech compliance from the bank’s side. With lower fees - the bank wants to help, using its infrastructure and employees’ time, instead of making money from clients from the charity field.

The Elbi team has been working with a large number of charity organizations around the world, choosing the most efficient ones, verifying their activities, understanding the specifics of their work and the lives of people they help, analyzing approaches and sharing experience and best practices of funds from different countries.

It is very important for me that Arival Bank is created by like-minded people - just like the Elbi team: they care. Together, we want Arival Bank to become not only the first crypto-friendly bank, but also the first charity-friendly bank!

Several days ago, the bank’s team showed their product’s first public demo at Finovate Hong Kong - and immediately won best of show (a “Fintech Oscar“)! I couldn’t be happier that industry specialists and experts supported this project with their votes and confirmed that it is needed by those who it is created for.

I’m glad to announce that I have joined Arival Bank’s team as an Advisory Board Member - I’m planning to help the project to build their internal culture, based on corporate social responsibility values, and create the banking product that will make charity organizations’ and donors’ lives easier. From the business point of view, Arival Bank claims - and Slava and I both agree: focusing on bringing more diversity and inclusivity to the fintech sector can only be a really good thing...

And as Hermione Granger says in Harry Potter and the Order of the Phoenix: “I mean, it’s sort of exciting, isn’t it, breaking the rules?"
On the way to the first fintech bank

The numerous filters make this page very intuitive. The filters are applied immediately and allows you to navigate your history effortlessly.

This is the bread & butter of any income/outcome related to the accounts. Here, you can find any transaction that has been received, sent, or even rejected.

When you click on the transaction, you will find more detailed information: bank account info, recipients or any related entities + you can also read or add comments for your colleagues (e.g. your accountant).

Genuine chat support at your fingertips.

Shortcuts for your favorite products.
The market starts talking about fintech bank[1] - please, do not confuse this fundamental concept with online-, neo- or challenger banks! In principle, online banks provide an interface for opening and managing accounts and deposits, as well as issuing banking cards. However, the financial services spectrum is huge: transfers, micro-P2P-P2B-lending, crowdfunding and crowdinvesting, online-trading, personal financial management, etc. In the short term, no player can deliver 10 and more major products in a set for retail and SME clients. Every startup has its piece of the puzzle and piece of the “market pie”. Most exit strategies in the market look like “to be acquired by a major bank, telecom or Internet giant”, which by the way have a profitable core business (with other elements). Just imagine how many products (customers, turnover, etc.) will have a fintech bank built by combining 6-8-10 successful fintech services! It would be very convenient for customers, simplifying the problem of choice and improving the services combined together. Moreover, it would solve many problems of these fintech startups: their market share and “premium for leadership”, a variety of monetization methods, improved cross-sales, increased margins and profitability, integration of services based on new technological platforms (rather than old bank IT infrastructures!). It’s like the introduction of Tesla: a completely new ecosystem of modern services creating new consumer experience! But it’s not just an electric motor inside an old well-known car brand or other services like charging stations, without) dealer service and 24-hour customer support based on big data provided by an old market player.

One of the core differences in approach to financial services between banks and fintech lies in democratization. While banks have always been looking to control the financial services industry, with the rise of fintech, the situation has changed drastically. If we were to decompose a bank, there would be a fintech company that can substitute each service the bank provides. However, a single ‘problem’ remains - banks are still holding our accounts. So we still need a bank, but not for the reasons we needed it ten years ago. Over time banks may become sort of ‘warehouses’ bringing together fintech startups[2] to serve each particular customer need.

The second wave of fintech: What is a “fintech bank”?

Philippe Gelis, CEO at online-remittance startup KANTOX, told [3] about in 2015 “The second wave of fintech, to come in two to five years’ time, will be ... a type of bank based on five simple elements”: 1, A core banking platform built from scratch; 2, An API layer to connect to third par-

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1 http://www.europeanfinancialreview.com/?p=10748
2 https://www.dealstreetasia.com/stories/fintech-mergers-are-reshaping-nascent-sector-how-can-42497/
3 http://fintechranking.com/?p=925
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1. A compliance/KYC infrastructure and processes; 2. A banking license, to be independent from other banks and the ability to hold client funds without restrictions; 3. A customer base/CRM, meaning that the fintech bank will have the customers, and a customer support team.

The products directly offered by the “fintech bank” will be limited to “funds holding”, comprised of: bank accounts (multi-currency); credit and debit cards (multi-currency); eWallet (multi-currency). All other services (investing, trading & brokerage; wealth management; loans, credit & mortgages; crowdfunding (equity and social); insurance; crypto-currencies; payments; remittances & FX; this list is not exhaustive) will be provided by third parties through the API, including old-school banks, financial institutions and fintech companies.

Imagine that you are a client of this “fintech bank” and that you need a loan. You do not really care if the loan is provided to you by Lending Club or Bank of America, what you look for is a quick and frictionless process to get your loan, and the lowest interest rate possible. “It is a simple mix between an access fee to the “marketplace bank” and a revenue sharing model with the third parties providing additional services.”

Here we have a completely different approach regarding the relationship with incumbents. Fintech banks, thanks to their banking license, will not rely anymore on any bank to be and stay in business, and so will not be at the mercy of incumbents. What is even more powerful, through the marketplace, incumbents will become “clients” of fintech banks, so the system will be completely reversed. The beauty of “fintech banking” is that it competes directly with banks on core banking services without the need to build all the products. Most bankers are not yet worried enough by fintech to react to its coming second wave. This creates a fantastic “window” for us, fintech entrepreneurs, to build it, and once it’s done, it will be too late for them to react.

Neo- and challenger banks want to become interfaces for “fintech banks”

German N26 plans to systematically “rebundle” and create tight-knit integrations with other startups that focus on specific verticals. What this could effectively mean is that through your N26 bank account, you could access TransferWise’s cost-cutting currency exchange service or perhaps even a Robinhood-style stock investment service.

British Tandem founder Ricky Knox said the aim is to differentiate the bank from the rest of the market by using customers’ data to offer good deals on the money they spend, such as utility bills as well as on financial products.

4 https://www.techinasia.com/talk/fintech-asia-grow-bankasaservice
British Mondo has an open API from the get-go, part of a wider differentiator that’s seeing it build a “full-stack” bank with its own in-house banking tech in order to offer features that legacy banks struggle with as they are reliant on outdated software and infrastructure.

**Fintech bank: from Uber to Tesla’s user experience**

Enough has been written about who the possible super aggregators could be and quite a bit has been written about the potential ‘Uberization’ of banking. The banking response though could have more to do with Tesla than Uber.

Tesla is the world’s most famous electric car, but it’s actually more than that. It’s a stylish, environment-friendly mobility platform changing infrastructure, a new type of insurance, online-customer support, and dealer-less distribution model. The real experience of Tesla includes the value of being connected, which it’s trying to provide to the customer. This value is delivered at the individual car and driver level, and the collective learning from all cars that Tesla sells. It is a platform that iteratively adds value to the core product while learning everything it can from the use of its vehicles.

“Fintech bank” is a value ecosystem. It’s not feasible or viable (and perhaps not even necessary) for a bank to provide every product or service that a customer may need, but it can very well be the channel through which the product is provisioned by another party. Platforms will be as much about ‘coopetition’ as they are now about competition. I believe, that the next step (and this step will be not about more money, but about the real evolution of fintech movement to ecosystem) in fintech will belong to a new generation of “fintech banks” (maybe, they will be totally separated from traditional banks), which will have:

- Bank-as-service platform as back-end – to host these standalone independent fintech startups on their major market and to expand faster and cheaper to other markets
- Investment arm or fund to invest in fintech startups to build stronger relationships with them
- Neobank(s) as front-end(s) – to tailor all these services for final end-users in unique user experience

The idea of fintech banks’ arrival is actively circulating now. Almost all new players (Tandem, Monzo, Starling, N26) have announced that they are going to build a product with open architecture and APIs in order to be able to integrate freely with external services and allow their clients to interact with these services using already familiar interface. German mPOS-acquir-

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5 http://banknxt.com/56408/bank-platform-tesla-uber/
ing service SumUp integrated with such “non-bank” as Finnish Holvi. US-based Moven – with online lending service for students Commonbond. Neobanks N26 from Germany and Monese from the UK – with British online remittance services TransferWise and CurrencyCloud, accordingly.

That is, if earlier a fintech company used to be sold to traditional banks that embedded it in its product range, corporate processes and old services’ culture, now the functionality of fintech companies is strong enough to enable one to construct a fintech bank consisting only of new services, which would have a client base big enough to compete and earn profit. So, the main question concerning the future of a fintech bank idea is – what is going to be a core of such a bank? It is clear from the technological point of view, that is should be a BaaS platform. However, from client interface point of view neobanks could be a good fit for this role.
1.1 The main fintech battle is about the land of big data

Big data is like teenage sex: everyone talks about it, nobody really knows how to do it, everyone else is doing it, so everyone claims they are doing it. Admittedly, “blockchain and bitcoin” and “big data” are two phrases that are about as buzzy as you can find in the modern business world. But that’s no reason to dismiss either one. Both consumer (B2C) and business-focused (B2B) companies are facing intensifying competition when it comes to customer insights, and the data-science field is expanding in order to help them meet the challenge. Not all data analysis qualifies as “big data,” of course, but solutions are multiplying, and 2016 may well be the year that more companies seriously ramp up their investments in the field instead of just talking about it.

In the past, the talks and euphoria about “big data” were left to mathematicians and their models and the monetization could be seen only in the distant future. However, the last year, we witnessed a huge number of new players in this sector, and the discussions became more practical. The growth of online lending services and the rising interest of telecoms and internet giants created a demand for online scoring, which takes into account not only traditional data (a passport and banking history), but also data from social networks, smartphones and mobile operators.

UBS’s Paul Donovan offered some thoughts[^6], that Data is the new money, and data – like money before it – is only valuable if it’s being shared and rehypothecated through the wider network. Furthermore, we put our data into the safekeeping of cloud custodians for precisely the same reasons we put our money into the charge of banks: because of security, liquidity and utility maximization.

Everything from renting an apartment to getting a business loan often requires a credit check, which can make life difficult for the 15M Americans who don’t have enough credit history to generate a score. These people are referred to by credit bureaus as “thin files,” and often they’re in the dark about what’s on their credit history and why it’s so empty. In April 2014, Credit Karma began offering tools to help these people by providing free credit information[^7]. “Most thin file consumers that sign up for Credit Karma will be able to review what is currently on their credit report, as well as learn why they don’t have a credit score and how to build their credit history,” the company said. It also offered to direct them to specific loans or credit card options that could help them build their credit history. Kenneth

[^6]: http://ftalphaville.ft.com/2016/02/05/2151931/digital-money-negative-rates-as-gosplan-2-0/
Lin’s (CEO of Credit Karma) parents emigrated from China when he was just 4 years old and they worked in the kitchens and at the blackjack tables of Las Vegas casinos to help put him through Boston University. Founded to bring new levels of transparency to consumer finance beginning with free credit scores, Credit Karma’s product expanded quickly to become a financial technology leader: adding full credit reports, daily credit monitoring, financial account monitoring, full credit information from two of America’s major credit bureaus, as well as educational tools and content for its members. Recently Credit Karma announced that it running its business profitably after earning $500M in revenues in 2016. The company has signed up more than 70M users, which includes about one half of all millennials in the U.S. Lin also claimed the company was profitable, although it is growing headcount significantly. It grew 40 percent in 2017 so far, with about 700 employees now. The services focused on work with centralized credit bureaus in developed countries, such as the American leader CreditKarma or newcomers, like British ClearScore (attracted 2 million users in a year), are developing in a more predictable and stable way. However, this model restricts their potential and scaling capabilities as well.

CreditKarma (US). Everything from renting an apartment to getting a business loan often requires a credit check, which can make life difficult for the 15 million Americans who don’t have enough credit history to generate a score. These people are referred to by credit bureaus as “thin files,” and often they’re in the dark about what’s on their credit history and why it’s so empty. In April 2014, Credit Karma, began offering tools to help these people by giving them free credit information. “Most thin file consumers that sign up for Credit Karma will be able to review what is currently on their credit report, as well as learn about why they don’t have a credit score and how to build their credit history,” the company said. It also offered to direct them to specific loans or credit card options that could help them build their credit history. Kenneth Lin’s (CEO of Credit Karma) parents emigrated from China when he was 4 and worked in the kitchens and at the blackjack tables of Las Vegas casinos to help put him through Boston University. Their sacrifices, he says, made him want to do something big: “Lots of people look at us and say we’re disrupting the way credit scores work. What we’re building is much larger than that.”

Credit Karma, meanwhile, raised $175M in summer 2015 at a $3.5 billion valuation. Today, a decade after its launch, Credit Karma claims 75 mil-
lion members, including almost half of all U.S. millennials and a third of all Americans with credit reports. Now the site, known mostly for giving out free credit scores and helping people find auto loans and credit cards, wants to remake Americans’ financial lives from top to bottom, and it’s starting with two of the most complicated and unpleasant tasks of all: filing taxes and getting a mortgage. This year the company launched both a free tax preparer and a new service to streamline the process of securing a home loan. Banks pay Credit Karma every time a user of its site is approved for a credit card or loan. The key is to recommend the right products to each customer, and that requires collecting lots and lots of data. Every day, the site collects 2.5 terabytes of information on its members, then runs billions of calculations to find products that suit their needs and creditworthiness. Members hand over personal information, including Social Security numbers, giving access to their credit bureau files. Founder and Chief Executive Officer Kenneth Lin could have made millions of dollars by selling his customers’ data to third parties, or by promoting products like exploitive “credit repair” services, but refrained. Credit Karma was careful not to spam members with incessant emails. Credit Karma offered truly free credit scores when many sites were advertising such services but sneaking in fees. The company also built a service that helps members dispute and remove errors from their credit reports, and says it has made $8.4 billion in corrections so far. This year it began helping members look for unclaimed money, such as balances in old bank accounts or rebate checks that were never cashed. It says it found $100M in two months. The strategy appears to be working. The company added 70 million of its 75 million members over the last five years, it says. By now, about half of Credit Karma’s new members come from word of mouth, Lin said.

There’s more than $40 billion in unclaimed cash in the U.S., which comes from stuff like uncashed paychecks, forgotten bank accounts, unclaimed refunds and insurance payouts that were never collected. After a company or financial institution loses touch with a person to whom it owes money, that cash is considered abandoned and handed over to state governments until it’s claimed. With Credit Karma’s Unclaimed Money product, users can search for funds being held by the states in which they live. And if they’re Credit Karma users, they can sign up to have the company proactively notify them of unclaimed cash that appears later. The release of the new product comes about a year after Credit Karma quietly acquired a start-up called Claimdog. While individual states each have their own database that residents can search, the Claimdog founders worked to build a single

14 https://techcrunch.com/2017/05/09/credit-karma-unclaimed-money/
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page where users could quickly search multiple places they might have previously lived. In checking against its database, Credit Karma was able to find $75M in unclaimed funds for more than 600,000 of its users – and that was just in California.

The new tax-filing service is a bid to lure even more members while collecting high-quality data on them. Completely free, including the filing of state returns, it’s a direct challenge to the country’s two dominant tax preparers, H&R Block and Intuit’s TurboTax. About a million taxpayers filed with Credit Karma this year.

It turns out that you can make a lot of money by giving stuff away for free. That’s the lesson[15] from Credit Karma, which announced in June that it’s running its business profitably after earning $500M in revenues last year. The company increased revenues by about 50 percent in 2016 to top $500M for the year. Lin also claimed the company was profitable, although it is growing headcount significantly. The SF-based company has opened new offices in Los Angeles and Charlotte, N.C. and continues to invest heavily in AI.

Its flagship product is a free credit report and credit monitoring service, which it launched five years ago. Credit Karma uses the data it collects to recommend financial products suited for each particular user based on their credit score and what they’re looking to accomplish – whether that is to transfer a balance to a card with a lower rate, collect points or miles or just get cash back on purchases. While credit reports are still its bread and butter, Credit Karma is moving into adjacent areas in an effort to collect even more data.

Projects targeting specific needs of certain customer groups (and their behavior data) draw much attention too. SelfScore analyses credit histories of foreign students in the USA and derives credit scores (compare it to the British mobile bank Monese that targets expats). NovaCredit, meanwhile, works with immigrants in the USA, focusing on those from India and Mexico. There is an advantage in this focused approach – you can clearly see what information is relevant to your analysis when you narrow the scope of the query. In addition, targeted solutions appeal more to the clients.

Besides China, where the market significantly depends on the government and actions of the BAT (Baidu, Alibaba, Tencent) companies, Indian market looks very promising for newcomers as it’s rather big but more fragmented and less crowded. This year the Southeast Asian markets will probably wake up to new trends, with Indonesia being the largest market in the region. In the new issue of “Money of the Future” annual fintech report we can find

15 https://techcrunch.com/2017/06/27/credit-karma-number-dump/
that the services which focus on users with none or insufficient credit history in developing countries, operate in a riskier segment, but their growth potential is unlimited \(^{16}\). This is quite natural as credit potential is probably more significant than credit history. American ZestFinance is the most striking example. It has attracted the Chinese search engine Baidu as a shareholder (80% of search queries in China) and expanded with its support to China to analyze the credit rating based on search queries, geolocations and payment transactions of customers.

China is proposing to assess its citizens’ behavior over a totality of commercial and social activities, creating an Uber-like scoring system. The partnership between Baidu and ZestFinance and Sesame Credit by AliPay are just two of several private pilot programs in China’s push to develop a nationwide social credit system. The current implementations are currently unconnected, but may ultimately be combined under government leadership. Part financial credibility indicator and part compliance mechanism, the social credit system aims to generate a score for individuals and institutions in China based on data like tax filings and driving demerits. Moreover, while consumers may reap rewards, the score functions as a signal mechanism for authorities about who or what deserves to be penalized. A substantial proportion of China’s population remains unbanked and parts of the economy are largely cash-based, and Chinese government is very active with their plans to push its own fintech and AI industries \(^{17}\). The ambition is to collect every scrap of information available online about China’s companies and citizens in a single place – and then assign each of them a score based on their political, commercial, social and legal “credit.” Beyond Sesame Credit’s reward offerings, public social credit systems offer good-behavior benefits that can be minor conveniences like enhanced borrowing privileges at a local library, or free loaner umbrellas. But rewards can also have greater financial significance like expediting loan application approvals.

Chinese national social scoring system. Imagine the world where your score becomes the ultimate truth of who you are \(^{18}\) – determining whether you can borrow money, get your children to the best schools, travel abroad; whether you get a room in a fancy hotel, a seat in a top restaurant, or even just get a date. This is not the dystopian superstate, but it could be China by 2020. It is the scenario contained in China’s ambitious plans to develop a far-reaching social credit system, a plan that the Communist

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16 https://thenextweb.com/guests/asia-land-big-data-online-scoring/
Party hopes will build a culture of “sincerity” and a “harmonious socialist society” where “keeping trust is glorious.”

The overriding principle: “If trust is broken in one place, restrictions are imposed everywhere.” A whole range of privileges would be denied, while people and companies breaking social trust would also be subject to expanded daily supervision and random inspections. The ambition is to collect every scrap of information available online about China’s companies and citizens in a single place - and then assign each of them a score based on their political, commercial, social and legal “credit.” The idea is that good behavior will be rewarded and bad behavior punished, with the Communist Party acting as the ultimate judge. Harnessing the power of big data and the ubiquity of smartphones, e-commerce and social media in a society where 700 million people live large parts of their lives online, the plan will also vacuum up court, police, banking, tax and employment records. Doctors, teachers, local governments and businesses could additionally be scored by citizens for their professionalism and probity.

At the heart of the social credit system is an attempt to control China’s vast, anarchic and poorly regulated market economy, to punish companies selling poisoned food or phony medicine, to expose doctors taking bribes and uncover con men preying on the vulnerable. “Fraud has become ever more common in society,” Lian Weiliang, vice chairman of the National Development and Reform Commission, the country’s main economic planning agency, said in April. “Swindlers have to pay a price.”

That project, launched in Jiangsu province’s Suining County in 2010, gave citizens points for good behavior up to a maximum of 1,000. But a minor violation of traffic rules would cost someone 20 points, and running a red light, driving while drunk or paying a bribe would cost 50. On this basis, citizens were classified into four levels: those given an “A” grade qualified for government support when starting a business and preferential treatment when applying to join the party, government or army; or applying for a promotion. People with “D” grades were excluded from official support or employment. The Suining government later told state media that it had revised the project, still recording social credit scores but abandoning the A-to-D classifications.

With few people in China owning credit cards or borrowing money from banks, credit information is scarce. There is no national equivalent of the FICO score widely used in the United States, say, to evaluate consumer credit risks. At the same time the central government aims to police the sort of corporate malfeasance that saw tens of thousands of babies hospitalized after drinking tainted milk and infant formula in 2008, and millions of children given compromised vaccines in 2016.
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The Cyberspace Administration of China wants anyone demonstrating “dishonest” online behavior blacklisted, while a leading academic has argued that a media blacklist of “irresponsible reporting” would encourage greater self-discipline and morality in journalism. Under the social credit plan, the punishments are less severe - prohibitions on riding in “soft sleeper” class on trains or going first class in planes, for example, or on staying at the finer hotels, travelling abroad, or sending children to the best schools - but nonetheless far-reaching. Under government-approved pilot projects, eight private companies have set up credit databases that compile a wide range of online, financial and legal information. One of the most popular is Sesame Credit, part of the giant Alibaba e-commerce company that runs the world’s largest online shopping platform. Tens of millions of users with high scores have been able to rent cars and bicycles without leaving deposits, company officials say, and can avoid long lines at hospitals by paying fees after leaving with a few taps on a smartphone. The Baihe online dating site encourages users to display their Sesame Credit scores to attract potential partners; 15 percent of its users do so. One woman, who works in advertising but declined to be named to protect her privacy, said she had used Baihe for more than two years. Looking for people who display good Sesame Credit scores helps her weed out scammers, she said.

Cities like Hangzhou, home to Alibaba, are beginning to track citizens’ utility bills, criminal record, online shopping habits, and public transportation use, among other factors, to generate a social credit score. Three dozen cities are beginning to compile records. Alipay compiles scores based upon a user’s smartphone brand and what they buy online, before offering users perks for high scores. “We want people to be aware of” their online behavior having an influence on their online credit score “so they know to behave themselves better,” the WSJ quoted Joe Tsai, Alibaba’s executive vice chairman, as saying. Tencent is another obvious candidate to join the government’s efforts. Tencent’s WeChat social network, which has a scrolling ‘moments’ feed and messenger service similar to Facebook’s offerings, has 800 million monthly users. Their online news posts and ‘likes’ provide a history of their online persona the government is looking to use. Baidu is another company likely to join the government’s program. The dominant search engine already cooperates closely with officials to censor content and boasts a business devoted to analyzing big data. Sesame Credit, a credit-scoring service from Alibaba affiliate Ant Finan-

cial, attributes scores\textsuperscript{20} to Alipay users who have opted into the program. Users with higher scores are able to access benefits that run the gamut from waivers on car rental deposits to expedited airport security checks. Sesame Credit is just one of several provincial-level or private pilot programs in China’s push to develop a nationwide social credit system — even as experts warn of data privacy and transparency concerns. The current implementations are currently unconnected, but may ultimately be combined under government leadership.

Conversely, poor scores result in penalties enforced against individuals or organizations that have committed wrongdoings — like traffic violations or late bill payments. According to a document released by China’s State Council, “trust-breakers” can face penalties on subsidies, career progression, asset ownership and the ability to receive honorary titles from the Chinese government. In a similar vein, those who fail to repay debts are punished by travel restrictions. Just last month, the Supreme People’s Court announced that 6.15 million people in the country had been banned from air travel over the last four years for defaulting on court orders, according to local media. While inconveniencing some, the social credit system will likely bring about benefits to the Chinese financial system. A substantial proportion of China’s population remains unbanked and parts of the economy are largely cash-based: Some 21 percent of the population did not have an account at a financial institution in 2014, according to the World Bank. A social credit regime could strengthen the credibility of the Chinese financial system by enforcing legal compliance and ultimately, building trust in the marketplace.

To be Chinese today is to live in a society of distrust\textsuperscript{21}, where every opportunity is a potential con and every act of generosity a risk of exploitation. When old people fall on the street, it’s common that no one offers to help them up, afraid that they might be accused of pushing them in the first place and sued. The problem has grown steadily since the start of the country’s economic boom in the 1980s. But only recently has the deficit of social trust started to threaten not just individual lives, but the country’s economy and system of politics as a whole. The less people trust each other, the more the social pact that the government has with its citizens — of social stability and harmony in exchange for a lack of political rights — disintegrates. All of which explains why Chinese state media has recently started to acknowledge the phenomenon — and why the government has started searching for solutions and to invest its energy in technological fixes.

\textsuperscript{20} https://www.cnbc.com/2017/03/16/china-social-credit-system-ant-financials-sesame-credit-and-others-give-scores-that-go-beyond-fico.html
\textsuperscript{21} http://foreignpolicy.com/2017/05/24/chinese-citizens-want-the-government-to-rank-them/
Take China’s booming bike-sharing industry, which has become a highly visible metaphor for China’s uncivil society. Of course, such businesses, which use GPS to allow users to pick up and leave the bikes anywhere in a given city, depend on trust: trust that users won’t park bikes in places that cause disturbances; trust that users won’t steal the bikes for themselves, whether by repainting them or by dismantling them and selling the parts; trust that users won’t replace the QR codes used to track and unlock bikes with codes that transfer money to their own bank accounts. And, unsurprisingly, such trust is broken on a daily basis in China. One company called Mobike has tried to encourage more courteous behavior among its customers by awarding each user a starting credit score of 100 points – this number goes down if you park your bike somewhere disruptive and goes up if you report abuse of the system. If your score drops below 80, the price you are charged for renting a bike goes up. If your score remains high, you are rewarded with free rides. Such ratings aren’t unique to China; from eBay’s seller ratings to Uber’s passenger and driver ratings, firms worldwide have been encouraging consumers to rank themselves and others. But only in China has the government decided it wants in on the game.

Advocates for the system point to the example of Western credit ratings, which are run by private firms and take social as well as financial data into account. Financial credit ratings are barely developed in China, which makes it hard for many ordinary people and small businesses to borrow money. The central bank has been lagging in developing its own financial credit rating system, which is widely recognized as being needed in a growing and increasingly complex economy. Both the social credit system and the recent anti-corruption campaigns are generally popular, in part because there’s no alternative. The citizen watchdog groups or independent media which would serve the same purpose and help uncover corruption have been crushed. If the party wants to build a greater sense of civil society, it could improve transparency and accountability at all levels of government, and allow the existence of independent arbiters.

Ayannah, the leading provider of affordable and accessible digital financial services in the Philippines has partnered with Bayad Center, the bills payment subsidiary of Meralco, the Philippines’ largest electric utility to launch Juan Credit, the first artificial intelligence-powered credit scoring system for the unbanked in emerging markets. JuanCredit will analyze unstructured data from various sources – bills payment, mobile tops, insurance premium payments, social media profiles – to provide meaningful credit scores for unbanked Filipinos and provide banks, financing companies,
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insurers and property developers with a system that will instantaneously and continuously update a borrower’s credit worthiness and insure sound underwriting.

Banks in Asia are using customers’ smartphone data points, like how often they drain their battery, to determine whether or not they’re eligible for a loan. While this may sound like unusual criteria for qualification, Singapore-based startup Lenddo thinks it can help people without traditional credit history borrow money. But its program is primarily used by lenders in emerging markets, such as Asia, Africa and Latin America. Most people in those regions don’t have traditional bank accounts or credit cards but access to a smartphone is increasingly greater. The company is already helping dozens of banks analyze data from millions of smartphones globally. The 5-year-old firm’s software platform analyzes thousands of data points – everything from a smartphone user’s messaging and browsing activity, to the apps and Wi-Fi network they use. Factors like the cellular towers a phone pings are examined, too. Lenddo puts the data points into a complex proprietary algorithm, which computes how likely someone will default on a loan. Lenders then decide the default rate they want to accept. Banks either buy a license to use Lenddo’s software, which is pulled into an existing bank app, or Lenddo can build a separate app for the bank. It takes less than three minutes to calculate a rate through Lenddo. Lenddo’s goal is to help 1 billion people get access to financial services by 2020.

FICO, a global credit rating agency, announced that it will start letting nonfinancial information help determine scores. FICO has partnered with Lenddo to develop a credit risk score for consumers in India and to help facilitate loans for small businesses and individuals in India and Russia. It will give lenders improved certainty about the risk assessment of people with ‘thin-files’ – those who don’t have enough data in their credit report to score. With Lenddo’s technology, FICO can check if users’ phones were physically present at their stated home or work address, and if they are in touch with other good borrowers – or with people with long histories of fooling lenders. Financial institutions, overcoming some initial trepidation about privacy, are increasingly gauging consumers’ creditworthiness by using phone-company data on mobile calling patterns and locations. The practice is tantalizing for lenders because it could help them reach some of the 2 billion people who don’t have bank accounts. Selling such data could become a more than $1 billion-a-year business only for U.S. phone companies over the next decade, according to Crone Consulting LLC. Also Lenddo will give its own score for these borrowers which will give an additional yardstick for MFIs to assess them. The new service will cov-
er individual MFI customers who live in urban areas and have an Android phone. MFIs over the last six to 12 months have begun using tablet-based solutions while travelling to remote locations and capturing know your customer (KYC) details of customers and avoid complicated paperwork. These new solutions have reduced the turnaround time required by these lenders, which has also helped in cutting operating costs. Observing actions of big centralized credit bureaus – Experian (partnered with JD Finance to fight online fraud) and Equifax (launching a pilot program with P2B-lending platform InvestDen) – they obviously realize that the market is changing (especially in Asia), as traditional approaches do not allow these giants to tackle their new clients’ problems in an efficient way. How much should these “dinosaurs” change?

**People are more than just their credit scores.**

PFM – personal financial management, effective personal accounting, - is about «yesterday» (how much a person has spent, on what, when, where, why – aggregation and visualization of expenditures, budget comparison with people similar in behavior, etc.). PFP – personal financial planning, - is about «tomorrow» (what the person is aiming for, his/her goals, which financial products they would need to get there). According to the industry experts, the future belongs to the projects that try to strike the best logical combination between PFM and PFP, so that expenditure is not only recorded but also displayed in a user-friendly graphical interface that allows to visualize easily whether a person is moving in the right direction and to the desired goals. The PFM services are usually constructed on the «speed-up system» and motivate to spend less and less, and save up more and more. Whereas PFP services rather address who a person wants to be, and what they need to do to get there, and how to «earn more» to get to the desired position. Some of these services are even able to advise their user whether to buy a certain consumer product, or a trip, or not taking into account the set goals. The most impressive are the services that are not only able to record and account for expenses, savings, and future goals, but can also proactively manage all the accounts without having to enter the Internet banking systems of the banks themselves. These functions are the best for planning the future, the means for getting there, and the suitable accompanying financial products – and this is what most of the clients demand and expect of these kinds of projects. Just a bunch of pretty diagrams and expenditure tables aren’t enough anymore.

Traditional credit scores are but one indicator of overall well-being. But there are other measurements that also matter to both consumers and providers. How are people doing managing their daily finances? Do people

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22 http://techcrunch.com/2015/07/04/measuring-your-financial-health-beyond-the-credit-score/
use systems and products that make them resilient to unexpected financial challenges? Are people able to achieve major financial objectives — such as buying a house or retiring comfortably? Taking a “financial health” lens is what consumers already do naturally. They’re already thinking about their daily financial management, how resilient they are over time and how they’re preparing for long-term opportunities.

By contrast to price-comparison sites, it is noteworthy that PFM rarely works as a stand-alone solution, but it effectively complements many other services like mobile banks (Moven’s partnership with MoneyDesktop, move of Singaporean Kashmi into PFM market and full-scale mobile banking, American Trim and Swedish Tink eager to develop their virtual banking solutions), p2p- (acquisition of BillGuard by Prosper), student lending (NextGenVest, acquisition of SmartyPig by Sallie Mae), insurance (North-Western Mutual deal with LearnVest) and wealth management (Envestnet’s acquisition of Yodlee) solutions.

Big data is a connector between all verticals. As concerns mPOS-acquiring companies (Square, SumUp, iZettle), they own such a huge amount of data, not only about their merchants, but also about their merchants’ clients (purchases, card availability, contact details), that doesn’t influence their business and capitalization because they don’t serve clients of their clients in any way (except for a raw solution from Square.Cash). Online- and mPOS acquiring may turn into a channel of client acquisition, a way of differentiation and a source of data for credit risk tackling for Square, while the company will make money on SME lending and complementary products.

Identity is the New Money

In “Identity is the New Money”, David Birch, a founding director of the specialist consultancy Consult Hyperion, lays out the extraordinary change in how we think about both identity and money that new technologies — especially mobile phones — are making possible. As David Birch wrote[23]: “The social anthropologist and money historian Jack Weatherford said: “The electronic money world looks much more like the neolithic world economy before the invention of money than it looks like the market as we have known it in the past few hundred years.” What Weatherford means is that ancient society worked on a shared memory of mutual cross-obligations, continuously adjusted and revised. In the clan, everyone knew who owed what and to whom, a structure that does not scale beyond the kinship group. Once clans form into tribes and tribes move into cities, the shared memory is no longer sufficient. We need intermediaries to man-

age, and money is one of them. If, however, technology gives us back that shared memory, then we don’t need intermediaries to enable transactions. It becomes what some people call a “reputation economy”.

Nathaniel Popper in his book “Digital Gold: the untold story of bitcoin” mentioned⁴⁴, that “the book [Debt: The First 5.000 Years], by anthropologist David Graeber, argued that historians and economists have wrongly assumed that money grew out of barter. In fact, Graeber argued, and Wences [Casares] came to believe, barter was never common and money was actually an evolution of credit - a way of tracking what people owed to each other. People used to just keep a mental tally of what they owed each other, but money provided a way to expand the system more broadly among people who didn’t know each other. As he read, Wences felt that after twenty years of working on financial technology, he was finally coming to understand money for the first time. He saw that Bitcoin’s lack of any apparent intrinsic value didn’t matter when looked at against the history of money. The reason gold itself had been used as money was not that it was valuable, it had become valuable because it was used as money. And it was used as money because it did what all good money did: it served as a sort of physical ledger on which society could keep track of who was owed what. Each piece of gold represented a slot on the ledger of all outstanding gold, which anyone could verify by checking the mass and volume of the gold.”

The idea of “reputation economy” by David Birch (with credit-based nature of money and human relationship by David Graeber) is very close to “human capital contracts” (or “social financial agreements”) concept, which has been proposed⁴⁵ by esteemed economists including Milton Friedman, who advocated them as an alternative to taking on student loans⁴⁶. Yale University even experimented with them before the federal government started guaranteeing loans. The concept has been compared to artistic patronage, as when wealthy merchants funded artists in Renaissance Italy in exchange for prestige, artistic influence⁴⁷, and a collection of works that could climb in value. Today, it’s common for tournament poker players to raise money from backers⁴⁸ in exchange for a cut of the winnings. 

David Birch is continuing this idea: “Using patches such as college degrees and credit ratings instead of real, immediate reputational data is just not good enough in our connected world, which is why there are companies

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⁴⁴ https://goo.gl/eT5ZmA
⁴⁸ http://online.wsj.com/article/SB10001424457159262885804577496749663159635408.html
now looking at using the social graph as an alternative. “Social capital (the result of computations across the social graph) is now accessible and usable at the transactional level. Proxies such as high-school diplomas and glossy CVs are being replaced by social capital because it is a more efficient form of the kind of memory we need to make transactions work.” “With that kind of transactional social capital in place, delivered by the combination of mobile phones and social networks, commerce will be re-invented. That social capital will be deployed in smaller and more commonplace transactions, not only getting a job or buying a house. In the long run, there will be no need for a single medium of exchange, no need for fiat currency.” “This “social identity” is the basis for a reputation economy, an economy based on trust. It will be reputation rather than regulation that will animate trust in economic exchange, and that social graph, the network of our social identities, will be the nexus of commerce, administration and interaction.” In such a world, cash is no longer needed, and thousands of ‘currencies’ based on your identity can bloom.
1.2 Money as the new language for communication (not for remittance)

Money transfers are becoming less and less a financial function and more a part of communication, a language you can use to say something. When you are lacking the words you can shoot a movie, sing, dance, cook, paint, have sex... Messengers’ initial function was to transfer important information but over time they have become more and more emotionally intense, with their vocabulary, semantic and social codes. The same will happen to money transfers. You can say “I love you” by a hug, flowers or a burger from a nearby McDonald’s.

The main newsmakers of 2014 on the P2P transfers market were social networks and instant messengers – the natural competitors to banks and payment systems in this field, already possessing all the necessary information in order to make payments easier, more convenient and intuitive. In his message CEO Mark Zuckerberg told the audience: «Over time, we will probably add a functionality of P2P-transactions to our messenger. Built-in payments will increase the success of our messenger and ease the financial interaction between users and with the businesses».

Startups that help people send money to each other or pay for goods and services online have been growing like weeds, fueled by consumer demand, increasingly ubiquitous connected devices to make and receive the funds, and VCs eager to profit from their growth. The entire banking industry can be disrupted for the better and bricks and mortar banks are “heading for tough times”, according to Taavet Hinrikus, founder and executive chairman of TransferWise. “Every vertical in banking is a huge opportunity”. Previously Skype’s first employee, Hinrikus looks to Skype as an example of the disruption technology can bring. In a decade the firm, now owned by Microsoft, has snared 40 percent of the global market in international calling - and Hinrikus believes similar success stories will soon be found in fintech. While consumers “don’t really care about fintech” - or even know what it is - Hinrikus believes disrupting the industry will be about making services more user-centric.

Now that many people are using peer-to-peer payment services, providers are eager to monetize them. Peer-to-peer payments technology, which enables people to send money to each other in minutes using a mobile application, is growing in popularity as a tool for businesses to reimburse consumers. But sending money to and from a business? That’s a different story. Charging fees to corporate customers will enable P2P payment
providers to make money off the billions of dollars moving through their networks and subsidize consumer-to-consumer activity.

The segment of online remittances is one of the most dynamic fintech segments, mostly due to the huge interest from social networks and instant messengers. Similar blockchain-based startups have so far attracted much attention but haven’t made a strong impact on the market yet.

Such players as Facebook Messenger and Telegram have been actively developing chatbots and integrating games. Facebook Messenger now offers online money remittances not only in the US but in Europe as well (the company has obtained the e-wallet license in Ireland). In June 2014 Facebook poached PayPal’s ex-president David Marcus to run its Messenger unit. Marcus joined PayPal three years before it acquired his mobile payments company Zong for $240M in cash. In a Facebook post announcing his move, Marcus wrote: “While I was in the middle of my thought process about what was next for me, Mark Zuckerberg and I got together. Mark shared a compelling vision about Mobile Messaging. At first, I didn’t know whether another big company gig was a good thing for me, but Mark’s enthusiasm, and the unparalleled reach and consumer engagement of the Facebook platform ultimately won me over. So… yes. I’m excited to go to Facebook to lead Messaging Products.”

Another Facebook-owned messenger, WhatsApp, is already used as a communications network between people in different countries, and is particularly strong in developing countries, touching users that Facebook does not. WhatsApp, it should be noted, also has made a strong case for expanding its platform beyond basic messaging to gain a bigger share of users’ mobile “wallets.” But there was no news on the topic from WhatsApp (Zuckerberg has said WhatsApp could be worth a lot more money one day), except for rumors from India that the company was going to launch online remittances there. In this country, the service has 200M users (over 15% of the entire customer base), and the mobile wallet FreeCharge has integrated with the messenger. Back in 2014, Snapchat partnered with Square to launch its money transfer service (however, no news on the progress in this area so far). In 2016, it was rumored that an online trading service for youngsters like Robinhood was going to be launched (again, rumors remained rumors). Talking about neo-banks, we are currently seeing many mobile banks for “Snapchat generation”, so maybe the acquisition of one of them could allow the company to take on financial services, as well as improve monetization of its customer base. In the American and European countries, startups like Transferwise, Azimo, CurrencyCloud and WorldRemit are more active in remittances via messengers than messengers themselves are. Most likely, they will be finally acquired, as it was pre-
dicted by the market two years back. This would make the most sense for the messengers, which haven’t succeeded in this area.

As in many other fintech sectors, the majority of leading online remittance companies are based in the US (Venmo, Dwolla, Remitly, ClearxChange) and UK (TransferWise, WorldRemit, Azimo, Revolut, CurrencyCloud). There are some strong remittance services localized in France (Lydia), Ireland (CurrencyFair), Israel (TravelersBox), South Korea (Toss), Singapore (Instarem, Fastacash, Kashmi), the Philippines (Ayannah) and other countries, but in fact, they are just growing their assets to be acquired by bigger players (like Israeli Xoom was acquired by American PayPal), and can barely change the market landscape. Otherwise, the local players will have to expand their product line horizontally, rather than compete with international single-product companies for a market share. Remittances are at their core very low margin businesses and as a result, must have exponential growth of their client base or have to increase margins by offering new complimentary products. Competing by offering just quality is not enough.

While big messengers and social networks like Facebook, KakaoTalk, Line, WhatsApp are just entering into the social remittance market, being inspired by the enormous success of WeChat in China, online remittance startups are actively integrating with chatbots for remittances: TransferWise and Azimo (which has raised a new round from Rakuten, the owner of Viber) have integrated with Facebook Messenger, and Lydia has integrated with Slack. There is a lot of experimenting with the integration of AI technologies and remittances.

Remittance companies used to compete for developed markets, like Transferwise in Canada, Japan and the US. However, in 2016 we saw a massive migration towards Asian countries: Azimo entered Asia, WorldRemit was developing in Africa and Remitly in Latin America. The unbanked markets now have their regional leaders (Ayannah in the Philippines or Red Dot in Myanmar), which enable both new applications and traditional leaders to integrate their online and offline strategies.

It’s now obvious that the historic remittance giants consider newcomers to be not just a threat, but also market-shifters, and as a result, the giants are making attempts to rethink their role in the new digital world. Western Union, MoneyGram, XpressMoney have launched new projects on API integration with new players, and are trying to leave newcomers behind by establishing more close partnerships and joint projects with banks.

More than four years ago, Mark Zuckerberg announced an unofficial messengers’ race for better and faster monetization of a customer base by
integrating remittances and payments\textsuperscript{30}. Taking into account that new functions and changes are being introduced every three-six months nowadays, messengers haven’t gone far for the past year. Those (fewer than all) that have managed to integrate payments, made them available just in one country with only basic functions. Clearly, WeChat is far ahead of the competition, but like all other solutions - it is local, for all practical purposes. With online payment processors like Alipay already more popular than credit cards in China, it’s not surprising to see consumers look to WeChat as an easy way to transfer money between friends. Mobile is quickly becoming the hub for not only social but for commerce in China.

Among WhatsApp’s competitors, WeChat has made a strong move already into offering peer-to-peer payments on its network, with services like a red envelope. “WeChat payment registered users reportedly jumped 5 times given the viral effect of the red envelope app,” analysts at investment bank CLSA (Crédit Lyonnais Securities Asia) noted in March 2014 in their report, where they valued WeChat at some $65B in part because of the success of these services. (Heads turned when Facebook forked out $19B for messaging service WhatsApp in February, and eyes popped when Facebook CEO Mark Zuckerberg said it was probably worth even more.) Analysts Elinor Leung and Terry Chen make the case for how WeChat should be worth at least two to three times the value of WhatsApp, which they had previously valued at $35B. Along with its basic communication features, WeChat users in China can access services to hail a taxi, order food delivery, buy movie tickets, play casual games, check in for a flight, send money to friends, access fitness tracker data, book a doctor appointment, get banking statements, pay the water bill, find geo-targeted coupons, recognize music, search for a book at the local library, meet strangers around you, follow celebrity news, read magazine articles, and even donate to charity … all in a single, integrated app.

At least one in five active WeChat users are set up for WeChat “Payments”, a process that begins in the Wallet menu by linking a banking or credit card to the user account. Being set up for WeChat Payments means instant, frictionless ability to transact on the WeChat Wallet services, all official accounts that sell products or services, and any associated promotions or campaigns. In this sense, WeChat gives us a window into the potential evolution of Western social networks and buying behaviors if they, too, succeed in convincing users to embrace payments on their platforms. In China, meanwhile, usage of the WeChat Payments platform is growing so quickly that WeChat is experimenting with processing payments offline.

\textsuperscript{30}http://fintechranking.com/2015/10/12/whatswefacetelkalivibesnap-pay-comparison-of-messengers-payment-functions-3/
via QR codes at brick-and-mortar stores, live events, vending machines, restaurants, and hotels. The network effects are obvious and substantial: the more places accept these payments, the more users jump on board (and it goes both ways: offline and online) ... benefiting everyone.

In June of 2015, there were some rumors that Viber is secretly working on a mobile payments system to be released in the Philippines. In November 2014 Snapchat added a “Snapcash” payments option to its app through a deal with Square Cash. In September 2015 Telegram’s CEO, Pavel Durov, announced that one of the things that could be coming soon is a payments API, which would certainly help put the messaging service on par with the likes of Facebook Messenger. He said that Telegram probably won’t build the payments product itself, but would instead partner with third-party providers. So what do we see after more than two years? Some messengers haven’t launched money transfers and payments (WhatsApp, Viber, Telegram), all solutions are operational in one country (except for Line) with a basic functionality (except WeChat).

Money transfer market is huge but the market of payments in offline points of sale is much bigger. If you get people used to your service (become top-of-mind) for money transfers, your application can later be completed by payment function (according to the example of some of the abovementioned players) and the service will gradually develop a full-fledged mobile banking functionality. While money transfers become an “anchor” to attract the customer base. How to transform from online-only and connect offline experience with online technologies (O2O), as WeChat has successfully done. But integration with current points of sale is not very high-tech and will take a lot of time, as they are not designed for this. You make your customer to perform an unnecessary operation if he has to scan digit-, QR- or bar- codes. What can be really useful is a service of contactless customer profile recognition and payment without having to provide any additional information or start an application. Such use case of contactless payments can be implemented, for example, by integration of such services with mPOS-acquiring startups or tablet-based cash registers (like Poynt or Square Stand) – we’ll watch Snapchat and Square in this respect.

There is a huge potential in the provision of such services to unbanked customers: their demand for and “pain” about remittances is much stronger, they are lacking access to bank services, and at the same time the penetration of cellular communication, cheaper smartphones based on Android, social networks and messengers is extremely high and constantly growing. In addition, a 3% commission for money transfers charged by Facebook in the US seems rather high and there are plenty of cheaper alternatives, but, for example, for the Filipinos, who are paying 10-15% for transfers now – 3% will be a gift from above.
The development of transfers not only from person to person (P2P), but also within the groups (P2M) opens up great opportunities for crowd-gifting, crowdfunding, charity, group-buying...

Money transfers (quantity and quality of recipients, objectives, geography, frequency and amount) can say a lot about the credit risk profile of a person (not only income but also funds after all expenses, social environment, geographical activity, target transfers, lifestyle). This amount of data opens up tremendous opportunities for big data services like Lenddo and DataDepot: they can aggregate and analyze information not only on transfers, but also the data from social networks, smartphone manufacturers and mobile operators - in order to build hypothesis about your creditworthiness, to predict the demand for goods and services, to target advertising messages, to help recruitment agencies in the selection of the ordinary staff, to improve the quality and penetration of online KYC and reduce fraud with online transactions.

As a result, you can see that all the giants (except WeChat) haven’t moved far in their product functionality development and in terms of the number of countries covered. My hypothesis is that in the coming year we will see a series of acquisitions of these players by messengers. When Apple launched ApplePay, its closest rival Samsung, which has been long trying to develop an analog in-house, eventually acquired LoopPay (currently Samsung Pay). Having acquired it, the giant has got not only cash cow, sales system and customer base (their own customer base is millions bigger and they can sell anything), but its unique team and Vision, product and the team’s skill to quickly integrate these technologies in different markets. The same logic would most likely be in new examples.

Money transfers are becoming less and less of a financial function and more of a part of communication, a language you can use to say something. “When Sarah Mellema wanted to shoot a quick, encouraging message to her friend Sam, she didn’t open Facebook, Instagram, Twitter, Snapchat or WhatsApp. She didn’t email, text or call. She used Venmo. “Miss you boo. Here’s a kiss and some money,” the 26-year-old Chicagoan wrote, attaching a digital payment of 50 cents to the message.”[31] That one note may not seem significant, but it represents Venmo’s unlikely status as a thriving, millennial-heavy, emoji-infused social phenomenon. Venmo lets its users make those payments and their associated messages public on social feeds that others can comment on and like.

The Emoji is the birth of a new type of language (no joke). Tyler Schnobelen has discovered[32] something curious about why people use the

32 http://www.wired.com/2016/04/the-science-of-emoji/
skull emoji. Schnoebelen is a linguist and the chief analyst for Idibon, a firm that interprets linguistic data. He analyzed a million social media posts containing those familiar little pictograms and found that when people talk about their phones they’re 11 times more likely to use the skull. Fully 92 percent of all people online use emoji now, and one-third of them do so daily. “When you don’t have access to your phone, or when nobody’s texting you, you’re socially dead,” he says. In essence, we’re watching the birth of a new type of language. Emoji assist in a peculiarly modern task: conveying emotional nuance in short, online utterances. Interviews with more than a dozen Venmo users showed how they are finding new ways to jury-rig the app into a more social experience, such as using the messages for crude and silly inside jokes (“sex swing for new apt”; “money I stole from your wallet”), cataloging memorable events, sending money for drinks to a missed bachelorette party, or - like with Mellema - making micropayments to friends as a clever way of saying hi. “Venmo is not an inherently social app in the way of Facebook or Twitter, but it offers emotional support and the ability to keep in touch,” said Cliff Lampe, a social-media professor at University of Michigan’s School of Information. “Young people are good at repurposing feeds and emojis and signals to mean different things and to become social even when it’s not intended to be social.”

Google is also wading back into the crowded P2P payments arena, adding a feature to its Gmail Android app that makes sending friends funds[33] as easy as attaching a file to an email. Google first began letting US users send and receive money through Gmail on desktop back in 2013 but is only now bringing the feature to the Android (but not iOS) app. US users simply link a card and then tap on the attachment icon and pick whether to send or request money. Recipients do not need a Gmail account and can have the money routed directly to their bank accounts. The service is free to the tens of millions of US Gmail account holders, although it remains to be seen whether this is enough to help it gain momentum in a fast growing market dominated by PayPal’s Venmo.

Some blockchain-based remittance companies (like Circle from the US, which raised $60M in 2016 at the valuation of $428,3M) put emphasis on provision of services to end consumers, while others (such as American Ripple, which attracted $55M, valued at $339M and Canadian Blockstream, which also raised additional $55M) are more focused on cooperation with partner-banks in order to establish a faster and cheaper remittance infrastructure. Interestingly, Asian investors actively invested in all three companies: Chinese Baidu and CreditEase - in Circle, Japanese SBI - in Rip-

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[33] https://www.finextra.com/newsarticle/30273/google-brings-p2p-payments-to-gmail-android-app
ple, Hong Kong’s Horizons Ventures - in Blockstream. The first company is actively developing in the Chinese market, while the latter - in Japan and Southeast Asia.

In September 2015 Dwolla announced[^34] a new white label service that lets some of its biggest customers build their own real-time payments systems. With $1B in transaction volume in 2014, Dwolla founder and CEO Ben Milne says moving dollars is just the beginning. “The other forms of assets are just things to record in the system and so it seems like an eventual inevitability,” Milne said. “It’s just a question of which asset is next, and why?” Founded in 2008, Dwolla is a veteran among the payments infrastructure disruptors. But that doesn’t mean Milne thinks we should expect to see a consolidation of the industry for quite some time. Chris Larsen[^35] is CEO and Co-founder of Ripple Labs, creators of Ripple, an open-source, distributed payment protocol. Mr. Larsen also cofounded and served as CEO of Prosper, a peer-to-peer lending marketplace, and E-LOAN, a publicly traded online lender. Stefan Thomas, chief technology officer of Ripple Labs, wants to build something he calls the “internet of value”[^36]. “By value we’re talking about money but were also talking about stocks and bonds... intellectual property... anything you can think of that might have value,” he told.

Microsoft, Facebook, a host of startups, and an even larger gaggle of tech pundits are trumpeting the arrival of autonomous bots that can carry on conversations inside services like Slack and Skype and Facebook Messenger. “Bots are the new apps,” Microsoft CEO Satya Nadella announced[^37] at the end of March 2016. The idea is that these bots will let you interact with businesses much like you trade text with friends and family, letting you do stuff much quicker than you could using dozens of disparate smartphone apps. Some people call this “conversational commerce.” In recent years, deep neural networks have helped automate so many online tasks. They can recognize faces and objects in photos. They can recognize commands spoken into smartphones. They can improve Internet search results. And they’ve made significant progress in the area of natural language understanding, where machines work to understand the natural way we humans talk. Deep neural networks learn by analyzing enormous amounts of big data. But there are limits to the conversation. Chatbots, you see, don’t chat very well. People don’t typically interact with machines in this way. So, companies like Facebook must find other sources of data—or generate

[^34]: http://www.bizjournals.com/newyork/news/2015/09/02/dwolla-launches-white-label-service.html
[^35]: http://thefinanser.co.uk/fsclub/2015/04/the-finanser-interviews-chris-larsen-ceo-and-cofounder-ripple-labs.html
data on their own. But maybe we can afford to wait. Maybe we just want to get things done without too much talking.

By using artificial intelligence and machine learning, startup Azimo is creating a Facebook Messenger bot[^38] that will let you communicate naturally with it and make transferring money easier. “You would be able to speak to Azimo and ask what the international rates are,” company co-founder Marta Krupinska said. With advances in bots, Krupinska says the AI bot economy will be able to overtake, but not replace, the explosion in mobile applications. Bots aren’t the only type of AI Azimo is intending to use. The company says machine learning can be “fully deployed in compliance, risk management, and fraud screening”. Among AI deployments already being used by the company is an algorithm that can scan documents to see whether they have been edited. The firm is also able to tell whether bank details have been copied and pasted into its service - indicating potential fraud - or were typed by hand. Amazon’s virtual assistant Alexa, embedded in devices like the Echo speaker and Fire TV, is taking on a new role: she’s now a banking assistant, too. Capital One announced the rollout of a new “skill” (like an app for Alexa-powered devices), which will allow consumers to do their banking by voice, including checking balances, reviewing transactions, making payments, and more. To use this voice-activated service, Capital One customers have to first add the skill to their Amazon device via the Alexa mobile application, then connect their account by providing their username and password. Afterward, they’ll be able to manage their finances through their Amazon device, be it the Amazon Echo, newly launched Amazon Tap or Dot, or Fire TV.

In addition to the integration with chatbots, in 2016 remittance startups started to launch complimentary products that attracted even more interest from customers: PayPal’s Venmo started integration with the points of sale connected to PayPal, allowing them to accept offline payments through the app. The move from pure remittances towards offline and payments should allow companies to increase revenue from the client base (historically remittances attract a large number of customers, but have low marginality). Surprisingly, we have not seen major partnerships (or M&A) between remittance services and mPOS-acquiring players. However, there are a few examples: Ezetap has integrated with Paytm and Mobikwik in India, while Square develops Square Cash following the same logic. There are two promising ways to expand a product range and increase the profitability of a customer base: South Korean Toss has launched a micro lending and PFM service for its 4 million young customers.

[^38]: http://www.wired.co.uk/article/marta-krupinska-azimo-money-transfer
1.3 The power of the crowd: fintech banking as a “Tinder for money”

Ray Dalio, by one measure the most successful hedge fund manager of all time, argued\(^{39}\) in a note to clients that central banks will eventually have to usher in what he calls “monetary policy 3” – where rate cuts were the first stage and quantitative easing the second phase – which will more directly and forcefully encourage spending. The Bridgewater founder says this third era of monetary policy will range from central banks directly financing government spending through electronic money-printing to what the famous economist Milton Friedman coined “helicopter money” in 1969, in other words central banks disbursing cash directly to households. (In this case, is it possible to consider that involvement and shift to “basic income” in Finland, Switzerland and other countries is not the measure of social or economic policy of these countries, but the “helicopter money?”)

P2P-lending

Peer-to-peer (P2P) lending became one of the hottest industries in fintech – or any other any industry. Companies raised large venture rounds, investors found unicorns and there were even several IPOs. However, don’t be surprised to see Internet consumer companies like Google, Facebook or Amazon enter this space and either partner with or acquire existing lending sites. There are several factors that will determine if the rapid growth in peer-to-peer lending will continue: 1, Rise in interest rates, 2, Regulation, 3, Competition from banks, 4, Market size. The crisis that happened several years ago in the banking sphere is undermining customer trust in traditional banks, which brings positive effects for the growth of P2P financial services. These services offer borrowers lower credit rates, and lenders receive higher interest than on consumer deposits.

While the earliest lending platforms (e.g., Prosper, LendingClub) began with true “peer-to-peer” models, the majority of lending capital is now provided by institutional investors, such as hedge funds, insurance companies and banks. The shift of suppliers from many small providers to fewer large ones is not unique to P2P lending. The same trend can actually be seen on many other types of Internet marketplaces.

More and more online lending services appear (“Too much of them” as people in USA and China say), they of many types and flavors. There are payday lending (PDL) services, general lending for larger amounts (up to $45K) and longer terms (up to 5 years), student loans, consumer lending (for online and offline purchases), auto loans and mortgages (not many

\(^{39}\) http://www.ft.com/cms/s/0/5bc2c2be-d666-11e5-829b-8564e7528e54.html
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players still), P2P-lending and online pawnshops - and all of them are only available for individuals. At the same time every service has its focus - some target more reliable borrowers, giving them cheaper (in comparison with banks) loans and loan refinancing offers; some see the segment of people with absent, poor or bad credit history as more perspective, offering them accessible (and usually more expensive) loans. These credit facilities, in turn, may either use their own money for lending or serve as intermediaries for banks or microfinance institutions. If we multiply all the above-mentioned, we will get about a hundred types of online lending[40].

The key to LendingClub’s success is that it manages to attract not just good, but the best borrowers. Thanks to its thoroughly developed scoring system, the platform selects only the most reliable borrowers, thus reducing its portfolio’s credit risk. Furthermore, some of their most reliable borrowers also used the platform’s services to refinance their old credits at a better interest rate. As a result, now their borrowers include not only private individuals, but also investment, retirement, and hedge funds. The profitability for these funds demonstrated by LendingClub is higher than from many other investment instruments, coupled with very low risks. Today LendingClub can be more accurately described as a Funds2Person service, because most funding comes from institutional players. While online marketplace lenders once set out to disrupt traditional banking, many of them are now cooperating with Wall Street by teaming with banks, selling their loans to large institutional investors or helping to bundle them into securitized bonds.

Integration with online trading and investment management services is another complementary segment for p2p-lending. Such services allow their clients not only to invest money in stocks, but also to lend it on this kind of platforms. As an example, Canadian lending service Borrowell has integrated with Wealthsimple investment platform, while American online trading players think about integration with p2p-platforms. After all, you can invest not only in stocks through these services, but also in p2p\p2b-lending, crowdinvesting.

**P2B-lending, crowdfunding, crowdinvesting**

P2B-lending services are also growing, like Funding Circle (over £1B worth of loans) and Nucleus (a variety of products for SMEs ranging from overdraft to factoring for different segments) in the United Kingdom. Despite the abundance of services, solutions and technologies, this kind of startups is practically absent in Asia, Australia, the Middle East and Africa.

[40] https://medium.com/@slavasolodkiy_67243/the-god-of-online-lending-is-in-the-detail-not-in-the-online-or-lending-parts-8e70d4f9eec9
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Such Singapore platforms like FundingSocieties, MoolahSense, Capital-Match and NewUnion experimentally partner with major banks (DBS) to offer lending to the customers considered too small by banks with their subsequent “resale” when they grow up to the appetites of traditional giants.

Some interesting results are shown by the French Lendix (which has become a country leader, acquired its competitor Finaquare, and is now expanding to Spain) and Indian Loanzen (which finds SMEs related to their major network-partners as suppliers).

The most well-known crowdinvesting service is AngelList (SecondMarket and SharesPost can be barely called startups), and all other projects around the world are small to medium in comparison with AngelList.

The rapid surge of activity in this area in Asia comes from Malaysia, which was the first to issue crowdinvesting licenses (Crowdo, CrowdPlus, FundedByMe). Following the Malaysian example, Singapore has turned attention to the sphere and licensed FundedHere, Crowdo and OurCrowd (this Israeli startup has also raised funds from Singapore UOB Bank).

Crowdinvesting in real estate continues to gain momentum as an independent sector. In addition to the well-known RealtyMogul, we would like to highlight a new US player RealtyShares, Malaysian EthisCrowd (Islamic banking investments) and Chinese Dvocaitou.

The partnership of such platforms with stock exchanges is also worth paying attention to: it is a pre-IPO tool or trading tool for tech companies with low capitalization in comparison with the main stock exchange board: SyndicateRoom with LSE and a number of Singapore startups with SGX (many Asian startups currently prefer to be placed on ASX).

The cooperation of crowdfunding platforms with large companies is gaining scale: Amazon has launched a separate marketplace for products developed as a result of crowdfunding campaigns, while IndieGoGo has established a partnership with General Electric, Harman International Industries, Hasbro and Shock Top. Giants can now test their new ideas and technologies in a more interactive manner and using the services that contact with the most open to novelties users. Platforms also receive new major customers and engage their audience.

Platforms are building an ecosystem of complementary services: IndieGo-Go launches equity crowdfunding (crowdinvesting); Tilt - online remittances; Kickstarter has acquired a crowdfunding startup for musicians and artists called Drip (with Patreon and Show4me present in the niche).

However, despite the acquisition of Kickstarter, it’s too early to talk about market consolidation through M&A (although, this would be a logically
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sound stage of development judging by the number of startups in this sector, many of those cannibalize each other in their fight over the same customers).

The scaling ability and plans of the majority of crowdfunding services generate questions and doubts. Except for Kickstarter, which is now present on 18 markets after its expansion to Hong Kong and Singapore, the rest of the companies are demonstrating poor scalability.

PayPal has heightened our interest to crowdfunding market with two news. The company has canceled guarantees of reimbursement for the goods purchased through crowdfunding. This proves that the market is attracting a lot of attention and it makes up a large share of transactions for the giant, as well as indicates that the number of defaults in the production and delivery of prepaid products has risen. The second news turned out to be a rumor that PayPal might acquire one of the market leaders GoFundMe ($3B turnover, $600M capitalization, 25M users).

An interesting trend is that platforms also attract equity capital through crowdfunding\crowdinvesting: for example, CoAssets is listed on the ASX (which is in fact rather crowdfunding than classical IPO), or CrowdCube attracted 8 million pounds from 300 thousand of its members.

The chicken or the egg issue

At the same time, every service has its focus – some target more reliable borrowers, giving them cheaper (in comparison with banks) loans and loan refinancing offers; some see the segment of people with absent, poor or bad credit history as more perspective, offering them accessible (and usually more expensive) loans. These credit facilities, in turn, may either use their own money for lending or serve as intermediaries for banks or microfinance institutions. If we multiply all the above-mentioned, we will get about a hundred types of online lending.

The past year put forward the question of lending startups’ refinancing (so they would be able to lend money to ever-increasing client base) as the number of these startups and growth rates of these businesses make them seek for sources of external financing such as credit lines from pension, insurance and hedge funds (which are not able to invest in lending startups directly due to inherently high risks of the latter) and loans from banks with cheap money. In certain cases they also turn to portfolio securitization (when the debt of similar maturity structure and liquidity risk is assessed by external auditors, pooled and sold to investors wholesale as security) since venture financing can’t provide enough money for them. Specialized platforms offering such securities appear and facilitate trading. As far as securitization is concerned, while big players are coping with it by them-
selves, smaller firms need specialized platforms and funds to act as their intermediaries. Credit portfolio securitization issue (as well as accessibility of long-term and cheap financing sources in general) is crucial for India and Southeast Asia, where the abundance of lending startups and their inability to scale-up to the national level lead to “the chicken and the egg” problem (not enough money as long as there are not enough borrowers and vice versa). Japanese and Korean funds could play facilitating and unifying role if they untie this Gordian knot.

Investors on these platforms become more pragmatic and they are no longer hooked by the fresh approach of projects, but tend to look more at expected profitability versus potential risks. They also become bigger (the key players in capital deployment through such services are funds and banks), and as a result, startups are required to improve their reporting and process management (more expertise in securing loan portfolios, than in innovation in finance). As I have already mentioned, there is a whole new wave of startups (and funds) that focus solely on investing in this kind of services.

Let’s turn back to the problem I have mentioned above: the “chicken and the egg” issue (sufficiency of both borrowers and funds to lend to them) is gradually turning into the “vicious circle” problem (to attract enough capital one has to be skilled at risk management, which forces one to differentiate on the market not by the price factor but by focusing on the target audience and understanding its behavior). Another problem is “ecosystem presence” (when an attracted client leaves, if not offered any new products).

A mere idea of a loan marketplace (mediator space between capital holders and potential borrowers) is no longer relevant: you need to be as focused and differentiated as possible: to manage risks better (by means of big data or localization for some specific audience’s needs), or have some unique offer (on specific conditions, pledge or its absence, ways of issuance, specific clients), or the largest amount of money to invest (then again we return to the question of clients quantity and quality of risk management).

As described above, almost all startups in this field work within the borders of one country, while the necessity to unite lenders and borrowers from different countries is becoming more and more audible. The developed markets (Japan, Korea, Singapore, Hong Kong) are well endowed with money and have low interest rates. The developing economies like India, Brazil and Indonesia are in need of capital (preferably at lower interest rates, which are still high enough for investors from the developed markets). In order to make the movement of capital possible, platforms
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need to work their way to international expansion and have a sufficient level of trust (brand awareness, sufficiency of the present audience and experience in risk management). Most probably, in the near future we will see the services, which will give people an opportunity to lend and borrow money across borders, leveraging advantages of the best-in-class services in each country.

Many countries are currently concerned with how to support and accelerate the development of their startup ecosystems (including the focus on fintech) and it would be logical to provide their financial market support not directly, but through crowdinvesting\crowdlending platforms. For example, countries such as Singapore, Malaysia, Hong Kong, Korea, Japan offer a large number of grants and co-investment programs for startups. If they had provided them automatically after a market player had reached some positive results, it would have simplified the market processes and accelerated the development of ecosystems, as well as made the market itself more transparent. For example, Indonesia is currently considering such a partnership interaction; iAngels is being implemented in Israel, while Santander Bank provides 50\50 co-financing through CrowdFunder platform.

**P2P-insurance**

The CEO and founder of Guevra, a UK-based peer-to-peer based insurance company, believes the future for insurance startups lies in decentralized systems[^41]. “Instead of taking all of your money each year, we let drivers pool part of their premium together in groups,” the company explains on its website. Kim Miller admits most customers don’t want to hear from their insurance companies - ideally, he says, they wouldn’t want to pay either - unless they’ve been involved in an accident or need to get in touch with them.

Lemonade is an American P2P insurance provider for renters and homeowners’ insurance founded in 2015. It’s an interesting concept, as it uses the giveback collected from each peer group to pay for the group’s claims, giving back any leftover money to their common cause, and uses reinsurance to cover for cases where the group’s claims exceed what’s left in the pool. Louis de Broglie, CEO of InsPeer, describes the method’s value as follows: “The idea is to use technology to help you leverage your community - with all its positive aspects. So it is true that we are coming back to the original idea of the mutual company.”

Lemonade continues to build out an impressive team giving some hope that its new model for insurance (the company’s tagline is “Insurance that

[^41]: [http://www.wired.co.uk/article/kim-miller-guevara-insurance](http://www.wired.co.uk/article/kim-miller-guevara-insurance)
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doesn’t suck.”) will live up to its promises. Its most recent hire is Dan Ariely, the famous behavioral scientist, who will serve as the company’s Chief Behavioral Officer. Ariely is tasked, in part, with helping design systems and processes that ensure that the interests of the insurer and the insured are aligned. “This was an idea of a financial institution with no conflicts of interest”. Ariely firmly believes that insurance is a key part of people’s financial and social well-being. Lemonade, with Ariely, will try to bake honesty into the process of filing claims – in part by using Ariely’s own research. “We will try to use all kinds of things we have done that we have learned on the research of dishonesty to promote people to be honest,” he said. For instance, the Duke University professor has found that when people sign forms at the top of a document it encourages them to be more honest – so Lemonade may use that policy in its own applications. Since its public launch with a $13M investment from Sequoia Capital and Israeli venture investor Aleph late last year, Lemonade has amassed a series of impressive wins. The company lined up Berkshire Hathaway’s National Indemnity, Lloyd’s of London, National Indemnity, Everest, Hiscox, Munich, Transatlantic, and XL Catlin as reinsurers. In all, the firms have $100 billion in surplus capital to pay out to policyholders.

In its primary strategy aimed to penetrate all states in the US in 2017. After it has launched a full stack insurance carrier in the state of New York, by the end of 2016, it received all the licenses in 46 states and the District of Columbia to offer insurance to 97% of US citizens. In September Lemonade revealed its early numbers after its New York opening in a message from co-founder Shai Wininger. It said it sold 142 policies and generated $14,300 in gross written premium in its first 48 hours. Additionally, prior to that, it announced a $34M B round of funding. The latest round was led by General Catalyst with participation from GV (formerly Google Ventures), Thrive Capital and Tusk Ventures, as well as existing investors Aleph, Sequoia, and XL Innovate. This brings Lemonade’s total funding to date to $60M.

UK experience for fintechs in other countries: customer engagement through crowdinvesting

In 2016 London-based challenger bank Tandem raised over $30M from investors including eBay founder Pierre Omidyar. Earlier that year the bank raised £1M in a crowdfunding campaign on Seedrs crowdfunding platform that valued it at £65M. It has first raised £1m in just 20 minutes. Tandem has already given away 5,000 single shares to so-called co-founders who it wants to help shape the bank by giving feedback on how it should work.

43 http://www.insurancejournal.com/news/national/2016/12/05/433992.htm
The success of startup GoHenry, which raised just shy of £4m and surpasses the previous record of £3.5m for JustPark, has spurred crowdfunding platform Crowdcube to call for the existing limit on the value of investments to be raised. More than 2,000 investors ploughed cash into GoHenry for a share of 15.9 percent equity in the business. The final amount it raised was nearly double its initial £2m target.

Kwanji, the emerging market payment specialist, has closed its first crowdfunding round, exceeding its initial target and finishing 123 percent over-funded having raised £496,682 on the UK equity crowdfunding platform SyndicateRoom. UK-based PFM-app Squirrel planned to have the same success on the same platform, and New Zealand-based Squirrel Group, an alternative finance platform, has successfully secured $3M during its funding round on SnowballEffect crowd-investing platform.

Also, what else could be interesting, new digital banks turn to celebrities to boost sales - singers Will.i.am and Tom Odell show interest in UK fintechs. Rapper Jay Z is putting his money to work in startup and technology investing[^44]. By setting up a firm Sherpa Capital, Jay Z joins a growing crowd of celebrities that are bringing their brand to the tech world. Ashton Kutcher[^45], Kobe Bryant, Lupe Fiasco, Robert Downey Jr. and Justin Bieber and about 10 celebs[^46] more have also done technology deals.

Two of the UK’s new digital banks are bringing on board celebrities[^47] and raising millions of pounds from investors in an attempt to boost scale and appeal to millennial customers. Monzo and Atom are among a new breed of app-based banks that are focused on customers who want to manage their finances via their mobile. Monzo was set to raise money from angel investors in the next few months, which could include British singer Tom Odell, who is also a customer of Monzo, according to a banker close to the plan. Another app-based bank, Atom, has signed a deal with record producer and singer Will.i.am to act as an adviser. Will.i.am is expanding his CV[^48] in a perhaps unexpected direction, striking a consulting deal with Atom Bank which could see him take a multimillion pound stake in the fintech firm. In return, Will.i.am will have the option to acquire up to 3.55m shares in the digital bank at £1.15 each during a three-year period. Will.i.am’s new role at the digital-only bank will include taking part in public relations activities, attending board meetings and publishing social media posts about Atom.

[^47]: https://www.ft.com/content/8d887986-f921-11e6-9516-2d969e0d3b65
Abra (a payment app for any currency that slashes remittance costs by using a network of human tellers on the ground as well as the Bitcoin blockchain in the background) chief executive officer Bill Barhydt chose Gwyneth Paltrow, actress and chief executive officer of Goop, to help his app. Entrepreneur advisor Gary Vaynerchuk, who invested in payment app Venmo, was so anxious to hear Barhydt’s choice. Barhydt says of Paltrow, “She has been a huge value add. She’s opened up her network to us, given us valuable business advice, her insights on running a consumer business with hundreds of thousands of paying customers.”

Greed is good: what is the long-term value of ICO bubble?

Like in the late 1990s (in the dotcom era), angel investors and venture capitalists bought stakes in dotcom companies for a few cents before they went public, unloading them for double and triple digit dollars the day these companies made their debut on Wall Street. We all know what happened in that case: the bubble collapsed. We’re past the tulip stage now. Yes, that first dotcom bubble was ridiculous, but it also gave us enduring companies like Amazon, Google, and Ebay. And yes, scores of foolish day traders and IPO junkies got crushed, but a lot of smart, early players got very, very rich. That history is repeating itself now, too.

Jamie Burke, the founder and CEO of blockchain-focused VC firm Outlier Ventures, calls ICOs “the blockchain ecosystem’s killer app.” The way Burke sees it, ICOs are finally lowering the barriers to entry for technology investment, as whoever has some cryptocurrency can join the party; more than that, coins’ speculative potential is allowing open-source projects to raise more funds than ever before. “The point is that now, for the first time ever, open-source initiatives can be profitable for investors,” he says. “Previously, they were relying upon donations and they were inherently unprofitable – people would just do them for an ethical goal. Now there is a financial incentive for people to participate.” “Most of the projects which have launched ICOs are poorly designed and won’t scale,” he says. “But I look past that: I still think we have the ability to kick-start this new economy.”

Most of blockchain companies have technologies but they don’t have financial and business results. It was a real nightmare to raise traditional VC money and now with ICOs they can raise money cost effectively. On the demand side there was a real lack of capital available for blockchain.

The liquidity for cryptocurrencies is not high but with ICOs people were able to readily convert these currencies to services and goods and even stocks in startups. It is like ‘helicopter money’ for these companies and it

also allows investors to diversify into cryptocurrency assets. In addition, there is a speculative mood in the industry where people are looking for high returns in short term from these ICOs.

Right now, it seems like a “bubble” story, not unlike the dotcom era. But this is also an evolutionary phase. Many small companies will die, but the ones that will survive will be strong infrastructure-based solutions rather than end-user solutions. We expect only 5 to 10 percent of companies to survive. These will change the industry and become the future leaders like Amazon.

I expect the industry to become a more viable and regulated instrument over time. ICO as a tool has lots of advantages like security and liquidity that it brings to venture capital players but lots of people will be disappointed with the unprofessional investments made in ICO without proper business evaluations. I expect the market to mature, become more transparent as mature players like VC come into the market. These funds will be regulatory compliant and will filter companies that has no potential or reason for investment. There will be new infrastructure platforms that will provide technology to host ICO for preliminary due diligence.

It’s the Wild West, it’s very much early days still. People are getting overloaded with offers and the quality of the companies is going down. The future will see more professional players such as big funds, institutional investors and technology platform enter the market. The renaissance will be more apparent in the near future when we see more regulatory changes and after professional capital begin to enter the market which will bring stability. In one and half year from today potentially we will have companies that will go out of market - companies that would have already spent all the money raised, unprofessional investment will not be successful. Founders of the companies will then be more mature and investors will be sophisticated with the pockets to invest several hundred million dollars in cryptocurrencies.

The most interesting (and perspective) blockchain-related spheres for ICOs are strictly outside of the cryptocurrencies’ realm[50] – they include solutions for healthcare and logistics industries, land sale support, governmental and corporate workflow solutions. Estonia, a global leader in e-government, has recently launched a unified medical record database, accessible to hospitals and insurance companies, in partnership with the blockchain startup Guardtime. Prescrypt works along the same lines in partnership with SNS Bank and Deloitte in the Netherlands, BitHealth – in the United States. Swedish government together with ChromaWay and a

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50 https://thenextweb.com/guests/blockchain-industry-grew-18-2-whole-fintech-market/
partner bank is going to test blockchain smart contracts for a land registry, which are to simplify the life of buyers, sellers, and banks, using land as a collateral on regular basis. BitFury launches a similar initiative in Georgia, whereas BitLand enters Ghana and Honduras (and have plans to expand to Nigeria and Kenya). UAE launches Blockchain strategy to become paperless by 2020. The state of Delaware, hosting numerous companies from other states and countries, is to introduce a blockchain-based system of company registration, an issue of shares, recording of Board Resolutions, redistribution of shares as a result of purchase and sales transactions (Singaporean Otonomos is developing a similar solution for a number of countries). British Everledger assists banks, insurers and open marketplaces in a reduction of risk and fraud by digitally certifying diamonds, art objects and high-end bottles of wine.

My colleague, Elena Masolova, also wrote her thoughts regarding this: “The technologies of 1993 have met with the hype of 1999. Many tech barriers exist yet, but the concentration of brains (and now the concentration of capital as well) makes me believe that the community will solve everything. Five to 10 companies of this autumn will surpass US$1 billion capitalizations after crypto exchange listing. The best factor the industry is seeing is the huge influx of talent and capital. Hundreds of entrepreneurs, coders, investors I know have joined. Gordon Gekko was right, ‘greed is good.’”
1.4 Fintech is all about how to earn more — not pay less

Jack Ma, Alibaba founder, continues to emphasize\(^{[51]}\) that Alibaba is not a retail trade platform, but rather a channel for small and medium businesses allowing them to boost their growth, connect with clients all over the world and compete with world-leading companies on equal footing. mPOS and online acquiring fintech startups take a similar stance. These companies, just as Jack Ma, see their mission in not just provision of the cutting-edge payment processing to large companies, but also in the delivery of technologies and analytical tools to help one to grow his business. Their motto says “Don’t spend less, just earn more money”.

Online acquiring market grows vigorously all over the world - however, it seems that there is some shift in balance to the side of bigger companies, enjoying leadership premium. Large companies grow faster than the smaller ones. This raises a question of what sort of future awaits smaller companies. Will they be bought by traditional payment processing giants in order to strengthen their technology stack and increase competitiveness (perhaps, but at lesser valuation), acquired by leaders, such as Stripe, Klarna and Adyen, to provide them access to new markets and niches (hardly), or merged with other fintech startups to add to the ecosystem of services in respective countries (most probably)?

Turnover-based lending for SMEs (PayPal Working Capital and Square Capital come to mind) and mPOS acquiring are complementary segments for online acquiring (and vice versa - Square again). WePay, which, after the US and Canada, starts to develop its business in the UK, also expands to mPOS acquiring.

After Square’s IPO, the attention to the mPOS segment has decreased significantly - although one can expect a revival of interest taking into account the steady demand for such services and expansion of fintech services to the SME segment in general. New services are poised to seek for a “core” to unify ecosystems, as well as for data sources and cheap client acquisition channels.

The success of Square.Capital (which demonstrates a high level of profit margin coupled with low level of risk - just as a structurally similar PayPal Working Capital) prevents one from concerns about its profitability potential. mPOS acquiring may turn into a channel of client acquisition, a way of differentiation and a source of data for credit risk tackling for Square, while

the company will make money on SME lending and complementary products. The question is rather - if, and when other players are going to scale to this segment (and iZettle has already launched its service).

So far it is not clear, how justified is the proprietary production of readers for the mPOS players (Square, SumUp, Ezetap). Some analysts refer to it as a competitive advantage for it allows companies not to depend on hardware suppliers. Others regard it as a costly distraction. Overall, this approach is perfect in case you are building a completely proprietary ecosystem so that you would be in control of the value chain (like Apple). The same reasoning applies to acquiring own payment provider license instead of partnering with banks - while you increase one-time expenditures, thus possibly hindering your expansion for a while, with the license you are more flexible and agile and this makes your development in the local markets cheaper and faster.

Square made a questionable and interesting move to offline, starting to sell its riders via Apple stores. On the one hand, it is indeed an interesting distribution channel and objectification of the product that helps the client to remember the company thus inclining more to buy its services. On the other hand, this objectification focuses client’s attention on hardware, making it unclear whether he buys plug-and-play hardware box or business analysis software, allowing him to reshape his business - new opportunities may potentially harm the perception of the service’s value.

Square is still a trendsetter in terms of its speed and quality of product line diversification: both with its own solutions (Square Cash, Drawler, Invoices and open APIs), and with purchased products (Framed Data for Square Capital) and partnerships (Intuit, Xero and others in order to enter the Australian market). SumUp has integrated with neobanks Holvi and Fidor. Indian Ezetap represents an interesting example: it has integrated with popular e-wallets Paytm and FreeCharge, opened APIs, it doesn’t charge any additional fees for transactions, earning on monthly subscriptions for their app with data and analytics.

Geographically, mPOS projects are located mostly in the USA, UK, Germany, Brazil and India, with Australia being a new and interesting venue for newcomers from all over the world. There are some small players in Southeast Asia, Africa, China, Japan, South Korea and West Asia; however, if they don’t consolidate in the following year, they will most probably die.

For banks mPOS acquiring is still just another form-factor (the same story as with many other fintech products and services) and not a completely new system dedicated to value creation for SME clients. Therefore, they feel their solutions are competitive given their partnerships with Ingen-
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ico, GoSwiff, WePay or FirstData. It is equivalent to interbreeding Tesla’s body and your old school petrol car and calling it an “electrocar”. One should change many things and processes inside so that clients could fell in love with it. And sales of these rough-and-ready services support this statement. Apparently, telecom operators are going to follow the same road (Vodafone has launched a similar service with Ingenico and OTP bank in Hungary, Indosat with GoSwiff and BNI – in Indonesia) if they don’t invest in independent companies with original strategies and strong teams (look at the success of mPesa in partnership with Vodafone).

Another complementary direction is the production of new cash registers (usually tablet-based), coupled with the development of business management software (usually cloud-based), including payments, CRM, marketing, HR and purchase management tools. Most of such newcomers are from the US (Square Stand, AllSet, Poynt, E la Carte, ShopKeep, Revel, Breadcrumb, Clover, Toast and Lavu), Canada (Shopify POS and Lightspeed), Australia (Vend, Albert) and Singapore (Mobikon and other players). There are a few other small-scale projects in Germany, Estonia, Russia, Malaysia and Indonesia.

One half of the players makes an emphasis on hardware sales (Poynt, Square Stand, SumUp Stand, Shopify POS, E la Carte, ShopKeep, Albert, Revel, Breadcrumb), the other half (AllSet, Vend, Lightspeed, Clover, Toast, Lavu, Erly, Mobikon) focuses on the software. Again, the latter have an advantage of easier scaling and ability to expand quicker to any country in the world, however, customer engagement is not that pronounced in this case. Most of these solutions (AllSet, E la Carte, Breadcrumb, Mobikon, Toast, Lavu) focus on F&B sector (cafés, bars and restaurants).

The segment is highly integrated with mPOS acquiring only, whereas immense opportunities offer partnerships with such sectors as P2B- and SME-lending and online factoring. Yet again, such services don’t capitalize their client data (big data and online scoring), while they have it in quantity and quality good enough to facilitate targeted offers of other fintech services (mobile wallets, remittances, microlending etc.).

Fintech is currently undergoing a natural evolution stage. Previous three years were a «toothbrush» era: when you perform just one function, but better than anyone, and when you are irreplaceable and used every day. The long-awaited turning point came in 2014 when all services started merging with each other in some way. And it’s understandable – if the first advanced customers were ready to bake a cake with disparate ingredients themselves, the mass customer wants to get a comfortable ecosystem of services with seamless integration allowing the customer to easily use data from one service inside the other and enjoy the benefits from their joint use.
The future ecosystem (or fintech bank ‘makers and doers’) could be built on mPOS-projects. Traditional banks have historically spent much effort and offered the widest range of products to two segments: retail and corporate business. Small and medium business has always been ‘something in between’ them. Therefore, the ‘pain’ of entrepreneurs is stronger than the pain of all other groups. Secondly, such customers consume products both for private individuals and for legal entities. They don’t differentiate in the way like – now I use some products, as an employee of a large corporation, and then I go out or come home and use different products. They don’t have this ‘customer journey gap’ – they use all products simultaneously as far as they have just a few employees, and they are so much involved in all processes of the business that their personal and corporate ‘wallets’ are a kind of ‘communicating vessels’.

The reasons why mPOS-acquiring can become the core of the future fintech bank for SMEs are the following: this service is the easiest to explain to the potential consumer and to use it; it attracts both SME customers and private individuals; it easily connects new online opportunities with conventional offline infrastructure (which is critical!); it has a very low CoCA and is growing very fast. mPOS sector has the highest number of people consuming fintech products among both entrepreneurs and individuals. mPOS is equally successfully developing in most countries.

The challenges that mPOS is facing trigger its development towards other products. mPOS is growing rapidly, but has a very low margin: it is necessary to increase the margin on mPOS-customers by selling additional fintech services either developed in-house or as a result of integration with partners. When an entrepreneur chooses whether to accept card payments or not (which is the basic functionality of every mPOS-project), he usually disregards the cost of this service (base price in most countries is 2,7%), but takes into account the advantages of having cash instead of non-cash in the bank account.

He notes that accepting cash payments is cheaper than card payments and in some countries it’s a way to avoid taxes. But then what? Then the entrepreneur is not able to provide the required business documentation to a bank and doesn’t get a business development loan at all or it costs him by times more than acceptance of card payments. As a result of tax savings, the best employees are not satisfied with their job (since they are not able to obtain a loan without officially declared salary and their retirement pension is also going to be small), they quit and the business declines with the worst employees. I believe that in a long term perspective this approach assumes that the entrepreneur is going to raise his children abroad, as over time the level of crime and unemployment due to unpaid tax will be high.
mPOS-projects urge their customers not to spend less but to earn more, they don’t show what will happen to you tomorrow, but they show where you want to be the day after tomorrow. It’s a simple but fundamental difference. If you want to save 2.7% on mPOS-service, accepting cash only or bargaining for a lower acquiring rate – it’s ok, but we are not going your way, because we don’t believe in your business success the day after tomorrow, and we don’t want to waste our time and effort on bankrupts.

If you wonder how to earn 30% more – it’s ok, and 2.7% is a fair price for this. Once you become a customer of mPOS-service, you access mPOS opportunities (which are not available with traditional banks). The most important is that you begin to know your customers. In your personal account you accumulate your customer base – bank cards, e-mails, mobile phones, the service recommends you to learn their names and put in your base – and «know and understand your customer» rule is the key to successful business development.

Most successful companies in the world are successful not because they have some goods or services, or have a better price, but because they are able to attract, serve and retain customers. Know your customer is your first step.

In your personal business account you can customize your receipt (why does is have your bank’s logo instead of yours? Why you don’t offer your customers to join your group in social networks? Print the information about your special offers on the receipt!). You can automate e-mail and SMS notifications of your customers. Now you can automatically ask each client for a feedback on a product or service – and your customers do not have to look for your «book of complaints», call the call center, or write in the feedback section on your website – they simply reply to your «receipt» sent by e-mail or SMS. You can immediately respond to it and save communication history in your database. You can immediately set up a loyalty program (Mobikon, etc) – «gifts for purchases», «if you buy goods at the amount X, you get a discount», «tell a friend» etc.

When you purchase not a simple mPOS-acquiring terminal for a smartphone or tablet, but a full-fledged replacement for your cash register (tablet on a stand, mobile reader, printer for printing receipts and cash box – Poynt, Square Stand, SumUp POS, etc), you are getting access to a wider range of opportunities. This solution is much more compact, aesthetically attractive and less expensive than a conventional angular plastic box.

You can accept and record in your system cash payments. You can provide your customers with free Wi-Fi (Purple, Starbucks Wifi, Tide Analytics, Shopster, Navision, etc) – dividing the signal into 2 channels (the secure
one for yourself, and second channel without a password for customers), you use the Internet anyway and free Wi-Fi is an attribute of a good modern service nowadays. You will be able to «meet» your customer (if he has visited either you or your SME customers before) — when he approaches your cash register, pop-up window will appear on the screen with his name, photo, shopping habits, information whether he is your regular customer or not, and you will be able to accept his payment even without a card present. Any customer would like to be recognized from the first sight and offered exactly what he wants to buy, and it doesn’t matter that mobile register is helping you with this.

You can save all the products in the form of a catalog (or load it from an Excel file or any other program or database). You can take a picture of your goods or upload a picture from the Internet so that your register looks as attractive as iPhone screen, rather than a dull list of names and prices just like a monochrome screen of a calculator (is there a difference?). Directly from the catalog store goods in the services like Pinterest — now millions of users of these services will be able to save them as a «wish» and you’ll receive the information about the deferred demand on your goods and get free advertising.

You can also save the catalog as a website, or mobile app for App Store, Google Play and Windows Phone (Shopify, etc) — just imagine that your app can be downloaded in one click on any smartphone or tablet! The app is fully customized, branded and includes all your products in stock, so that your customers can make distant purchases or place pre-orders (AllSet, etc) from home or office: book a table at the restaurant, make an appointment for a haircut in the weekend, arrange a delivery of a new bike. In fact, you just have opened your own store but online!

When your customer returns, he doesn’t need cash or bank cards, only a smartphone with your app installed — now he can pay with it. From your personal account you can also synchronize your catalog form the register with your communities on social networks (Ecwid), and sell products and services on Facebook and other social networks! Do not forget to place the information about your mobile app and social network store on your receipt, so that your new customer finds out from the receipt sent by email or SMS where and how to download your app, and your brand will remain in his smartphone or on a personal page in social networks for a long time.

If you own a cafe, restaurant or fashion store — besides registers, equip your sales assistants or waiters and tables in the cafe with a tablet and installed app built in your personal account of your mPOS-service (Burberry use case, Wallmob, etc). This will allow your sales assistants to see not only the clothes hanging in a showroom, but also what you have in stock or in
Part 1: On the way to the first fintech bank

another point of sale, thus, you will serve the customer even if you don’t have a particular product at the moment (and arrange a home delivery). If you own a café, clients will be able to place pre-orders rather than wait for a server, and you save on printing the updated menu if you change it often. 

It also will increase the effectiveness of advertising – if you want to immediately inform all staff members about the new promotion, special or daily offer, it appears on the screen of their tablets (including, for example, a video from a show or how your chef cooks). Not to mention the fact that you do not need to hire experts to design your club cards or pay for loyalty programs because any customer’s order, purchase, payment or comment will be saved. You will always have handy data on each client and his purchases!

After one month of using the mobile reader or register you will appreciate it. In your personal account you always see new/regular customers (motivate your regular customers and ask for a feedback from the new ones), best/worst employees (in terms of sales volume, average check, customer feedback), well/bad selling products. You will be able to sell goods and services on credit (Financelt, REVO, etc) – your point of sale used to be too small for a bank to have a credit consultant there and a promotional stand, but now you’ll be able to fill in all the required customer information on your register screen in 5 minutes and obtain loan approval, so that you receive money and your customer gets a product. You will receive information about people who want the same goods and services that you offer but use other stores or live in another district or city – now you can make them a special offer.

Those who prefer to make payments from smartphones using e-Wallets (Google Wallet, Apple Pay, PayPal, etc) can shop without cash or plastic cards. If a customer doesn’t use e-Wallets, mPOS-project will propose to download one (Square Cash, etc). They will be able to save there your products and services as future «wishes» and you will have a chance to remind about yourself.

Not to mention simple transfers from a mobile application to your friends and family with one swipe of a finger. Also you will be able to easily, quickly and cheaply issue prepaid gift cards (for example, you own a beauty salon and one your regular clients wants to make a gift for a friend) – firstly, it is deferred demand for which the customer is ready to pay now (Square Gift), and secondly, it is the promotion of your brand outside your point of sale.

In two months, you will collect some personal business statistics and mPOS-service will start comparing you with similar businesses and giving a recommendation on business improvements. Also after you have reached
Part 1: On the way to the first fintech bank

a certain turnover and showed how you appreciate and care about your customers, you will be able to obtain a business loan on more favorable terms than in a bank (Square Capital, PayPal Working Capital, Kabbage, etc), because a bank sees only your revenues, costs and business plan, while mPOS-service trusts you more and sees the number of your regular customers, employees’ motivation programs, inventory management, increased demand on pre-order service and your products saved as future «wishes» in wish lists.

Or even better – you can borrow directly from your loyal customers (LendingClub, FundingCircle, etc), or make them your co-investors (AngelList, ICO, etc). For example, global corporations use services similar to Kickstarter not because of the lack of money but because it’s top class to engage your loyal customers in your business development!

Do you remember that two months ago you recommended your customers to install a mobile app for payments in order to get rid of cash and cards? Now in addition to simplified payments and the fact that this customer is now «familiar» to other entrepreneurs, the customer receives spending analytics inside the mobile app (not by the check amount as a number of banks do, but broken down into specific products, e.g., the customer can filter how much fish he consumes and the app shows how many fish dishes he has bought in your café, in a grocery store, at the airport in a foreign country, etc), and can receive interest on his «wish» as if it is a deposit in case he is saving on it.

It will also be more convenient to forward the templates for utility payments from your online bank – there is more life here. Since your business is constantly growing and you need new employees, involve your customers in the process and publish your vacancies on the receipts. In another 2 months you’ll notice how that your advertising expenses and customer service costs have fallen, your loyal customers often recommend you to their friends and you have more regular customers than new ones. Visitors are less likely to leave without purchases and are happy that you always «recognize» them, give useful recommendations and spend a minimum of time for bureaucracy and product search.

Your brand went online – far beyond the area where you have opened your first store. Now regular customers place pre-orders from home and a few days before the visit. It’s high time to get rid of paper meaning both paper money and interactions with suppliers in paper – and electronic document flow management system (Tradeshift) will significantly reduce the costs and increase the speed of interactions with suppliers and partners for your fast growing business. At the same time, the number of your staff is also growing. Your personal account will help to optimize your pay-
roll project (ZenPayroll) – arrange staff schedule, vacations, sick leaves, issue payroll cards with your logo instead of a bank logo in order to promote your brand.

When you can’t cope with accounting and spend more time on management issues, you need a professional accountant, lawyer and personal assistant. But if you can’t afford the whole administrative staff since you are still a small business – in your personal account you can get additional features: a professional accountant, a lawyer and a personal assistant just working remotely and part-time – just like Uber, when the mobile app provides you with a professional and personal driver, but you only pay for the time when you need this service.

Your customers automatically receive more favorable credit offers from banks in their eWallets after they have accumulated payment history (CreditKarma), or even lend and borrow from one another (LendingClub). If you would like to start your business online, then fintech services can help you to set up your Internet (Shopify) or mobile shops, or accept electronic payments in case you have your own website (Stripe, Klarna, etc).

If you offer home delivery, equip your delivery guys with mobile readers to accept bank cards or, better yet, give them tablets with your app installed (in case the client wants to buy something else on the spot or asks for recommendations). On the customer consent, such services may even share the client’s history of online and offline purchases – it will help the customer to analyze his revenues and expenditures (gives a better overview) and to get a loan (lower interest rates) etc. On a larger scale, one can notice another common trend. New financial online services promote entrepreneurship, they encourage you to launch and develop your own business and not in the buy-sell format, but rather creating added value for the customer. It is much more important, in my opinion, than the 2.7% commission for acquiring.
1.5 Insurtech is the new fintech

Insurtech is a relatively new industry, however, it’s becoming one of the fastest growing verticals in the Fintech space. Last year, Reggy de Feniks and Roger Peverelli, our old friends and partners, shared their insights resulting in Top 10 Insurtech Trends for 2017 & beyond[^52]:

1. Massive cost savers in claims, operations and customer acquisition
2. A new face on digital transformation: engagement innovation
3. Next level data analytics capabilities and AI; to really unlock the potential of IoT
4. Addressing the privacy concerns
5. Contextual pull platforms
6. The marketplace model will find its way to insurance
7. Open architecture
8. Blockchain will come out of the experimentation stage
9. Use of algorithms for front-liner empowerment
10. Symbiotic relationship with insurtechs

Online insurance is one of the fastest developing fintech sectors and it will evolve in a separate sector in a couple of years without a doubt. The “hottest” locations are the USA (Lemonade, Oscar, Zebra, Metromile, Slice, Stride, PolicyGenius, Bunker) and Germany (FriendSurance, FinanceFox, Clark and others). Other countries – Great Britain (Trov, FitSense), France (Alan), Poland (DocPlanner), India (CoverFox) and China (PingAn Good Doctor, Huize Insurance) - cannot boast of so many new players.

As online insurance sector passes the formation stage, price comparison, product aggregators and brokers (Zebra, PolicyGenius, Bunker, FinanceFox, Alan, CoverFox) account for the majority of the market. However, as in the case with fintech as a whole, such services flourishing now will subside in the future and make room for players able to deliver added value for their end client and give him an enhanced range of services. Otherwise, they will have to migrate to complementary sectors for survival and retention of their client audience. For example, Oscar Health is very active now in many areas from arranging doctor appointments online and developing solutions for telemedicine to opening a new hospital in Brooklyn (in order to increase customer loyalty and revenue per client by providing more complex services for its clients), and working with small employers from the audience’s point of view.

All in all, companies focus more and more on work with SMEs instead of big companies, which is an apparent trend caused by the growing role of gig economy (composed of freelancers, employees, and clients of intermediary marketplaces and on-demand services). Slice, Stride, Bunker and CoverFox offer their Uber-like services for the new types of employees (and clients), which did not exist before. Metromile and Slice sell insurance services according to pay-per-mile and pay-per-use models, respectively, demonstrating clearly an on-demand approach and catering to the needs of low mileage drivers.

Another interesting approach borrowed from the pool of overall economic trends, is p2p-insurance. Such services as Lemonade and FriendSurance allow one not to obtain an individual insurance policy, but to become a member of the insurance group, consisting of people you probably know or at least people with similar need and circumstances as you have, instead. In case the insurance event does not happen, the money is paid back to the members (with a deduction of the platform fee).

The rapid development of online consumer lending leads to increased demand for online insurance services: electronics insurance, sports equipment insurance and even musical instrument insurance (available at Trov, for example). The high sales volumes of fitness trackers and increasing use of fitness apps instigate the emergence of companies aggregating and analyzing this kind of information about your physical activity (like FitSense). Innovations in AI and chatbots lead to an emergence of services, which automatically offer products (Clark) or foresee critical situations (Quartet).

Insurtech and healthtech are rapidly converging nowadays and this development seems logical. Insurance giant PingAn has launched PingAn Good Doctor to enable people to arrange doctor appointments online or get telemedicine services.

Services of the new generation grow at ever-increasing pace by relying not only on organic growth but also on merging with each other - DocPlanner has just acquired Doctoralia, Metromile has recently purchased insurance carrier Mosaic Insurance to handle the underwriting of its policies itself.

More and more investors are being attracted to insurtech/healthtech segment. It turns out that insurance companies are more active in Insurtech than banks used to be in fintech, seems they have learned from the unsuccessful experience of the latter not to resist changes or ignore them.

Auto insurance companies just in the US spend a total of $6B in advertising each year. It means you are “customer-oriented” and “tech-advanced” company when you are spending for advertising two times more than for
real innovators[^53]. Several big insurance players – like Chinese giant Ping An, - are showing us a great example of how to change your vision according to demand of the new digital era.

The average age of life insurance agents is 59 years old, and it’s estimated there is an average of three duplicate processes in each customer sale. It’s not out of the realm of possibility that your insurance company will at some point ask you to fax them something. Anyone who’s ever had an insurance claim knows that getting paid can often turn into a nightmare. Dan Ariely, a Duke University professor and the Chief Behavioral Officer at Lemonade, explained why it happens: “Every dollar your insurer pays you is a dollar less for their profits. So when something bad happens to you, their interests are directly conflicted with yours. You’re fighting over the same coin.”

Today’s consumers want to be able to get educated, get a quote and buy a policy from the comfort of their home or car via smartphone in less than 15 minutes. Just as fintech is transforming the banking world, “insurtech” has set its sights on the insurance industry. Endemic mistrust and persistently low net promoter scores are providing a ripe opportunity to use technology to shift power back.

Today’s world is driven by data. There is a huge opportunity for insurance to leverage big data and online-scoring platforms to help improve their operations in everything from sales to underwriting. Real-time and near real-time data streaming – everything from environmental sensors to connected devices and wearables – will allow insurers to better manage risk, improve subscriber loyalty and optimize sales opportunities.

Personal financial management (PFM) services have been actively cooperating with insurers even before. Blockchain will be useful to the safekeeping of insurance history, the issue of policies and their “journey” between those who issue them, buy them and request them.

The Verizon 2016 Data Breach Investigation Report concludes[^54] that large and small companies across all industries in all geographies are at risk of being targeted by a cyber-attack; in fact, it is estimated that 62 percent of cyber breach victims are small to mid-sized businesses. Cyber Insurance is a sub-category within the general insurance industry, offering products and services designed to protect businesses from Internet-based risks. In just a couple of years, the U.S. cyber insurance market has grown from about 10 insurers to 50 that provide stand-alone cyber insurance policies. In 2015, these providers generated $2.75B in premium revenues in the U.S. According to the recent study by PwC, this number is set to triple to $7.5 billion by 2020.

[^54]: https://letstalkpayments.com/five-new-types-of-insurance-from-revenge-porn-to-drones/
Live streaming of revenge porn is on the rise on the Internet, Europe’s police agency warned recently, saying [55] vulnerable young ladies are increasingly falling victim to sexual predators. A U.S.-based insurance company announced a new policy that specifically covers the damage of online abuse. Chubb Insurance told [56] that its personal cyberbullying insurance would cover counseling fees, lost income from taking off from work, and the cost of hiring an online reputation management firm to help remove smears online. Though the policy is aimed at parents whose children may become victims of cyberbullying, it will also cover adults who are targets of online harassment, which it defines as “three or more acts by the same person or group to harass, threaten or intimidate a customer.” Once considered harmless trolling, online harassment is increasingly recognized for its serious offline consequences.

AIG is rolling out a new set [57] of policies aimed at the growing drone industry. The policy offerings are designed for a newfangled purpose: protecting the operators of unmanned aircraft from liability in case of collision, technical problems, or any other sort of situation that could cause damage either to people or property on the ground. AIG offers optional coverage for “spoofing”: when a hacker hijacks your drone remotely. Commercial use of drone aircraft, which will take place over the next decade, is expected to shake up industries ranging from motion pictures to agriculture and energy.

With healthcare, we have a very outdated and inconvenient system too. We need to call a doctor 2 weeks in advance for an appointment, wait 30 minutes in a waiting room and then talk to a doctor for only 15 minutes while he types away on a laptop, only occasionally making eye contact with us. And, all of this for a huge cost that is growing at an unsustainable rate.

Digital health funding hit nearly $5.8B in venture funding in 2015 ($4.3B in 2014) - two times more than in insurtech at that moment. It is very difficult to see a border between insurtech and healthtech today: lines are blurred. Healthtech-startups, which gathering your data can improve your relationships with insurance companies (or startups), reduce your expenses, hedge risks of insurers, make customer service better.

Tissue Analytics lets you take pictures of a wound over time on your smartphone, allowing doctors to determine whether it’s healing or festering. AliveCor lets you capture an electrocardiogram at home and alerts doctors if something is wrong with your heart. Netra Labs lets you take eye tests at home using mobile technology. Period tracker Clue has become the world’s fastest growing female health app (or so it claims), with four million monthly

56 http://www.reuters.com/article/us-usa-cybersecurity-socialmedia-idUSKCN0XP1WD
57 http://fortune.com/2015/10/27/aig-insure-drones/
active users. Px HealthCare mobile apps provide people with cancer with personalized information and tools to manage their condition. Revere Care’s app lets people in need of care book a carer, a doctor or a nurse “at the click of a button” by connecting them via a “digital carer marketplace”. Knock lets people book face-to-face appointments with GPs, pediatricians and psychiatrists. TalkLife is a peer-to-peer support network for youth mental health.

Hong Kong-based Horizons Ventures, a private investment arm of billionaire Li Ka-Shing, led a US$15.3M funding round in Berlin-based P2P insurance startup FriendSurance. China’s internet giant Tencent recently acquired a major stake in Guahao, a startup that grew a massive user base as it enabled real-time geolocated physician appointments. And there’s a hardware and medical device arm - evident in the company’s recent unveiling of its own glucometer. In Singapore we can highlight CXA Group, which has raised $25M[58] in Series B investment round, co-led by B Capital Group (co-founded by Facebook Co-founder Eduardo Saverin) one month ago. The latest capital infusion will help CXA to scale its existing platform and operations beyond Singapore and Hong Kong, to include China, India, Indonesia, Japan, Malaysia, the Philippines, South Korea, Taiwan and Thailand. Its regional expansion strategy includes scaling CXA’s SaaS platform for distribution to SMEs and individuals via banks and insurers. The company said that a large insurer has piloted CXA’s white label portal to cross-sell individual insurance and wellness products to its captive base.

Chris Skinner wrote[59] that the digital transformation has reached insurance, as one of the last big offline industries. There are big barriers to entry, but while insurtechs do not have all the answers and the solutions yet, they are best positioned to find them. We have only seen the beginning of the amount of talent and money that will pour into this industry. “Companies who think they can still wait a couple of years until they start to embrace digital innovation will cease to exist 10-15 years from now. There is a huge potential to do more business and at the same time create a much more customer friendly industry.” And he is recommending to spend more attention what Asia is doing[60], because the region is more open for innovations.

Many entrepreneurs are waking up to the fact that insurance is arguably one of the most old-fashioned, analog consumer services in existence, and they are creating companies to upend this premise. Vivek Garipalli, CEO of Clover Health, mentioned why startups are more successful than traditional players in innovation: “There’s a big difference between spending a lot of money on technology and being a technology company”.

58 https://e27.co/facebook-eduardo-saverin-edbi-join-cxa-us25m-series-b-164741-2/
1.6 Neobanks as front-end interfaces for fintech banks

The idea of fintech banks’ arrival is actively circulating now. That is, if earlier a fintech company used to be sold to traditional banks, that embedded it in its product range, corporate processes and old services’ culture, but now the functionality of fintech companies is strong enough to enable one to construct a fintech bank, consisting only of new services, which would have a client base big enough to compete and earn profit. So, the main question concerning the future of a fintech bank idea is - what is going to be a core of such a bank? From client interface point of view neobanks could be a good fit for this role.

To start let us see: What allows new mobile players to compete with traditional banks? Have they succeeded? How expansion of ApplePay and SamsungPay threatens traditional banks and benefits newcomers?

Despite the fact that the development of e-wallet industry attracts much attention, more and more questions concerning end-client value and business results arise and it is still too early to be confident that the e-wallet industry is going to compete with banks and payment systems. More so, the direction of main players’ development seems to be more important than their current figures.

If one assesses achievement of real business objections (such as end-user and merchant value, frequency of use, product line diversification, turnover and revenue), only a few companies stand out - a historical giant PayPal and Chinese AliPay (and WeChat Pay too). But the latter have their own problem, common for all Chinese fintech players – it is hard for them to go abroad and attract users from other countries. Right now, they are expanding mostly through Chinese tourists going abroad - as they travel and spend more year by year, and local sellers (and banks) are gradually opening for Chinese payment systems and e-wallets. There is no value for non-Chinese clients so far in using AliPay and WeChat Pay. Thus, there is an opportunity for foreign-born mobile banks (with better local market sense and adaptation to it) to be acquired by Chinese giants in the mid-term perspective.

Solutions from Apple (ApplePay), Google (Google Wallet and Android Pay) and Samsung (Samsung Pay) demonstrate crude functionality: they allow users only to add cards and pay. Only geeks and early adopters use these means frequently as they are inclined to either test new solutions or make themselves look fashionable and advanced. Cash-back and discount campaigns boost installs, however, when they are over, the effect subsides.
In no country, consumer habits are considerably changed because of the spread of these solutions.

The only crucial point of competition among these players is their geographical coverage (and a number of connections from local banks). ApplePay is the most widespread, while Android Pay is available on nine markets (the USA, three countries in Europe - Great Britain, Poland, and Ireland, five in Asia-Pacific - Singapore, Australia, Hong Kong, New Zealand and Japan), Samsung Pay and Google Wallet eager to catch up with these players.

Sooner or later the question will arise: what value do these wallets bring to their users? And if they are not able to develop new functions in a manner similar to that of PayPal (after separation from eBay it has diversified its product line and increased speed and quality of new solutions’ introduction), they will only be able to evolve by purchasing mobile banks (which have worse figures, but better solutions), remittance services, mPOS-acquiring startups, etc.

Also, new players appear in the field - smartphone makers Xiaomi and Huawei. Most probably, Oppo and other fast-growing makers will join the race in the near future. As the client base of every player will dwindle, the issue of differentiation from competitors will soon become the most important one (and this event will mark the beginning of a long M&A period for startups, which test their products on local markets).

All these projects share the Chinese companies’ main problem – it is hard for them to expand abroad (foreign agents arrive in India as well as in China, meanwhile, new competitors spring-up). Take Paytm, for example – it has not still integrated its solutions with those of its main stockholder – AliPay – and it doesn’t go abroad. While there are many similar unbanked markets all over the world – Indonesia, Vietnam (local player Momo has attracted over 2.5M clients, 1M of whom use not only payment solution, but also e-wallet, which enabled Momo to attract $5.7M at first stage, $3M from Goldman Sachs somewhat later and $25M from Standard Chartered Bank), Thailand, Myanmar, Latin American and African countries (African telecom operator Net1 invested $40M in Indian e-wallet Mobikwik).

Traditional and direct banks are often skeptical about neobanks and challenger banks as they claim to be able to copy and introduce “features” of these newcomers and their mobile apps are not lagging behind in terms of functionality of the product. In my opinion, differences are rather drastic in most of the cases - apps and solutions from the two parties are as similar as the built-for-petrol car fitted with electric engine and Tesla. Firstly, new solutions are built according to the mobile-first, not the branch-first paradigm,
and this approach elevates user experience and product impression to new level (UX). Secondly, new players are focused on new market clients (not on the whole market, which is always comprised of current/old clients mostly), that influences their brand positioning, the language of communication and perception. These clients, as said, have never been served by traditional banks - by force of age or geographical position, as developing countries are characterized by low level of banking services penetration. Thirdly, a new level of client service and support is characteristic of newcomers - one may ask any question (literally any question in any sort of language) in messenger or via video communication in a manner he asks for advice from a friend - and he will be answered immediately. To consider neobanks as another distribution channel or cost cutting possibility is a fundamental mistake. To be purely online service or a traditional company, selling certain product via online channels, are two absolutely different things.

Neobanks and challenger banks complement many other fintech verticals, creating many opportunities for M&A deals and partnerships with high level of synergy. E-wallets have either a weak functionality (ApplePay, SamsungPay and AndroidPay) and low level of customer retention or poor scalability (AliPay, Paytm). Direct banks are little outdated technologically now (and they need some shake-up) and have a weak geographical coverage. P2P/online-lending platforms show high marginality and growth rates, but their customer acquisition cost grows day by day and they need to obtain information about new clients in advance to lower credit risks, while offering new service for current clients, increasing customer retention. PFM/PFP services don’t attract the same attention as neobanks, but they could give the latter better differentiation and better understanding of clients’ long-term plans. As concerns mPOS-acquiring companies (Square, SumUp, iZettle), they own such a huge amount of data, not only about their merchants, but also about their merchants’ clients (purchases, card availability, contact details), that doesn’t influence their business and capitalization because they don’t serve clients of their clients in any way (except for a raw solution from Square.Cash).

Another unexpected sensational trend is crowdinvesting (equity crowdfunding). For the last six months two British challenger banks - Tandem and Monzo - raised £1M each from their current and potential clients at Seedrs and Crowdcube platforms, accordingly. This news was positively received by investing community - because it is not simply about “raising £1M on the market”, but rather about planting your idea into your clients’ minds and inspiring them to risk their money to help you to build your service. This case is a good example to follow not only for neobanks, but also for other fintech companies.
For the last year, two important events occurred, indicative of high level of attention to fintech and growing level of competition in this area. Three deals were closed: Russian Rocketbank, German Fidor and Finnish Holvi were acquired by Russian “Otkrytie”, French BPCE and Spanish BBVA, respectively.

It is interesting to observe a trend of demographically targeted neobank creation, like British Monese for expats in London, Danish Ernit and Singaporean YoloLite - for children and their parents, British Loot and Hong Kong Neat - for students. An idea of online banks, targeting SMB, has a huge potential - besides already mentioned Holvi and Tochka, new players appear in this area (all of them in Great Britain, for now): Anna, Tide and Civilized Bank.

There are many innovations in the sphere of client communications: neobanks employ not only call centers with the support of messengers and video-calls, but also chat-bots (Russian Tochka and Indian digibank), Siri integration (N26, Monzo) and Alexa integration (CapitalOne).

Looking at dynamics of mobile banking use, one can observe, that most of the growth is concentrated in two overlapping segments: youth (18-29 years old) and developing markets (notably, unbanked markets). Examining geographic distribution of neobanks, we can observe that most of them are located in Europe, with some interesting solutions in USA and Canada, big demand in Brazil and low activity in Asia (which motivates Asian banks and investors look closely at what is created abroad, invest in it and work in collaboration with the teams involved on how to bring these solutions to Asian markets). The UK is the leader[^61].

Challenger banks or neobanks, as they’re called across the pond, are completely digital banks built on new technology as opposed to the outdated infrastructure of legacy banks. They usually tout better interest rates, lower fees, if any, and better service. They have an easier time creating a good customer experience because they don’t build on the rusty rails of the existing financial system, making the way they operate more efficiently and the user experience more enjoyable. Why are they so cool?

- New solutions are built according to the mobile-first, not the branch-first paradigm, and this approach elevates user experience and product impression to absolutely new level (UX). To consider neobanks as another distribution channel or cost cutting possibility is a fundamental mistake.
- A new way to collaborate and co-create with customers: another unexpected sensational trend is crowdinvesting (equity crowdfunding) for fintechs.

A new type of funding and promotion: two of the UK’s new digital banks are bringing on board celebrities and raising millions of pounds from investors in an attempt to boost scale and appeal to millennial customers.

New players are focused on new market clients (not on the whole market, which is always comprised of current/old clients mostly), that influences their brand positioning, language of communication (check their cool videos [62] online!) and perception. These clients, as said, have never been served by traditional banks - by force of age or geographical position, as developing countries are characterized by low level of banking services penetration. A new level of client service and support is characteristic of newcomers - one may ask any question (literally any question in any sort of language) in messenger or via video communication in a manner he asks for advice from a friend - and he will be answered immediately.

Many banks today are missing the clear opportunity

62 http://telegra.ph/How-neobanks-promote-themselves-cool-videos-inside-03-03
1.7 Co-working spaces as the new fintech bank’s branch

With co-working spaces around the world endowing people (sometimes for free) with place to work, involving vacant areas of schools, hospitals and train stations\(^{[63]}\) as new centers of activity, why can’t future fintech bank branches be a mix of digital banks’ showrooms and co-working spaces for bank customers\(^{[64]}\)?

Idea Bank, a Poland’s most innovative bank supporting the country’s dynamic and vibrant entrepreneurial culture, started\(^{[65]}\) turning branches into office space for SMB’s. With branches becoming increasingly irrelevant in a mobile age, banks began refreshing some of its sites, offering firms free access to co-working spaces, conference rooms, Wi-Fi, office facilities and beverages.

Idea Bank, a Polish lender focused on small businesses, is boasting that the free office facilities that it provides to entrepreneurs have proved so popular that it is being forced to close them to non-customers. “Demand for Idea Hubs’ unpaid office facilities and conference rooms is so high that Idea Bank decided to close them off to non-account holders.”, according to the bank. 40% of regular visitors use Idea Hubs at least once a week. Only one fifth of all visitors uses Idea Hubs the same way they would a typical bank branch. The remaining 81% consider them a place to work, conduct business meetings, attend workshops and training sessions, or engage in various networking activities – shows a survey by Idea Bank. 27% also pay close attention to the location of a branch. Other important factors include pleasant ambiance, interesting design or a desire to visit a much talked-about venue. In the era of emptying bank branches, it is the frequency of visits to Idea Hubs that’s probably the most surprising. 40% of the respondents use IB’s free co-working facilities at least once (22% – a few times) a week. 79% visit them on a minimum monthly basis. Only 6% have used a Hub just once.

The first Hub, located in Warsaw, was opened in January 2015. Currently, there are four similar branches available in the capital city of Poland, including one seasonal venue at the Vistula beach. The branches are equipped with a total of 43 desks and 9 conference rooms. Idea Hub in numbers: 22,5 thousand visitors, 55,5 thousand cups of coffee consumed, 111 business workshops, 1 000 trained entrepreneurs, 15,7 thousand fans on Facebook.


\(^{[64]}\) https://e27.co/will-fintech-neo-banking-next-frontier-co-working-spaces-20170227/

\(^{[65]}\) http://www.nocash.info.ro/idea-bank-says-turning-branches-into-office-space-for-smb-s-has-proved-too-popular/
“We wanted to popularize the Hubs, fill them with entrepreneurs and freelancers, make them visible in the cityscape. But today’s daily agenda is that clients come to Hubs and cannot find a place to sit’, sums up Dominik Fa-
jbisiewicz, Idea Bank board member and the creator of Idea Hubs.

With the beginning of October 2016, free office space will become avail-
able only to the bank’s clients, though this decision will not impose any costs on non-account holders determined to use the Hubs anyway – the bank has a wide portfolio of unpaid accounts. Entrepreneurs find using IB’s services highly beneficial.

The project’s business effects are a lot more important – and they are im-
pressive as well. Idea Hubbers open twice as many bank accounts as visi-
tors to regular branches, and the experimental branches report four times higher sales of Tax Care accounting subscriptions.

The 2,782-square-foot branch of Umpqua bank is likely the first in Port-
land to have an in-bank library. Customers – and non-customers – are free to sit and read the books or take them home. The goal is to make the bank more welcoming and less intimidating. “We want people to hang out,” said Eve Callahan, senior vice president of corporate communications. “We want the store to be relevant in the community.”

Portland-based Umpqua has long been known for its unique approach to branch banking, including offering a proprietary blend of coffee and free dog treats. Each Umpqua branch, which the bank refers to as stores, also has a lobby phone that dials directly to the desk of CEO Ray Davis. The most notable is enhanced meeting space. The branch features two conference rooms and numerous seating areas. The public can reserve the space free of charge. Callahan said the space is designed to “add value to the surrounding area,” which is home to numerous small businesses that might not have access to appropriate meeting space.

The counter just inside the entrance to the branch of Umpqua Bank of-
ers locally made hand cream rather than deposit slips. It has recently been used to peddle pottery, bike components and glasses frames, among oth-
er local products; eager local merchants have booked up the stand for the next year and a half. Much of the rest of the branch is put to unusual uses as well, including art exhibitions, yoga classes and “stitch and bitch” sessions (group knitting). At another branch located near an old-persons’ home, the manager hooked up a gaming console to large monitors hanging on the wall to create a popular virtual bowling league.

ly-well-branching-out
Part 1: On the way to the first fintech bank

Umpqua Bank has branches spread across Washington, Oregon, California, Nevada and Idaho. This sort of expansion runs contrary to accepted wisdom, which holds that cheap competition from internet banking is killing off the physical sort. To the extent that branches still make economic sense, runs the general view, it is in clumps (for efficient marketing), filled with aggressive salespeople pushing ancillary products.

Umpqua, in contrast, is trying to create outlets that neighborhoods will welcome and people will want to visit. It attempts to make even the most mundane transaction a treat. Tellers, for example, hand out a chocolate with each cash withdrawal. It goes to great lengths to cut the time and form-filling involved in obtaining a mortgage—typically an agonizing process. Prominently displayed at every branch is a phone which connects directly to the desk of Ray Davis, the bank’s president. If he is at his desk, he answers. Typically, he says, the caller just wants to know if the line is genuine.

The bank prides itself on doing everything differently. Instead of sending out junk mail offering consumer loans, Umpqua employees attached small flyers to potted plants and placed them on 1,700 doorsteps in the neighborhood they were targeting. Every day begins with a “motivational moment” (read something inspiring, play marshmallow dodgeball or hold a trivia quiz; do not refer to corporate memos or procedures). Phone calls are answered with the words “Umpqua, the world’s greatest bank”.

Umpqua’s success suggests that banking is not merely about hard numbers. Umpqua has shown an ability to delight customers and avoid the censure that has bedeviled its bigger competitors. Its rise is evidence that a small bank can indeed be different. It must now prove that a large one can be as well.

Any Umpqua’s location feels more like a contemporary store or upscale café than a bank branch. It features mobile concierges, iPads, interactive touch screens, outdoor seating and a free “loaner” bike. “It is built to be a community hub in every sense of the word, boasting an innovative store design aimed at fostering collaboration and interaction,” explains Eve Callahan, SVP Corporate Communications at Umpqua. Callahan says technology is changing the way people interact with their bank, and Umpqua is trying to embrace those changes rather than resist them. That’s why the branch is jam packed with iPads, six projectors and dozens of LCD screens.

This strategy is clear – literally; the location’s entire exterior is glass, opening the space up to the public and passersby. LCD screens facing the street feature a twitter feed using the hashtag #umpquasf, local weather, a cal-

Part 1: On the way to the first fintech bank

endar of events and bus schedules. The branch will be continually staffed with two “Mobile Concierges,” roving bank associates equipped with iPads and headsets that help them open and service customer accounts anywhere in the store. The transaction area (if it’s even fair to call it that) is intentionally designed to look more like a hotel registration desk than the teller ramparts seen in traditional banks. With the rollout of this new location, Umpqua is also introducing the use of paperless instead of printed transaction receipts. And hey, if someone needs to borrow a bike for a couple hours, no problem. They can check one out from the bike parking stations Umpqua keeps up front for just such occasions. Arguably the most pronounced and profound feature in the branch is the “Catalyst Wall,” a 20-foot long multi-part display exploiting all the five human senses – sight, sound, touch, taste and smell. The “Spark Resource Center” space includes publicly available iPads loaded with subscriptions to publications such as the Harvard Business Review. There’s also “Recharge Bar” where anyone – customers or the general public – can juice up their mobile devices.

The “Business Lounge” is an invitation-only space is designed for larger group meetings or sessions, and will feature events with local business and thought leaders. Umpqua’s “Exchange Rooms” are flexible-use spaces open to everyone, not just customers. Umpqua associates can use them to meet with clients, but small groups can also reserve the rooms for free, where they can deliver presentations, hold virtual meetings or simply have a meeting.

CheBanca! is the digital-first bank in Italy launched in 2008 by Mediobanca[69]. Mediobanca provides merchant bank services in Italy and had never had a retail bank before. Therefore, it made sense in the post-meltdown digital age to implement a fintech bank fit for Italy, and CheBanca! claims to be that bank.

Anyways, being a digital-first bank does not mean being a digital-only bank. A digital bank with a branch? Yep. CheBanca! has launched almost 50 of them so far, with more to follow. This has proven critical in getting trust and deposits, with the main aim of achieving three things that digital only does not achieve: Trust, Brand, Service. These three things are harder to achieve when you are unseen, unproven and unknown, although some are bound to disagree.

For example, once you get inside, it looks a bit empty. All you can see is a concierge with an iPad, a machine that looks like a teller (but isn’t) and something at the back that might be a Star Trek transport station (and is). Looking back the other way across the branch (which is in an L-shape),

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you see a few teller stations. These are stations to chat with people about account opening, service and advice, and the typical staff member here is from Gant, Massimo Dutti, PC World or similar retail stores by background. They’re not bankers, but customer agents who are enjoying the experience of joining a bank that helps people live their lives, or so they tell me. Finally, at the back of the L-shape are a few rooms with frosted windows.

These are the serious advice stations. They operate by customers making appointments to see wealth managers, mortgage advisors or similar and then, when they turn up, they check-in and can see which pod they’re going to go to and who they’re going to meet. However, you don’t need to wait if it’s about advice, as you can go to the transporter room. The transporter room is this weird funky station at the back. Once you sit at the station, it’s got all sorts of cool features like biometric recognition using digital signature and shared screens with video operators.

This particular small branch serves around 259 customers a month at these video stations, and it has proven successfully at broadening and deepening customer relationships using those old bank metrics of cross-sell and up-sell. According to the bank, the service video station has a 15% cross- and up-selling success rate. Finally, if you just want to deposit a check or cash, you use the funky self-service machine.

CheBanca! boasts over half a million customers overall, since the bank opened for business in 2008, and is now rolling out its digital branch formats. Today, there are four branches based on the new format. By the end of September 2015 it is already eight in a selected sample of medium and big towns. Equally, the bank intends to roll-out the video station experience via Skype from September. All in all, there are lots of things I liked about the digital branch concept.

New online services flourishing in Asia do not just let you do even better what has been done well before (like in the West), but for the majority of new users these services are a real “leap” of the Past to the Future. There are a lot of unbanked people in Asia with a low level of technical expertise and the surrounding traditional retail infrastructure hasn’t been yet established by the time of Online. The growth of mobile-only services is limited in Asia – at a certain stage of development you just have to learn how to combine offline experience with new online technologies (O2O – online-to-offline)[70].

On 28 August 2014 Chinese Internet giants Tencent and Baidu were teaming up with conglomerate Wanda to form an RMB 5 billion (about $814M)
joint venture\(^{[71]}\) in a bid to challenge Alibaba’s dominance. In a joint state-
ment, the companies said: “the JV underscores Tencent’s commitment to
enriching our O2O ecosystem.” Online-to-offline purchases are especially
important to Tencent as it seeks to capitalize on the 396 million users of its
popular messaging platform WeChat.

On 31 of March 2015, online retailer JD – Alibaba’s arch-rival – announced
it would establish an independent subsidiary specifically for online-to-of-
line businesses\(^{[72]}\). The new division was headed up by Wang Zhijun, who
report directly to JD CEO Liu Qiangdong.

E-commerce titan Alibaba announced 23 of June 2015 that it’s forming
a RMB 6 billion (US$970M) joint venture company to focus on O2O-ser-
vices\(^{[73]}\), such as food delivery. Alibaba is forming this joint venture, called
Koubei, with its affiliate company Ant Financial, which operates the Alipay
epayments system that’s integral to Alibaba’s e-commerce sites.

Baidu is focusing aggressively on online-to-offline (O2O) sales\(^{[74]}\), one of
the hottest forms of e-commerce in China. On 30 of June 2015 they an-
nounced, that they would invest 20 billion yuan ($3.22 billion) over the
next three years on online-to-offline services\(^{[75]}\).

I want to show some references how the best brands are changing their
understanding of offline distribution in the new online world. In Burberry
offline stores you cannot simply walk in and buy an item, instead any con-
sultant (not sales-manager) will first open your account in their online-shop
(if you do not have one – will set it up for you), choose the item you were
interested in, and only then sell it to you. LINE wants to be not just another
messenger – they took their heroes\/characters and created “the world of
LINE” via LINE Friends shops. They changed their business model from
sales of physical products to an educational center of online-services (they
also rented their branches to independent musicians, painters, photogra-
phers, producers of wine and coffee for free for their events\/exhibitions\/
concerts). Tesla have not just created electric-car controlled via tablet, they
have also excluded dealers from a distribution channel and organized di-
rect online sales model, and their showrooms are about their brand, val-
ues, history, knowledge about cars.

Over five years ago (October 2013), Apple announced that Ahrendts
would be joining the company as senior vice president of retail and online

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71 http://techcrunch.com/2014/08/28/tencent-baidu-and-wanda-form-814m-joint-venture-to-take-on-
alibaba/
72 https://www.techinasia.com/chinas-jd-creates-standalone-branch-for-online-to-offline-services/
73 https://www.techinasia.com/alibaba-billion-dollar-investment-o2o-services/
75 http://www.reuters.com/article/2015/06/30/us-baidu-investment-idUSKCN0PA0MH20150630
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stores[76], a newly created position, reporting to CEO Tim Cook. The Apple Stores’ annual revenue of just over $20B is more than six times Burberry’s, its 30,000-strong staff is almost three times as large, and—due respect to the trench coat—it’s products have insinuated themselves more thoroughly into consumers’ daily lives. As envisioned and created by Apple mastermind Steve Jobs and his retail lieutenant Ron Johnson, the stores’ design and customer experience were radical, “but they haven’t progressed that much in the past five years. If you’re not reinventing your experience every five years, you’re behind the curve,” says a longtime member of the retail team. A beloved manager, she transformed Burberry’s culture, more than tripled earnings, expanded its global footprint, and helped to restore its historic reputation as an innovator. All Apple wants her to do is exactly the same thing. In a company wide email announcing Ahrendts’s hiring[77], Cook wrote that she “places the same strong emphasis as we do on the customer experience.” But he also added, significantly, that “she cares deeply about people and embraces our view that our most important resource and our soul is our people.” One Apple Store employee says the focus on customer service, on “enriching people’s lives,” was wonderfully relentless at first. He recalls enjoying the luxury of taking time to walk people through their problems and think through possible solutions. “But when the first iPhone came out, things started to change to make us more of a typical retail establishment,” he says. At the Genius Bar in his store, early expectations were that you would help three customers an hour if you were working on Macs, four if you were working with iPods and iPhones.

During her long tenure as the head of Burberry, Ahrendts managed to roughly triple revenue, while launching novel digital initiatives with the luxury brand. In a separate statement, Burberry sought to ease shareholder concern over the move, announcing that revenue had shot up 14% for the half-year through September 2013.

Before moving to London in 2006 to lead Burberry, she had a long lunch with Christopher Bailey, who had joined the company five years earlier. They spent most of it talking about the need for a new corporate culture. At the time, “nobody talked about culture, and nobody talked about brand,” says Ahrendts. The whole operation—a business that was built largely on licensees and franchisees—felt fragmented and siloed. She and Bailey decided empathy and trust would be Burberry’s new cornerstones. When Ahrendts first came to Burberry, she was faced with a unique challenge[78]:

76 http://www.fastcompany.com/3019981/apple-hires-burberry-ceo-angela-ahrendts-to-rejuvenate-retail-stores
77 http://www.fastcompany.com/3023591/angela-ahrendts-a-new-season-at-apple
How do you breathe new life into a 158-year-old brand without disrupting its underlying DNA? She wanted the customer experience to be seamless, consistent, and brand-centric. The emphasis, Ahrendts says, is on creating an inviting atmosphere free of the pain points common of traditional retailers: “Everything we’ve done is counterintuitive to traditional selling organizations, with their traditional training. My dad used to always say that he could teach anything but he couldn’t teach how to feel. That’s the hardest part when you have 11,000 people: How do you teach them to feel how we feel? The thing is, I don’t want to be sold to when I walk into a store. I want to be welcomed. The job is to be a brilliant brand ambassador. Everybody is welcome. Don’t be judgmental whatsoever. Look them in the eyes. Welcome them. ‘How are you?’ Don’t sell! NO! What we have wanted to do is build an amazing brand experience and an amazing way that people can engage with the brand. Then it will naturally happen. And then I don’t care where they buy. I only care that they buy the brand.”

She said: “If you want to keep the next generation and if you want them to be united, you have to see this is how they live. You have to blow up all your existing policies—everything!—and rebuild them around this.” Mobile is transforming retail in ways that she finds essential but at times difficult to comprehend. She muses on how rapidly the technology has been changing—and how quickly tech-addicted shoppers are changing their behavior, too. “They’re just moving.”

“We’ve never been finance first. We’ve always been instincts first,” Ahrendts said. “My dad used to always say he can teach you anything but he couldn’t teach you to feel. And so that’s the hardest part.” “We have always said actually this isn’t about money, it’s not about price. This can be an experience. It doesn’t have to be about buying something. And hopefully one day we would love it if you might buy something but it’s okay if you go onto Burberry.com and you just want to listen to Burberry Acoustic, you know? Because you start to feel the soul of the brand, you feel it.” “Soul is the word,” Ahrendts added. First, if you see the stores as brand ambassadors, this isn’t primarily about sales in the current fiscal year; it’s about investing in brand awareness and prestige over the next 10 or 15.

True to her word, during her tenure at Burberry Ahrendts made Apple a centerpiece of the retail experience, from the iPads that store associates carry to the digital initiatives she’s empowered through apps like Instagram. In September, the company partnered with Apple to hold a runway show and film the entire event using the iPhone 5S[79]. Ahrendts pointed to the company’s flagship Regent Street store as being the benchmark for success. At Burberry, she pushed for a seamless consumer experience be-

[79] https://www.youtube.com/watch?v=akS3iFt9VvA
between online and brick-and-mortar. Everything about the messaging was unified, from the music played on the website and in stores to the photography and displays, all of which Bailey’s team curated and produced in-house.

With Bailey, she has spearheaded storytelling that creates a halo around Burberry and technology that gives customers shopping experiences at every price point, even if they might never spend a penny. For instance, the Art of the Trench website is Burberry’s selfie central, where those who have coats can show off how they wear them and those who want them can imagine which of these people (thousands have uploaded photos so far) they would like to be.

In 2012, Ahrendts shook up the traditional, often-siloed nature of Burberry’s retail stores. No longer would a store manager in Detroit only focus on Detroit in-store sales, for example, nor was a digital sales manager there allowed to ignore sales at brick-and-mortar shops. The disparate elements needed to speak to each other. “Traditionally, wholesale is wholesale. Digital people are incentivized to drive digital. And store managers are interested in the store. We blew that all up. I said, No, no, no, store manager in Detroit: You’re responsible for digital too. You’re telling me nobody in Detroit is shopping online? Wrong! Now London, for instance, every week has to report their online traffic and their offline traffic and what was their crossover. I hired a chief customer officer who came from Lloyds who built us a huge insights and analytics department. We put in traffic counters in all the stores, because I could get traffic online but I couldn’t get traffic offline and so I couldn’t get any crossover behaviors.”

During the 2012 year, the company has activated a system allowing all associates, in all 330 Burberry stores, to have at their fingertips, on their iPads, all relevant customer information gathered from their activities at Burberry.com as well as in-store. She saw a wealth of information in that flurry of flashes—what did customers respond to? What did they like or dislike? What did they share on social media? She thought there must be a way to collect and share such data with the whole Burberry team, as well as combine all six of Burberry’s consumer-intel databases into one salesperson-friendly interface. “She wanted to merge the digital experience with the in-store experience”. “We’ve got ten thousand iPads out there in the stores. And we’ve built this app. So if you buy in Hong Kong or if you went and bought online or even if you are just window-shopping and have stuff in your basket—we’ll know. Offline stores will be able to see all your behavior online. We are blurring the physical and digital, and it’s not just the retail experience. It is the service.” At Burberry, the digital experience

80 https://www.youtube.com/watch?v=Oh6DcY7zoYI
extended beyond retail. “We know that 70 percent of them are going to go onto Burberry.com before they travel, before they even walk into a store. So we feel that the most vital thing is whatever they see on that landing page, they also see in the windows. Online, offline, it’s gotta be the same.”

Once just digital stickers that users of mobile messaging app Line send to each other like emoticons, the bear, the bunny and their seven friends will soon be unleashed through stores, virtual reality and possibly an animated film. For smartphone users in Asia where most of Line’s 205 million monthly users are located, the characters are as familiar as old school icons such as Hello Kitty and Disney’s animated stars. As Catherine Shu wrote on TechCrunch[81]: “I live in Taiwan, where many WhatsApp users switched to WeChat and Line about three years ago, thanks in large part to stickers and emojis. At first I thought stickers were pointless—why waste time flipping through a library of cutesy pictures when you can type a response in seconds? Then I saw that twisted party sticker above and realized I was wrong. Like symbols in Renaissance paintings, Line stickers express a wide, complex, and often bemusing array of ideas and emotions—and some are just really messed up, in an awesome way.” Many people in the U.S. and other Western countries make the same mistake I did of assuming that messaging app stickers are just cute. “No matter how its business strategies perform, however, Line’s stickers are an example of how tech companies can influence and reinforce cultural trends, as characters created to sell a product take on a life of their own.”

Line planned[82] to open 100 stores selling Brown dolls and other cute ‘Line Friends’ paraphernalia worldwide over the next three years. They are not well known in America or Europe but owner Line Corp. hopes to change that. It has already opened two stores in Seoul[83] and its first Shanghai and New York stores will open this year. Though partly an accidental strategy, the company says the bricks-and-mortar presence will draw more users to the app and help replicate its rapid Asian success in other regions.

The popularity of the Brown and Cony stickers has shaped a new trend in mobile communication. Instead of typing messages, many users simply tapped a sticker showing a coy-looking Brown sitting on a toilet or eating a bowl of ramen. Users began to associate themselves with certain characters and the lineup now includes a bespectacled middle-aged man named Boss and James, a blond narcissist. Larger and more expressive than emoticons, the stickers have been a draw card for Line whose users are mostly in Japan, Thailand, Indonesia, India and Spain.

81 http://techcrunch.com/2015/07/10/creepy-cute-line/
83 https://www.youtube.com/watch?v=egb7CfMljxw
‘We never intended to do a character business,’ Yoon Sunmin, who oversees Line’s character business. Visitors to the newly opened flagship shop in Seoul’s trendy Gangnam district screamed with delight when they saw an outsized Brown bear greeting them near the entrance of the three-story store. Locals and tourists from Vietnam, China and Hong Kong queued to take a picture with Brown and other human-size cutout Line characters, as if they were pop stars. Line also cashed in on the rock star popularity of its animal characters through mobile games and an animated TV show in Japan.

The first Line Friends store in China opened in Shanghai’s Xintiandi shopping district in May 2015, selling Brown dolls, Cony pens, Sally mugs and other goods such as kitchen utensils, stationary, jewelry and toys. ‘We hope that in the countries where the Line app is not used actively, Line characters would promote the app.’ Over 700 types of items are on display on shelves around the store. Customers can taste cartoon cakes, egg tarts and many other desserts that are made specially for the Chinese consumer.

As Tesla Motors’ CEO, Elon Musk, has said, he wants Tesla to be the next major American car company shifting the paradigm of the last century from what has traditionally been known as the “Big Three” to the “Big Four.” But while the visions of grandeur may seem unattainable to many Americans given that Tesla is going to build electric cars and nothing else, the company has quietly been trying to use a perceived weakness—its lack of industry experience—to its advantage. By exploring every out-of-the-box avenue, Tesla is trying to create a model in which cars are designed, built and, ultimately, sold in very non-traditional ways.

Tesla’s goal is completely different from this traditional dealer model, says George Blankenship, Tesla’s VP of Sales and Ownership Experience. To begin with, Tesla doesn’t even have dealers. Yes, the company has retail locations, but these Tesla stores. Tesla’s new push involves opening stores in high traffic mall locations. “We want to engage with people when they are not thinking about buying a car,” said Blankenship. “Our goal is not to sell a person a car, but to educate them on what electric cars and, particularly, what Tesla electric cars can provide. At a mall, people are already relaxed and out shopping on their own. Most of them will likely never have heard of Tesla, and so we are becoming part of their daily routines.”

Blankenship doesn’t expect many vehicles will even be sold at the mall locations, instead expecting the sales to happen online after the initial mall experience. In many states, independent dealers can’t sell cars at retail lo-

84 http://shanghailist.com/2015/08/02/line_opens_cafe_in_shanghai.php
85 http://www.autotrader.com/car-news/tesla-is-turning-the-car-sales-model-on-its-head-132587
cations, but there are no such restrictions to online sales. This strategy is a way for Tesla to get around what they perceive as antiquated laws and control the entire ecosystem from conception to delivery of the product—much like Apple does by building the hardware and operating systems of their products and then selling them at an Apple Store.[86] This unique sales strategy in the automotive industry is just one of the things that makes Tesla a very different company, but according to Blankenship it’s key to their eventual success. “Eventually they will come back and buy a Tesla not because it was sold to them, but because they really want to become part of the Tesla community.”

Tesla Motors is radically rethinking the car. It’s also rethinking the way cars are sold.[87] They worked to create a rich, interactive experience that engages the public and generates sales inside each of its high traffic stores. Tesla’s focus on vertical integration enables a unified brand experience. The company owns and manages every stage of its business model, from concept to design to manufacturing and sales.

Tesla deliberately opened its stores in high traffic retail locations. This approach lets them interact with and educate potential customers in a less formal, more experiential environment. They utilized technology to deliver a variety of informative experiences in a small space. A remotely managed network of interactive stations introduces visitors to Tesla vehicles and how they work. “Our technology is different, our car is different, and, as a result, our stores are intentionally different,” as Elon Musk said.

Their interactive stations are designed to draw people into the store with visuals and content that address the most common questions they have about electric vehicles. They’re intended to move visitors from general interest to real consideration. They found that in a crowded store, each station serves two audiences: the current user and the individuals observing. The scale and position of key visuals are designed to serve both parties. Customers spend a lot of time considering the purchase of an electric car. That’s why they designed the Tesla configurator to work in-store, at home and on the go, providing continuous support and education. Prospective buyers can create, modify and save their car designs on Tesla store stations and revisit them on PCs and tablets—or vice versa. The experience is seamless across devices.

Cars are a major purchase for most people. Electric vehicles only extend the consideration cycle, which can last several months. As a result, they prioritized features that make it easy to design, save and retrieve a custom-
ized Tesla at any time during this process.

Tesla has dozens of stores and galleries worldwide, with more on the way. They developed a system that scales with company growth. A Dynamic Publishing Platform gives Tesla the ability to publish content to all stores, supporting the company as it grows and opens new locations. From its headquarters in Palo Alto, the Tesla team can push out software and content updates to Tesla stores around the world. Analytics data from stations in each store are sent back to headquarters, offering insight into usage patterns that enable continual refinement and optimization.

Digitally enhanced in-store experiences are the missing link in almost every retailer’s digital ecosystem. Since the advent of e-commerce, the ability to drive foot traffic or increase the average cart size through online initiatives has remained difficult to access. Connected stores remove this blind spot. They integrate retail shopping into a continuous, measurable service experience—offering seamless interactions with customers before they visit the store, while they’re in-store and post-purchase. Meanwhile, customers benefit from more informed choices and smarter, more efficient shopping. The introduction of digital experiences in-store also unlocks an important new tool for retailers: the same kind of real-time data and analytics insights that are central to optimizing their online channels. The integration of retail, e-commerce and digital marketing analytics will enable them to optimize the entire customer experience.

It’s not uncommon for independent workers to feel isolated. But the rise of co-working spaces in top urban centers is changing that, offering freelancers unprecedented support and resources. Co-working spaces are providing more than just a sense of community that comes from working around others. WeWork, for instance, is one of the most popular providers of workspace for independent contractors, and it’s expanding to major cities around the world. The company has raised the bar in part by focusing on creating a collaborative ambience you’d find at any cutting-edge start-up. WeWork spaces even boast arcades, fresh fruit, and beer on tap. And more than 150 WeWork partners offer services like human resources, web consulting, and accounting help—removing some of onus on freelancers to do everything themselves.

WeWork is attracting several thousand SMBs as new clients each month— it is much more than any of newborn neobanks can do. And vice versa, margin per client (and influence on the valuation of the company) of neobanks is higher. Banking services (where co-working spaces will be like showrooms for a digital bank) look very complimentary for such kind of customers, which WeWork has already attracted. It will be a very logical step for the development of WeWork’s ecosystem around their custom-
ers. And the purchase of one of these players for $50-200M can increase revenue and profit of WeWork (and their valuation too) much higher than the price of this acquisition. So, the main question concerning the future of a fintech bank idea is - what is going to be a core of such a bank? What about WeWork Bank?
PART 2

Building the puzzle of the ecosystem

Part 2: Building the puzzle of the ecosystem

FinTech Apps
- Dashboard
- History
- Accounts
- Transfer
- Invoicing
- m-POS
- Cards
- Deposits
- Crowdfunding
- Factoring
- Investments
- SME Loans
- SME

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The word “SREDA” in Russian means “ecosystem”, “environment”, “society” and “Wednesday” - we prefer all of them, especially the first one. We believe ecosystems are very important to be successful in the fintech space[1]. We spend a fair bit of time (especially on “Wednesdays”) thinking through how we can accelerate the development of startups (“ecosystem”), communities (“society”), BaaS-platforms (“environment”). There are many types of communities we believe are important in the development of the ecosystem: startup community, the education community, investor community, mentor community etc. Through structured thought provoking discussions in the various community events we not only contribute our perspectives but also help in connecting the various dots together. This helps in generating a level of trust in the ecosystem.

If we were to decompose a bank, there would be a fintech company with ecosystem of services, that can substitute each service the bank provides[2]. However, a single ‘problem’ remains - banks are still holding our accounts. In the most fatalistic prediction, a bank would be a back office organization maintaining an account, which is utilized by various fintech companies providing their services. So we still need a bank, but not for the reasons we needed it ten years ago. Over time banks may become sort of ‘warehouses’ bringing together fintech startups to serve each particular need of a customer.

Biggest fintech-startups started diversification of their product line. The transition from individual services to ecosystem launched, when Square and other biggest fintech-companies have started the development of their ecosystems in 2014, this year they will further the integration of mPOS services, offline payments, loans, loyalty programs, analytical platforms and websites and applications constructors.

- mPOS-acquiring (Square, SumUp, iZettle, Payleven) going to SME-loans, p2p-remittances, tablet-based cash-registers and POS-management systems;
- E-wallets (PayPal, AliPay, Paytm) going from payments to consumer and SME-lending, online-remittances;
- P2P-lending (LendingClub, Prosper), Online-lending (Zopa, Kreditech, Avant, ZestFinance), Online-lending for students (Affirm, CommonBond, Earnest, WeFinance) going to SME-lending, car-loans, mortgage, refinancing, personal financial management (PFM);
- Crowdfunding (Kickstarter, IndieGoGo) and Crowdinvesting (AngelList, RealtyMogul, Crowdcube, Coufenzi) going to SME- and p2b-lending;

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- Messengers for millennials (like Snapchat) going to Personal financial management (like LearnVest) and Online-trading (like Robinhood and MotifInvesting);
- and Online-trading services going to PFM.

Square has started to think beyond what it can do in the commerce space. CEO Jack Dorsey acknowledged\(^3\) that his company wouldn’t be able to build everything, “so we opened up a bunch of APIs, and in that marketplace, for third-parties to actually build functionality and services that extend our ecosystem.”

Open APIs integration and Bank-as-service (Baas) as a platform can help to unite and scale for all fintech-services. Chris Skinner predicted this trend in 2009\(^4\): “you’re probably all familiar with SaaS – it’s basically paying for applications as you use them, rather than buying them. These services used to cost you a fortune, but are now free or near enough. That’s where banking is going. Banking becomes plug and play apps you stitch together to suit your business or lifestyle. There’s no logical reason why Banking shouldn’t be delivered as SaaS.” “What I’m really getting at here is that the old model of banking, where everything is packaged together around a deposit account with a cheque book, is a bust. That’s why some banks are starting to white label and break apart their traditional services so that corporates can just buy-in the bits they like and want.” “This is the future bank, and old banks will need to reconsider their services to compete with this zero margin model.”

The traditional business models of Banks are being threatened by the small and agile fintech companies. “In next 5 years we will see a completely different kind of financial service providers, providers who are customer focused and more agile in their services and processes”. Bankers for long made banking a complex process. Banks define the services and how those services will be served to the customer. The customer is at the receiving end. The status quo is being challenged, and their monopoly on how the customer should conduct business is being questioned.

In next few years, we will see the banking-as-service model like any other service. The traditional financial house will act payment and accounting engines, service will be built on top of those smaller traditional banks. Anyone can build customer-centric service on top of the traditional banking system. This will provide customer bank agnostic services. Services will be pay per use. Customer will be free to pick and choose the service most suited to its needs. In any industry we look for building a relationship when services are not transparent and simple enough to understand. Once a


service is simplified, we aim to get things done. Building a relationship is just an overhead. No one visits a bank to build a relationship, customer builds relationship with the bank so that he can do business with ease. If he will get the same ease via different platform then why will he stick to the traditional banking model?

One of the best examples of BaaS is The Bancorp (75,000,000+ prepaid cards in U.S. distribution, 100+ private-label non-bank partners, including Simple, $232 billion combined annual processing volume). “From the start, we’ve spent most of our time and efforts behind the scenes, putting the companies who work with us - and their goals - first. We’ve remained in the background, offering them the guidance, innovative thinking, and operational support they need to succeed.” “Today we’ve grown far from our roots as a branchless commercial bank to become a true financial services leader, offering private-label banking and technology solutions to non-bank companies ranging from entrepreneurial startups to those on the Fortune 500.”

In December 2015 LetsTalkPayments.com counted 63 insanely useful APIs from fintech-startups across 12 segments “to supercharge your product”. APIs are the infrastructure that developers use to build applications to access content and other services. As FinTech startups continue to disrupt traditional financial services, banks are also waking up to the fact that offering an open API—where developers can latch on and create very specific customized app solutions—is the way to engage and retain their customers in the future. David Brear, Chief Thinker at Think Different Group, and Pascal Bouvier, Venture Partner at Santander InnoVentures, thought, that the integration and delivery of financial services are changing as new channels, products and partnerships are being explored, and Banking as a Platform (BaaP) is one of the alternatives. There are three main reasons why financial services industry incumbent did not organize as platforms. Current Business Models - Banking and insurance company business models do not currently lend themselves to network effects. Up until recently, banks and insurers were the perfect intermediaries. They were the best positioned to make credit or underwriting decisions. Why create a platform with partners when no one else knows how to lend or insure better than the current players? Third one: “We ‘own’ the customer”. Up until now, how individuals or corporations interacted with one another and between themselves lent itself to a top down organization for the selling of financial services. If the industry owns the narrative of how a financial product gets pushed to an end user, why create a platform with partners? Without fintech competition, financial services industry incumbents would still need to think about platform strategies, as the root causes are much more fundamental than that. Financial services industry incumbents need to transform into “fintech incumbents,”
with a complementary platform business model to better compete. For a bank or an insurance company to become a platform for financial services, profound transformations need to happen. Becoming a “digital bank”, if taken in the strictest sense of the term (i.e. bringing distribution channels to the digital realm) is not enough. It is clear that any success in developing a platform strategy for banking (BaaS) will be largely dependent on wholesale cultural and technology mindset changes. Traditional business models are far easier since banks are in full control. Financial services industry incumbents created products and sold them to their customers. The value was produced upstream by the banks and consumed downstream by the consumer. The BaaS structure allows users to create and consume value. At the technology layer, external developers can extend platform functionality using APIs. At the business layer, users (producers) can create value on the platform for other to consume.

If bank-as-service companies can be the back-end for integration of stand-alone independent fintech-startups, neo- or challenger banks could be their front-end for end-users.

Earlier, when we talked about “mobile banking” - we meant Simple and Moven, and their competitors, or rather “followers” of the “first wave”. But now there is a second wave[^5] of interest about this topic. Atom (UK), Tandem (UK), Monzo (UK), Monese (UK), Starling (UK), Anna (UK), N26 (Germany), LunarWay (Denmark), - this time, the focus is not for the United States, but for the United Kingdom. It happened there after a number of local regulator steps to stimulate the emergence of new players and their licensing. Many interesting teams with great experience and ideas came to the flow.

The digital banking platform Moven announced partnerships with two online financial services providers: Payoff, which offers tools to help individuals pay down credit card debt; and CommonBond, which offers student loan refinancing tools. Under the terms of the partnership, a Moven customer receives a $100 credit for opening a Payoff account, while a CommonBond customer receives a $200 credit and a 25-basis-point loan rate discount for paying via Moven. The Moven platform will be the primary customer experience for all three companies’ customers, offering tools and insights into financial management and goals. The Moven/Payoff/CommonBond partnership offers an interesting mix of services designed to appeal to customers who prefer to bank primarily through their mobile device and have a credit card or student loan debt. Many of these customers will be younger and may not be aware of existing refinancing services from traditional banks. The incentives offered show that the partners recognize the need to motivate customers to use new services.

Also N26, a Peter Thiel-backed German startup that’s setting out to create the bank account of the future, has announced a tie-up with London-based peer-to-peer money-transfer firm TransferWise[6]. The partnership will give N26 customers in-app access to a cheap international money-transfer service. “Our goal is to leverage the best banking products from around the world and make them accessible to customers with one tap, creating a fintech hub inside the N26 app”.

British Monzo has an open API from the get-go, part of a wider differentiator that’s seeing it build a “full-stack” bank with its own in-house banking tech in order to offer features that legacy banks struggle with as they are reliant on outdated software and infrastructure. “We’ve had hundreds of people attend our hackathons and they’re now some of our biggest supporters. It’s also great for recruitment!” Monzo’s CEO says.

Australian-based Tyro Payments chief executive Jost Stollmann wants to see the emergence of a new financial services economy run by innovative companies that create services that work with each other[7]. He wants fintech entrepreneurs to work together against the large banks, which he believes will use their investments in startups to slow innovation. Instead of hoping their businesses will be bought and adopted by big banks, he said they should aim to take the banks’ customers and revenue. “I call this the ecosystem,” he said. “Then we can get to the critical scale and scope to disrupt the establishment. Cuddling up with banks and thinking about exit and your beach house is not helpful.” The industry is debating if financial services startups should work with banks to help them improve their own products and customer service, or to scale up independently of incumbents and try to compete with them. Rather than collaborating, startups should “compete head-on with the majors by providing new solutions and co-operating with their peers”, Mr. Stollmann said.

Banks worry about a super aggregator who takes away the customer, leaving them to compete on price while the value cream is taken up by the super aggregator. Enough has been written about who the possible super aggregators could be and quite a bit has been written about the potential ‘Uberization’ of banking. The banking response could have more to do with Tesla than Uber[8]. Consider this: Tesla is the world’s most famous electric car, but it’s actually a little bit more than that. It’s a stylish, environment-friendly mobility platform. Tesla has introduced constructs such as firmware and over-the-air

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6 http://fintechranking.com/2016/02/25/the-bank-that-fintech-built-number26-and-transferwise-team-up-to-re-invent-banking/
8 http://banknxt.com/56408/bank-platform-tesla-uber/
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software updates to the automobile lexicon, and the reason these are so popular is that now the car has been reimagined as a mobility platform. And before you think that this is about self-driving cars, it isn’t. In the short-term, this is just one of the exponentially improving capabilities a Tesla car has. The real experience of Tesla includes the value it’s trying to provide to the customer - of being connected. This value is delivered at the individual car and driver level, and the collective learning from all cars that Tesla sells. It is at once a platform that iteratively adds value to the core product while learning what it is that it can learn from the use of its vehicles.

Philippe Gelis, CEO at KANTOX, told[9]: “The second wave of fintech, to come in two to five years’ time, will be “marketplace banking” (or “fintech banks”). This will be a type of bank based on five simple elements”: 1, A core banking platform built from scratch; 2, An API layer to connect to third parties; 3, A compliance/KYC infrastructure and processes; 4, A banking license, to be independent from other banks and the ability to hold client funds without restrictions; 5, A customer base/CRM, meaning that the fintech bank will have the customers, and a customer support team. The products directly offered by the fintech bank will be limited to “funds holding”, comprised of bank accounts (multi-currency); credit and debit cards (multi-currency); eWallet (multi-currency). All other services (investing, trading & brokerage; wealth management; loans, credit & mortgages; crowdfunding (equity and social); insurance; crypto-currencies; payments; remittances & FX; this list is not exhaustive) will be provided by third parties through the API, including old-school banks, financial institutions and fintech companies. Imagine that you are a client of this “marketplace bank” and that you need a loan. You do not really care if the loan is provided to you by Lending Club or Bank of America, what you look for is a quick and frictionless process to get your loan, and the lowest interest rate possible. “It is a simple mix between an access fee to the “marketplace bank” and a revenue sharing model with the third parties providing additional services.” Here we have a completely different approach regarding the relationship with incumbents. Fintech banks, thanks to their banking license, will not rely anymore on any bank to be and stay in business, and so will not be at the mercy of incumbents. What is even more powerful, through the marketplace, incumbents will become “clients” of fintech banks, so the system will be completely reversed. The beauty of “marketplace banking” is that it competes directly with banks on core banking services without the need to build all the products. Most bankers are not already worried enough by fintech to react to its

9 http://fintechranking.com/?p=925
coming second wave. This creates a fantastic “window” for us fintech entre-
preneurs, to build it, and once it’s done, it will be too late for them to react.

I believe, that the next step (and this step will be not about more money, 
but about real evolution of fintech-movement to ecosystem) in fintech will 
belongs to new generation of “fintech banks” (maybe, they will be totally 
separated from traditional banks, maybe not, but it is harder in terms of 
mindset, corporate culture and processes, and old-school IT-infrastruc-
ture), which will have:

• Bank-as-service platform as back-end – to host these standalone inde-
pendent fintech-startups on their main market and to expand faster and 
cheaper to other markets;
• Investment arm to invest (or to buy) in several fintech-startups to build 
strong relationships with them and build an ecosystem of services 
around the core;
• Neobanks as front-ends – to tailor all these services for final end-users 
in unique user experience.
2.1 The open architecture nature of the fintech bank: BaaS as a base

BaaS is the new black. Bank-as-a-service\(^{10}\) – leasing of banking infrastructure (license, payment processing, cards issue, and compliance) to other players (instead of developing or purchasing it), - is a very new phenomenon, which is rapidly gaining momentum with increasing amounts of fintech-startups. It is too expensive for startups to have their own banking license at the start (and it is not the main focus for them), meanwhile, they need new licenses and infrastructure for scaling to other countries. Negotiations and integration with a partner bank take too much time, effort and money, as far as traditional banks have their own core-business and KPIs, and yet do not have a clear strategy and skills of dealing with fintech-startups in a fast and cheap manner. However, not only fintech-startups create demand for the new industry: telecoms and e-commerce giants are also interested in such middleware-platforms.

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\(^{10}\) https://www.forbes.com/sites/vladislavsolodkiy/2016/08/03/what-asian-banks-can-learn-from-amazon-about-working-for-fintech/
Amazon-moment for banks

In late April of 2016, AWS (Amazon Web Services) reported a record profit, which amounted to 67%\(^{[11]}\) of the Amazon profits. Why is this fact interesting for banks and fintechs? Once Jeff Bezos has invested millions in creating an excellent infrastructure to support and scale Amazon business. At the same time, many new services, including the new e-commerce players, appeared on the market. Rather than compete with them, wait until they build their own infrastructure, and hope that it will take too long and will not be successful - he decided to lease his infrastructure to other players!

Drawing an analogy with banks, Jeff Bezos did not consider other online-services as competitors or enemies, he decided to become the best partner for them, and make money on it! And the truth is if you set up an infrastructure for yourself - you bear costs. If you lease it to other players - you make an investment and get new revenue streams. Currently, AWS claims to turn from a cloud-storage to “the operating system for the internet”\(^{[12]}\).

By connecting to a BaaS-platform banks could lease their infrastructure to fintech-startups. This will greatly reduce the cost, speed up and simplify the launch and scaling for startups, as well as create new revenue streams for banks and expand their product line.

Currently, all giants such as PayPal and Stripe have embarked on the expansion of their product offering by means of third party developers, whom they provide open APIs to work with their services and integrate them into external apps.

Over the last year, I met most of the banks and fintech-startups in Asia (I used to invest in fintech mainly in the US and Europe). No bank has succeeded in creating its open APIs or has a clear agenda for the new services. As a result, startups spend about 1 year and up to 80% of their resources for the launch. While their American counterparts launching, for example, on the Bancorp’s BaaS-platform spend 80% of resources on product development, customer acquisition and service.

Another point is that BaaS-platform should be truly independent and cover the entire Asia-Pacific region (where each market is very different, as opposed to Europe). The nature of the digital world is that you have to constantly scale to new markets; if you want to exist in one country, you shall start a traditional offline-business. Startups have to seek for a new bank and integrate from scratch on every new market. However, they do not want to depend on the “mood” of a partner bank and integrate into

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12 https://techcrunch.com/2016/07/02/andy-jassys-brief-history-of-the-genesis-of-aws/
each country from the beginning. Whereas, having once integrated with the platform they can launch their services faster and cheaper, as well as expand to new markets without any obstacles.

This is especially important for the unbanked-markets - Myanmar, Laos, Cambodia, Vietnam, etc. Such a platform will bring them into line with the developed countries in terms of market accessibility for fintech-startups. Otherwise, companies will keep scaling to other markets, and these countries and their population will be isolated from the latest financial technologies (although they are vital to them!).

Eventually, we shall ask banks, particularly in Asia, whether they want to (using regulators support) continue to protect their local markets from the invasion of new players, “forcing” to make agreements with a partner bank, or they are willing to follow Amazon’s example and earn 67% profit from leasing their infrastructure.

**BaaS vs BaaP approach**

Last year’s proliferation of FinTech startups increased the pace of integration between the leading companies (such as Dwolla, Kantox, CurrencyCloud, Braintree, OnDeck and many others) via open APIs - and now there are hundreds of them. Indeed, why would you reinvent the wheel, if this feature is not your competitive advantage and there are many quality solutions on the market? On the other hand, the abundance of possibilities for integration and obsolescence of their back ends incentivized banks, such as BBVA, to switch from one-by-one direct integrations to massive deployment of new stacks of solutions with the help of APIs specially created for this purpose. In countries, where there are no such banks – and we are talking here about most countries in the world – or where startups are eager to speed up their expansion by a partnership with several banks in several countries, BaaS (bank-as-a-service) platforms have emerged.

Big banks sensed that such platforms, together with FinTech startups with well-made APIs, represented a hidden threat for them, commoditizing their business and levelling their advantages and began to promote an idea of BaaP (banking-as-a-platform), where bank represented a focal point of startup ecosystem and “services-customers” chain (ABN Amro and Sberbank fall under this case). The explanation for such a behavior is quite easy to come up with – banks want to secure the last mile, in other words, the final relationship with their established customer base. In China, fintech giants AliPay and WeChat Pay follow the same footsteps now.

The historical homeland of BaaS approach is the USA. Such players as The Bancorp and CBW Bank have been systematically acting as platforms successfully hosting American fintech startups. New players like BBVA strug-
gle for this piece of the pie too. Spanish BBVA applies different strategies to different markets – where it doesn’t have a big client base (as in the USA), it follows the BaaS model, but where it dominates the market (Spain), it makes an emphasis on the BaaP strategy. Speaking of downsides of American (and Chinese) BaaS platforms, we should note that none of these platforms gives an international access, although there is a great need for this.

The most actively developing BaaS market is Europe - partly due to the support of regulating bodies, which incentivize banks, insurance companies and other players to open access to their platforms to external players - in particular, by issuing PSD2 directive - partly due to the emergence of new players, who satisfy the general market need in technological mediator. The largest of such mediators is German Wirecard, valued at $5B, which has expanded to the majority of European countries and opened an office in Singapore in order to penetrate the Asian and Near East markets. The goal of this company is to expand its services worldwide. In every country, the company seeks to obtain its own license, but in a number of cases, it is forced to work with a local bank (thus turning itself into a BaaP solution with respect to this bank). Despite the fact that Wirecard hosts a number of prominent startups, such as N26, Curve, Monzo, TransferTo, Loot, Revolut and others, it is far from doing as lucrative a business with them as its American peers - and, consequently, it grows mainly by serving large traditional players - e-wallets (AliPay), telecom companies and retailers, which look closely at new financial services. As Wirecard states, they are at the very beginning of the journey and the market could easily incorporate other 3-4 big players.

In Europe, new competitors spring up on a permanent basis\(^\text{13}\): SolarisBank (Germany), IbanFirst (France), UAccount (Great Britain). SolarisBank has a peculiar business model - the company is a part of the FinLeap accelerator (like Rocket Internet, but in FinTech), which has created a single center of infrastructure development for its startups and delivered its products as white-label solutions to final clients with the help of open APIs. At the end of 2016, the project secured its first banking license in Germany (while IbanFirst was able to get a hold on banking license in Belgium).

One can hardly find a project promoting BaaS approach in Asia, Africa or the Middle East. If such projects do not appear in the near future, then, considering infrastructural unpreparedness of the local environment hampering the ability of fintech startups to launch quickly and scale up efficiently, the majority of incumbents will die together with the hopes of Singapore/Hong Kong/Seoul/Tokyo to become the next fintech hubs.

\(^\text{13}\) https://letstalkpayments.com/baas-is-becoming-the-sexiest-vertical-in-fintech/
Many traditional back-end (core banking systems) solution developers see great potential in serving the needs of not only traditional players, but of newcomers, too. They try to find their niche in more and more BaaS-oriented world (although for the moment they only offer banks to make them BaaP-enabled).

**BaaS is becoming the sexiest vertical in fintech**

Former Barclays CEO Antony Jenkins has launched[a] a new startup that aims to modernize the back office technology used by banks. 10x Future Technologies is working on a cloud-based core banking system – the technology that allows banks to hold deposits and accounts. Essentially, it’s the heart of banking. Antony Jenkins, who founded the company and serves as CEO, says in the statement: “Our core digital banking platform, based on advanced data modelling and database design, will allow financial services providers to develop a much deeper understanding of their clients, cut costs and deal with regulation.”

Starling Bank and Monzo, the latest two challenger banks to win their UK banking licenses, have placed[b] open APIs at the forefront of their strategies to maximize their competitive advantage over their incumbent rivals. Application programming interfaces (APIs) are the pieces of software that allow two separate IT systems to communicate and interact with each other. Open APIs will allow both Starling Bank and Monzo to crowdsource the development of new products and services far more quickly and cheaply than they could manage on their own. This is a vital consideration for new entrants that have limited resources of their own and need to deploy a full service proposition.

Suresh Ramamurthi[c], an ex-Google engineer, and his wife Suchitra Padmanabhan, a former Wall Street banker, used their own savings to purchase the 124-year-old CBW Bank[d] in Kansas. It was 2008, the height of the financial crisis, and CBW – then called Citizens Bank of Weir – was under orders from the Federal Deposit Insurance Corp. (FDIC) to cease operations due to inadequate capital reserves, ballooning levels of bad loans, and internal fraud. Over the last few years, the bank has become a secret weapon for other fintech companies (like Moven) as BaaS-platform, which rely on both its technology and status as a state-chartered bank to build their own businesses. Fintech companies are somewhat unusual in that they offer new consumer products in a heavily regulated space. Rather than applying for a charter themselves, these startups often find it much easier to work with a bank through open APIs that has passed regulatory muster and can already

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take insured customer deposits or loans. Fintech companies need to focus on what makes the payments work, and by working with a bank, it gets them to market faster and lets them focus on what makes them different. Japanese financial conglomerate SBI Holdings and a subsidiary of German media company Bertelsmann SE & Co KGaA have backed Berlin-based solarisBank, a fully licensed startup bank that enables businesses to offer digital financial services to their customers. The bank has raised 26.3M euros ($28M) in a Series A funding round from investors, and that it planned to use the capital to improve its products, and expand into Asia, Europe, and the US. The funding came from three new investors, as well as existing backers Yabeo Capital, UniCredit, and FinLeap. SolarisBank offers fintechs looking to provide banking services access to its suite of banking products, and to its European banking license.

That two of SolarisBank’s new investors hail from Asia suggests the region’s importance to the company. SolarisBank’s new backers include HypoVereinsbank, Germany’s third-largest private bank; Arvato, a Japanese financial services company. solarisBank plans to develop “joint ventures” with SBI, in which solarisBank would take a 40% stake to SBI’s 60%. The first such collaboration is due to launch in Asia in early 2018.

Moving into Asia will give solarisBank access to a wealth of new customers. With VC investment in Asia outstripping funding in Europe and North America, the region will likely see more new fintechs emerge than the US or UK in the near term. This proliferation of additional players represents an opportunity for solarisBank: Many fintechs aim to provide banking services, but becoming regulated remains a difficult process, and SolarisBank’s offering addresses this pain point. By concentrating on Asia, solarisBank is positioning itself to take advantage of a region that’s historically lagged behind Western markets, but now seems ready to take off.

In January 2017 British RialsBank, a banking-as-a-platform (BaaP) startup led serial entrepreneur Nigel Verdon that promises to provide access to global banking services with 5 lines of code, has signed its first banking partner and released its API to the global developer community. RailsBank says it will enable banks to digitally deliver the services fintech companies desperately need at a low cost; and with a lower compliance risk as conformance with anti-money laundering rules is designed into the platform.

Customers will have access to a core digital ledger banking platform and a complete range of ‘Product Rails’, including Iban creation, issuing cards,

sending, receiving and converting money, and accessing credit, provided by financial service partners. Nigel Verdon, co-founder & CEO, Rails-Bank, says: “Our platform massively reduces the time, cost and complexity of connecting to and managing, multiple financial service providers and their legacy technologies as well as enabling both parties to have a trusted compliance relationship”.

Picking and choosing your bank products like you pick and choose your TV streaming products is inching closer to reality every day. With more and more Fintech’s finding creative solutions to provide consumer-centric experiences and more and more financial institutions realizing the need to serve an evolving consumer base, the “bank-as-a-platform” is slowly melding into reality[21]. “RailsBank is a platform which connects the Fintech world with a global network of small and midsize banks with just five lines of code. It acts as the key to connecting financial institutions that have the regulatory capability with the technology startups that have the consumer user-friendliness and appeal.”

French startup IbanFirst is launching its full-fledged banking service for companies. In October 2016 the company raised $11M (€10M) from Xavier Niel and others [22]. Now, companies can ditch their corporate bank account altogether. IbanFirst has a banking license in Belgium and can operate in the European Union. In a few minutes, you can create a bank account on the startup’s website and receive an IBAN. Then, you can more easily accept payments in foreign currencies by sharing your IBAN with your clients and suppliers. Opening an IbanFirst account is free. The company bills you exchange and other fees. IbanFirst just wants to be more competitive than traditional banks with lower fees. Finally, IbanFirst plans to add a wide array of services on top of these basic banking features – in particular, the startup plans to partner with other fintech companies. In the future, you can imagine integrations with payment processors, factoring services, debit cards and more. IbanFirst already has an API so that you can integrate the company’s services with other services. While it’s still the very beginning of this platform approach, it could quickly become a good option for companies operating in the European Union.

About a year ago five of the 10 graduates from the Startupbootcamp accelerator program pitched[23] technology designed to be used by traditional banks. As part of the 13-week program, Startupbootcamp had matched

[22] https://techcrunch.com/2016/10/18/ibanfirst-grabs-11-million-to-expand-beyond-foreign-exchange-services/
the entrepreneurs with 350 mentors, some from financial institutions like Rabobank, Santander and Deutsche Bank. (The banks were among the program’s sponsors.) A characteristic example was SandBox, which offers banks a “sandbox” for testing fintech partners’ software.

More than 15,000 founders from 7,200 startups applied to the last batch of Y Combinator. It chose just over 100, with founders from 22 countries, to go through its accelerator program. One week ago, the second half of those companies launched onstage. SandBox was one of them. SandBox is a company whose software integration platform aims to connect the legacy systems of banks and credit unions and provide them with one standardized API that their fintech vendors can use to integrate with them seamlessly. Put another way, it’s building an app store for banks. So far, it says 17 fintech vendors have agreed to use the platform; the unsurprising idea is to hit critical mass, after which “every new financial institution will consume the newest technologies via SandBox.” Like all app stores, notes the company, it’s a “winner take all market.” (As for how it makes money, it has apparently stolen its inspiration from Apple here, too, with plans to take a 30 percent revenue cut from every sale.)

[24] https://techcrunch.com/2017/03/21/demo-day-y-combinator/
2.2 The next wave of mergers and acquisitions, rather than new startups

Despite the slowdown in the growth of fintech (in terms of new investments), the industry has been leading in the venture world over the past two years. In addition, the slowdown is quite natural as the market is full of new ideas, technologies and players, and further evolution is the result of the development and consolidation of existing companies. Take, at the very least, the capitalization of fintech unicorns - their total value almost doubled in 2016 compared to 2015.

The market used to grow mainly at the expense of new players and new investment rounds, but currently, only major companies are rapidly growing. Therefore, the question arises with medium-sized fintech startups. Max Levchin (PayPal, Affirm) predicted even more than a year ago that it is becoming increasingly difficult for fintech startups to raise Series B funding. This problem is especially acute for the Asia-Pacific region (with the exception of China).

A couple of years ago, in Asia, there was a sharp increase in interest in fintech. On the one hand, a large number of small startups were launched and received funding from already successful VCs (but they are all focused on early-stage investments). On the other hand, Asia has a large number of potential acquirers of these startups or their strategic investors. However, between the early and late stages, there is now a huge gap, which is fraught with fatal consequences for these startups in the next one or two years, and also with extensive growth, if the gap can be filled in.

The problems which the fintech startups in the Asia-Pacific region are facing now:

• There are plenty of startups, but all of them are small. They also develop roughly the same products (in the US and Europe startups rely on unique ideas and technologies, while in Asia - on localization and distribution). As a result, there is a strong disproportion: there are a few acquirers or strategic investors and there are too many startups that don’t differ much from each other, so the acquirer sets the price and brings it down.

• They are local: more than 90% of startups operate in only one market. Each of them is more eager to win its own market than to scale to others. Suppose that AliPay or WeChat Pay would like to acquire similar companies in each country in the region. It will turn into a task to inte-

grate more than 15 different teams, corporate cultures, technologies, which can destroy the processes of the acquirer or strategist.

• At the current stage, their customer bases and turnover may be larger compared to their local competitors, but in comparison with their foreign competition, the share will be very small. Additionally, due to the early growth stage, there will be a disproportion between the costs for a launch and accumulated indicators over the period.

• Cannibalism. They spend their efforts to compete with each other, instead of fighting for the “blue ocean” of opportunities.

Why do these problems exist? On the one hand, due to the lack of fintech infrastructure in Asia (open APIs, BaaS platforms, special regulatory policies), the launch of each individual project is disproportionately expensive compared to the likes in the US and Europe. This consumes most of the investments raised in the first rounds, which could be spent on customer acquisition, and as a result companies can’t boast such impressive indicators on customer bases and turnover by the time they are attracting round B. On the other hand, late-stage investors expect not only the success on the parent market but also the ability to scale to other countries (“go big or go home!”) or complementary industries - both are hampered by the lack of infrastructure. On the third side, as mentioned above, there are many early and late-stage VCs in Asia and a small number of those participating in rounds B and C.

It would be logical to expect their organic growth for a while, but this is not the case:

• Due to the lack of infrastructure for scaling (such as pan-regional banks with open APIs for fintechs or BaaS platforms) starting each new market will not be cheaper than launching the first one neither in terms of money nor time and the number of people involved in the process.

• In terms of the number of VCs and strategists in Asia, there are many early- and growth-stage players. While there is a very small number of funds participating in rounds B and C. Their risks against the profit they make at this stage for current prices signify that it is more profitable to invest abroad than in their home region. Meanwhile, it’s pointless to attract American or European VCs as they invest in international businesses with proven scaling experience.

• As a result, you can grow 2-3 times every year and be ahead of your competitors on all accounts, but still, you will be slower than your foreign counterparts. You need to remember that in fintech you compete with the whole world: and in the end, your (insufficient) growth can become your bottleneck.
As a result, the organic growth of startups is rather limited and can be achieved by the very few. If you decide to wait for it, it will take too long and increase your risks. But this growth can be facilitated by artificial consolidation through mergers and acquisitions. In the two years that we’ve been in Asia, I have rarely seen fintech startups that are distinguished by a unique product or technology. Basically, their advantages are in local insights, product localization, and efficient distribution. Let’s imagine a few startups from Singapore, Korea, Malaysia and Thailand that develop the same product (which happens pretty often). They have successfully raised the first $3-10M, their capitalization is $10-50M, and some have possibly become the absolute leaders in their countries. Venture firms which supported them earlier can’t afford the new $10-15M rounds, while larger players hedge their risks by investing in larger services operating in three or more markets. Potential acquirers or strategists, if they already exist, are ready to acquire each of the companies only at a discount - while you are a local player, then the number of potential acquirers is much lower than the number of players, and they set the price.

What are potential or strategic investors looking for?

• New markets. For example, AliPay and WeChat Pay are huge companies, but they are successful only in China. They need to learn to scale for further growth - but they would rather acquire several markets in bulk (with a premium) than integrate each separately.
• New products and technologies that are complementary to their core business.
• A significant increase in quantitative indicators, as well as business diversification.
• They will spend as much time and effort on a decision to acquire a company for $50M, as on a $500M deal. Since this is not the last $50M or $500M for them, they will choose to consider the deal which will allow them to achieve a greater synergy.

These four players combined will make up a company with a capitalization of over $100M (an important psychological mark) capable of attracting the attention of large investors and $20-40M rounds, with the regional presence (it’s apples and oranges: whether to expand to one or four markets), and a top-of-mind brand. Such a company receives a premium for leadership not only at the expense of the aggregate share but also due to the reduction in the number of participants. Also, it cuts R&D expenses by four times (or increases R&D by four times for the same money) and finds it easier to attract talents (the larger and more popular the company is, the easier to attract candidates). This company is also interesting in terms of its operational indicators: the number of customers, turnover, and profit.
The advantages of artificial consolidation (as opposed to organic growth):

• The presence in three or more markets shows that the company is international. If it succeeds to supplement new services in the process of merger, the company will be diversified not only geographically, but also in terms of its product range.

• The point is not only in “internationality”, but also in the “premium for leadership” – you greatly differentiate from your competitors by size. As a result, you find yourself in a situation where by reducing the number of market participants you create a reverse disproportion: there are more potential acquirers than objects for acquisition. Now you are setting the price. The number of those interested in your company is also growing.

• Since everyone is developing roughly the same products, after the merger you can choose either to spend the same amount of money to develop more products, or to reduce the cost of R&D by several times.

• The number of brands on the market is decreasing, you are becoming international and your brand becomes top-of-mind. As a result, you can spend less on advertising, as well as on HR: potential candidates are tired of large, faceless corporations, but they are also afraid of joining very small companies, and this kind of medium-size player will attract them faster.

• You do not multiply the expansion costs for each new market (because these costs have already been incurred). And against the background of the reduction in marketing and R&D costs and growth of turnover, you become profitable (or you get much closer to the breakeven point).

So far, we have seen a huge number of small and almost identical startups in each country in the sphere of mPOS- and online acquiring, remittances, lending, trading, e-wallets, etc. They have once successfully answered the question “How do you launch in your home country and show the first results?” and are now facing a completely different question: “How do you differ from the similar startups in neighboring countries?”

The merger accelerates “exits” – not necessarily for the founders (when they do not want themselves), but for their investors:

• You are not yet a unicorn and it’s too early to think about an IPO on the NASDAQ, but you are already large enough to be traded on AIM at LSE in London, on ASX in Australia, in Japan or Korea (in this case acquisitions are the must and include acquisition of local businesses in these countries). This is not a full-scale exit, but the company will be able to attract a new type of liquidity and shareholders will receive a more transparent assessment of their shares. You will be able to afford a good audit and other corporate governance tools.
Part 2: Building the puzzle of the ecosystem

• You can sell the whole company (like LoopPay was sold to Samsung) or a large part of it (like AliPay made a strategic investment into Paytm and Kakao Bank).

• In the end, you can exchange the company for a share in a larger ($500M+) American and European company. You will still own shares but the shares of a bigger and more rapidly growing market leader.

It is a mistake to believe that if everything sounds so simple and logical, then why does not anyone else do it. It’s not that simple indeed. The existing investors of these companies are usually not able to come to terms with the rules of the merger. In most cases, it is arranged by a new investor-facilitator that provides an additional bridge-round for the merger. He is also actively involved in a huge number of operational issues, like who will be CEO of the merged company, and what will other CEOs do (because it’s very important not to lose teams and their motivation when merging!); which areas to shut down and which to strengthen. Such period implies increased risks for which this investor eventually receives an additional fee.

It should be noted that if you look at the overall pattern of investor behavior in Asia (excluding China), the VCs very rarely lead investment rounds preferring to co-invest with other players. In the context of a conservative mentality, it is difficult to imagine that they are capable of taking an increased risk of mergers and acquisitions. While the Chinese have already demonstrated that they are able to aggressively invest both at home and abroad (one-third of deals in Silicon Valley[27] are performed with the participation of money from China), and now they are even launching special funds for mergers and acquisitions worth $1B[28] and $1.5B[29]. China benefits from this not only in terms of investments, but also in the operational sphere, as most of its fintech unicorns are extremely successful at home, but are absolutely unable to scale to other markets and acquisition of their likes will help them to accelerate their expansion. Taking into account that the largest number of new fintech unicorns comes from China and the country itself is the leading industry investor, if you miss the moment for mergers and acquisitions, you can possibly forget about fintech without a constant prefix “Chinese”.

It is a mistake to believe that only investors benefit from mergers. Let’s imagine several startups: three of them are mPOS-acquirers from different Asian countries, one more company in the field of big data and on-

line scoring from another country, p2b\SME-lending platform from one of these countries, and an e-wallet from a different country. Let’s assume that the first three companies are able to attract customers quickly and cheaply but they have a very low-margin product, which makes it expensive for them to enter a new market and they prefer to grow deeper into the current market. The big data company can quickly analyze and predict markets for any customers, but it has a constant shortage of data sources (which are very many in the case of mPOS-startups, but they do not monetize them at all) and they do not lend themselves. The lending platform has high-margin products but the customer cost per acquisition is constantly growing, and they do not understand how to reduce risks (without data on client’s behavior history) and a few have the resources to strengthen the risk management team (they are more focused on lending). While e-wallets are able to quickly attract large customer bases, but also quickly lose them because they vanish in a narrow segment between offline payments and emerging new full-fledged online banks.

The merger of these companies will result in their synergy: for example, mPOS-players can be used as channels for cheap and fast attraction of SME clients, as well as for accumulation of qualitative data on their behavior, the big data company will stop wasting time for experimenting with new sources of data and will focus on specific markets and existing customers, while the lending platform will eventually be able to issue loans to already attracted customers (cheaper than before) and even with reduced risks. The e-wallet will be able to enter a new niche of SME wallets (on the basis of personal profiles of customers of mPOS-startups) and offer to install the wallet to the clients of their clients (retail customers), who have used mPOS terminals (currently mPOS-companies are not analyzing this client audience at all!), and also after exchanging APIs for terminals, they will be able to provide opportunities for card-not-present payments.

To sum it up, the process of mergers and acquisitions is now conditioned not only by any fintech market evolutionary stage, strategic competition for the market share between global fintech hubs, and the potential premium for solving current investors’ issues, but also by an entirely new user experience (fintech bank) due to the seamless merger of segmentary products into a package of complimentary services.
PART 3

Customers, workers, and places for fintech banks
3.1 Why Zuckerberg, Gates and Omidyar invest in fintech for the poor?

According to a report\(^1\) published one year ago, Facebook was considering acquiring mobile money giant mPesa. While the report does not say much, the writer claims to have been present at a closed door meeting with Mark Zuckerberg while in Kenya. He further stated that Mark showed “so much willingness and expressed it too”. While the news is not yet confirmed, it could be a sound deal for Facebook in terms of their presence in the sphere of online-remittances (what Facebook Messenger and other messengers are trying to develop right now) and projects like Internet.org to provide people from unbanked and emerging markets with access to digital services, which Zuckerberg promotes a lot.

This was on the heels of Zuckerberg’s visit to Nigeria\(^2\) and Kenya\(^3\). Mark hailed Kenya as the world’s mobile money leader in an apparent reference to the success mPesa has witnessed in Kenya and other parts of the world. The future will be built in Africa, Zuckerberg said\(^4\) before visiting Kenya,

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the “world leader” in mobile money, on his first visit to sub-Saharan Africa, a surprise trip that has propelled Africa’s entrepreneurial spirit.

It echoes similar compliments made by US ex-President Barack Obama, who praised Kenya’s tech entrepreneurs during a trip last July: “This continent needs to be a future hub of global growth, not just African growth”.

Just like many other entrepreneurs and fintech-investors, he was inspired by success and positive influence of mPesa on poor people’s lives. mPesa is a mobile money transfer service that launched in Kenya in 2007. It’s operated by Vodafone for Safaricom and Vodaco, the largest mobile operators in Kenya and Tanzania. The service was the first to let you text money to other people. The service has improved basic commerce and helped bring necessities like water and food to Kenya’s poorer areas. mPesa provides “bankless banking” in regions where banks are scarce. The mobile payment system is now a part of the culture of the region. Also Kenya has 5.3 million of Facebook users, many of whom access the social network via mobile.

One year ago Visa payments network introduced a mobile-phone application to enable cashless transactions in Kenya. The mVisa app will initially facilitate transactions for people with accounts at four banks. Africa had 557 million mobile-phone users at the end of 2015, according to the GSM Association. The company estimates 84 million of them still pay by cash. About 1,500 merchants have signed up already and Kenyan lenders with units in the region want to introduce the system in neighboring nations. Visa is in talks to roll out the product in Uganda, Tanzania and Rwanda.

In east Africa, many people have access to an easy source of credit. It takes just a few taps on a phone to obtain a short-term loan, which will arrive in a mobile-money account almost immediately. Mobile wallets such as mPesa and Tigo Cash have already transformed microfinance. VisionFund channels 95% of its Kenyan loan payments and 98% of its Tanzanian ones through mobile wallets. The mobile networks seldom compete directly with microlenders. Most of their loans are tiny—more nano than micro—and must be repaid in a month or two. They are strongest in Africa, where microlenders have always been scarce. But some are now offering bigger, longer-term loans.

Irrational Innovations, a venture capital fund focused on Fintech and Financial Inclusion in SSA, has researched, explored, and mapped out how

7 http://www.economist.com/news/international/21708254-microlending-might-work-better-if-it-were-more-impersonal-cash-call
financial technologies are impacting multiple key aspects of people’s lives in Sub-Saharan Africa. They discovered over 20 companies that use mobile phones and financial technologies to serve and promote sustainable development. This report includes companies that supply energy through solar panels and enable payment through mobile phones; health insurance and hotlines companies facilitated through mobile-based subscriptions; financial identity and credit scoring – assessed through mobile usage and behavior, and more.

BKash, launched in 2011 as a subsidiary of BRAC Bank, has about 18 million accounts, second in the world only to mPesa in Kenya. Even so, the value of mobile money transactions in Bangladesh was 5.6 percent of GDP, far lower than Kenya’s 55 percent. Mark Zuckerberg is not the only one inspired by the success of such companies as mPesa and BKash – World Bank, Bill and Melinda Gates Foundation, Omidyar Network are doing a lot to learn from their experience and to replicate it in other countries, especially in Asia. India, Indonesia, Vietnam, Myanmar, Cambodia, Laos and many other countries in this region have to jump from the past (cash) to the future (fintech), because they have already skipped the competition for the present (traditional banks with branches, ATMs and banking cards).

Bill Gates once mentioned[9]: “in the next 15 years, digital banking will give the poor more control over their assets and help them transform their lives.” The key to this will be mobile phones. By 2030, 2 billion people who don’t have a bank account today will be storing money and making payment with their phones. And by then, mobile money providers will be offering the full range of financial services, from interest-bearing savings accounts to credit to insurance. Traditional banks cannot afford to serve the poor because of their costs. That’s why 2.5 billion adults don’t currently have a bank account.

Omidyar Network is a self-styled “philanthropic investment firm”, established[10] in 2004 by eBay founder Pierre Omidyar and his wife Pam. Omidyar Network reports it has committed several billion dollars to nonprofit organizations and for-profit companies across multiple investment areas, including Financial Inclusion. In addition, they advocate[11] that when people take the initiative to make life better for themselves, they can share the benefits with their families, become more active in their communities, and be a more positive force in society.

This fund invested in Asia in such companies like Philippines-based big-data and online-scoring startup Lenddo, which was honored as a 2014

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Technology Pioneer by the World Economic Forum. Lenddo helps\(^\text{[12]}\) businesses and finance companies to simply and securely evaluate both the character and identity of customers using alternative data in order to extend credit and deliver life-improving services. Lenddo is already solving the challenges of identity and risk management associated with thin file customers in over 10 countries.

Brookings Institute, which is one of America’s oldest Think Tanks and provides independent research into social sciences, particularly economics, governance and foreign policy, for the US Government, has a dedicated area of research and reporting on Financial Inclusion and have just produced their 2016 report \(^\text{[13]}\). On their map \(^\text{[14]}\) you can find that Asian countries still are not so successful. Why is it happening so? First of all – lack of capital and investors, who wants to invest in “fintech for unbanked”. IFC (International Financial Corporation) by World Bank, Bill and Melinda Gates Foundation, Omidyar Networks, Quona Capital are very active right now in the Asia-Pacific region to support initiatives for unbanked population, - but still it is not enough to reboost financial systems there.

Second one – lack of talents. US-based Branch (by Matt Flannery, who changed the world of lending in developing countries when he co-founded Kiva.org) successfully has launched \(^\text{[15]}\) and tested several microlending products for SMEs in Africa and is now going to the Asian region. Singapore-based Nearex also provides \(^\text{[16]}\) payment solutions for non-banks’ customers in Africa and now deploying it in India and Thailand. Myanmar-based Red Dot Network by Irish entrepreneur John Nagle \(^\text{[17]}\) (and Philippines-based Ayannah too \(^\text{[18]}\)) provide a great example how to create a non-banking agent-based network for distribution of financial services in rural areas. But how to attract more foreign talents to help these markets?

This question is very closely connected with third one challenge - lack of infrastructure. Availability of BaaS (bank-as-a-service) platforms and open APIs on the market is also one of the biggest stop-factors for unbanked-countries to join the fintech-world. Without this solution it is very expensive and hard to launch any fintech-service internally and for the best foreign solutions to expand to the region.

\[^{15}\text{http://techcrunch.com/2015/05/19/flannery-branch/}\]
\[^{16}\text{https://www.techinasia.com/nearex-series-b-funding-tata-capital}\]
\[^{17}\text{http://frontierrmyanmar.net/en/interview/red-dot-founder-john-nagle}\]
\[^{18}\text{https://e27.co/digital-payments-startup-ayannah-diving-deep-into-big-data-20151020/}\]
Part 3: Customers, workers, and places for fintech banks

In September 2016 McKinsey in their recent “How digital finance could boost growth in emerging economies” report[19] wrote that delivering financial services by mobile phone could benefit billions of people by spurring inclusive growth that adds $3.7 trillion to the GDP of emerging economies within a decade. But without infrastructure changes (by new tech- and non-banking players) and regulators’ support of them (like it happens in Africa) it will never happen in Asia.

A lot of activity is happening in Vietnam (with IFC), India (where the government is making outstanding efforts to leap from the cash-based society into fintech), Kenya (increasingly launches new projects, such as Mkopo Rahisi), Peru (the government intends to build the national payment system), Malaysia (activities in Islamic banking), Nigeria, and Myanmar (growing Red Dot Network and ConnectNPay, and new banking licenses). Zoona, a project launched in Zambia and Malawi, hit the mark of $1B transactions, daily services 1 million clients and is integrated with 1,500 POS agents. Singapore’s Nearex intends to develop public transport payments in India, Africa, Thailand, and Latin America. PayPal launched a program to support startups for unbanked countries.

Pawnshops that moved online has also shown interesting business strategies. And it can be observed with two extremely different types of audiences[20]. British Borro, who attracted £5,6M provides online secured loans through a customer’s luxury assets, targeting the top 10% of the population. In opposite, Philippines’ PawnHero provides small and quick loans to subprime borrowers, secured by assets that can be found on Alibaba, so in case of unpaid – it can be sold back on Alibaba. PawnHero is the first online pawnshop in Southeast Asia[21] that aims to solve the problem of expensive credit for base-of-the-pyramid consumers in emerging markets. [22] It was first launched in the Philippines in February 2015 to meet the quick loan needs of the country. A pawnbroker registered with the Bangko Sentral Pilipinas, aims to equalize the situation by providing an easy way for Filipinos to pawn their items – online - as a solution to short-term needs. PawnHero has partnered with logistics company 2GO and Security Bank to provide this innovative service to Filipinos across the Philippines. [23] Prior to launching its marketplace, It has also landed undisclosed pre-Series A funding in a round led by the SoftBank-affiliated, Philippines-focused Kaikaku Fund,

[22] https://www.techinasia.com/asian-startup-list-1-march-2015
with participation from 500 Startups and IMJ Investment Partners.\(^{[24]}\) PawnHero co-founder and chairman David Margendorff said, several other venture capitalists and angel investors from the region and Silicon Valley have steadily followed suit. PawnHero will use the funds for talent acquisition and continuing its mass outreach in the Philippines.\(^{[25]}\)

Sun Life Vietnam Insurance Company Ltd. has entered\(^{[26]}\) into a 3-year partnership with Global Online Financial Solutions Ltd., the owner of Vietnam’s digital banking platform Timo. The partnership enables Timo to offer life and health insurance products and provide its customers access to Sun Life’s network of professional through the Timo mobile app. It follows Sun Life’s 25% stake acquisition in Crescent Asia, the holding company of Global Online Financial Solutions. “This partnership marks an evolution for Timo into a more robust financial management platform,” said Don Lam, founder of Timo. “Our vision from day one has been to find the best digital solutions for our Timo members. This is why we have partnered with Sun Life Vietnam. Our combined dedication to our customers is a winning formula that will bring financial inclusion and management to everyone that is looking for easy access to their money and effortless management of their financial well-being.”

Price comparison sites become quite popular when a market is mature enough, yet still growing – people need some sort of a guide when they make their choice. This is the advantage of such services (in the stage of market formation, such aggregators accumulate more audience than all service providers in total), as well as their weak spot: when the market is saturated and a client chooses a satisfactory service provider, the motivation for using such services slumps.

Such services also develop rapidly in Asia (due to high growth rates and active market). A Hong Kong holding company CompareAsiaGroup (with a presence in Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Taiwan, Thailand and Vietnam) has attracted $50M in Series B round ($96M in total) from Goldman Sachs and other investors. Indian BankBazaar (co-operates with 50 banks and has the audience of 5.5M visitors a month) has raised a $60M Series C round ($80M in total) from Amazon (India is an important market for them) and other investors for expansion to Singapore, Malaysia, Philippines, and UAE. Many new companies spring up in Malaysia – LoanStreet, SavingPlus\Jirnexu (present also in Indonesia) and iMoney. Meanwhile, a sector of real estate and mortgage aggregators is booming in Great Britain (like Habito and Trussle).

24 https://www.digitalnewsasia.com/philippines-fintech-startup-pawnhero-secures-pre-series
26 http://fintechnews.sg/9311/vietnam/timo-funding-sunlife-vietnam/
But the only way for aggregators of banking and insurance services to counter this unwanted tendency is to play with forecasts: to migrate in new segments and come up with new services for their customers. Neobanks, PFM/PFP, and online scoring (credit history assessment) solutions, p2p lending platforms are the most obvious choices. These players accumulate at some point a large number of customers and a large amount of their data, but if they don’t evolve, they eventually fail after about three years of growth in average.

While fintech offered solutions only for hipsters and geeks before, now an increasing number of players bet on “Fintech for unbanked” solutions. This sphere is interesting, both in terms of market potential and its effects on improving global well-being.
3.2 Fintech banks for the “Snapchat generation”

Snapchat filed an IPO in February 2017 [27]. It was more than double as expensive as Facebook’s IPO, and nearly four times as expensive as Google’s. But there were several reasons to be cautious about jumping in as an investor: and the first one is about, that you’ll be paying 62x trailing sales for this company. It drives the company (and potential investors too) to think more about better monetization through complimentary products and services.

2,5 years ago, Mark Zuckerberg announced an unofficial messengers’ race for better and faster monetization of a customer base by integrating remittances, payments and other fintech-functions. Taking into account that new functions and changes are being introduced every three-six months nowadays, messengers haven’t gone far for the past two years. Those (fewer than all) that have managed to integrate payments, made them available just in one country with only basic functions. Clearly, only Chinese WeChat is far ahead of the competition, but like all other solutions – it is local, for all practical purposes.

Online student loans represent another very interesting niche [28]. Such players as Affirm and Credible have already started to expand their product lines to provide not only personal loans, but student loans too. American public company SoFi, a market leader, actively expands its business model to b2c (not only student loans, but mortgages as well) and b2b (Credit Opportunities Fund, created by SoFi, allows institutional and private investors acquire pooled loans from SoFi and other players) segments. The Fund has recently sold a portfolio with AAA rating by Moody’s worth $380M, which sounds like an investment opportunity for pension and insurance funds (which, in turn, would open this newly emerged market to conservative investors).

However, the size of SoFi makes it unwieldy over time – and it opens doors to such players as CommonBond (which has recently acquired PFM startup Gradible), Affirm, ClimbCredit and Earnest (all of them being approximately of the same size). Smaller players follow the leaders – LendKey, Credible and LendEDU, for example, have already launched their student loans’ refinancing programs.

There is a pool of interesting projects focusing on particular needs (and behavioral trends) of some client groups. SelfScore, for example, allows an international student to build a credit history in the US by issuing them credit cards – and this is a niche of up to 1M borrowers a year.

28 https://letstalkpayments.com/online-lending-for-students-on-the-rise/
Noteworthy, this sector is actively developing only in the US despite the fact that student loans are a burning issue everywhere. Only British Future Finance (has raised $13M in equity and $143M of working capital to finance credit disbursement and expanded to the German market recently), Indian Buddy and Indonesian Cicil (all of them are very small startups) are developing in this field. This is strange considering that people from Singapore, Hong Kong, Japan and Korea spend a considerable amount of money for their education.

Fenqile, a Chinese online shopping mall that lets users pay in installments, is planning a U.S. initial public offering[^29] that could raise about $600M. The Shenzhen-based startup, founded by former Tencent executive Xiao Wenjie, could list as soon as this year. Fenqile, which means “Happy Installment Payments” in Chinese, targets university students who are eager to buy consumer products yet can’t afford to pay in full. Fenqile, which sells products ranging from laptop computers to concert tickets, has more than 10 million registered users and had 10 billion yuan of revenue in 2015, according to its website. Selling shares would give Fenqile, which is backed by Russian billionaire Yuri Milner’s DST Global, more funding to compete with rivals like Quufenqi, whose investors include Alibaba’s finance affiliate Ant Financial. E-commerce is expected to be the main driver of increased consumption in China, supported by the growth of online shopping in third- and fourth-tier cities. Chinese e-commerce operator JD.com Inc. is also among investors in Fenqile. It most recently received $235M in a private fundraising round in June 2016.

Online-lending service for students SoFi (Social Finance Inc.) is raised[^30] $500M in a funding round led by private equity firm SilverLake Partners to bolster the expansion of its online-lending businesses and personal financial services. The investment round should include several Asian investors like Japan’s SoftBank and others. The new international group will purchase SoFi’s loans as well as take an equity stake. The fundraising round values SoFi at $4.3 billion, higher than its previous valuation of $3.2 billion. Closely held SoFi started out in 2011 by refinancing student loans. In 2015, San Francisco-based SoFi issued $5 billion in loans. That had grown to more than $15.5 billion by early this year. It’s since chased a much wider vision, expanding into personal loans, mortgages, wealth management and life insurance. Earlier, SoFi acquired mobile banking startup Zenbanx[^31] for about $100M. Expansion and scaling to neobanking as complimentary fintech vertical is the very trendy step right now.

3.3 The Gig economy is on the rise

We know that freelancers are changing the way we think about work, with their flexible schedules and multiple employers. And we know that freelancing is on the rise. Increasing numbers of skilled professionals are driving the growth of the gig economy. And while there are those who ultimately expect that growth to level off, it doesn’t appear ready to do that within the next few years.

Freelancers are changing the way we think about work

The 2015 report [33] by the Freelancers Union and online freelancing platform Upwork found [34] that over a third of U.S. workers (nearly 54 million) did some freelance work in the previous year. The majority (60%) who left to freelance said they now earn more than they did with traditional employment. A 2015 Freelancers Union survey found that 34% had done freelance work over the past year, and about 60% of those who had received 25% or more of their income from those jobs. The barriers to acquiring and sustaining freelance projects continue to drop. Taking out all of those leaves only 11.3 million self-employed freelancers, or 7.7% of the total workforce.

Here’s how the 2015 FU/U survey breaks it down:

• Independent contractors (36% of the independent workforce/19.3 million professionals) – These “traditional” freelancers don’t have an employer and instead do freelance, temporary, or supplemental work on a project-by-project basis.

• Moonlighters (25%/13.2 million) – Individuals with a primary traditional job with an employer who also moonlight doing freelance work. For example, a corporate-employed web developer who does projects for nonprofits in the evening.

• Diversified workers (26%/14.1 million) – People with multiple sources of income from a mix of traditional employers and freelance work. For example, someone who works the front desk at a dentist’s office 20 hours a week, and fills out the rest of his income driving for Uber and doing freelance writing.

• Temporary workers (9%/4.6 million) – Individuals with a single employer, client, job, or contract project where their employment status is temporary. For example, a data entry worker employed by a staffing agency and working on a three-month assignment.

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33 https://www.fastcompany.com/3048919/the-future-of-work/are-freelancers-to-blame-for-our-slow-economic-recovery
Freelance business owners (5%/2.5 million) – These freelancers have one or more employees, and consider themselves both freelancers and business owners. For example, a social marketing guru who hires a team of other social marketers to build a small agency, but still identifies as a freelancer.

Harvard Business Review called [35] this phenomenon “The Rise of the Supertemp.” These days, even professionals like attorneys, CMOs, and consultants with world-class training are choosing to work independently. There are many reasons why independent work is on the rise [36], from shifting economic conditions to corporate downsizing and employee dissatisfaction. But two things have slowly fueled the trend in a much bigger way, lowering the barriers that once made independent contracting much more challenging.

There are now more ways to work remotely than ever before, from devices, apps, and other personal technology that lets us communicate with one another from virtually everywhere. But there’s another kind of technology that plays an arguably bigger role—platforms designed to match companies with talent. New online marketplaces are launching in a wide range of categories, helping talented freelancers to find jobs in their chosen fields.

It allows businesses to find more targeted and better-qualified talent to address their needs—typically at lower costs. Rather than bringing someone in full-time, with benefits and a salary, a company can hire a consultant who’s ideally suited to a particular project. And that consultant is likely to have more resources to tackle it than at any time before. HourlyNerd designed by Harvard MBA students to connect companies with talented business consultants. The community lets businesses compare consultants’ profiles to those who correspond with their needs. Users can bid on projects within HourlyNerd’s platform, making it a flexible option to find qualified independent partners.

By 2040, the American economy will be “scarcely recognizable,” according to report [37] published by the Roosevelt Institute and the Kauffman Foundation. In the next 25 years, this shift will accelerate in a major way towards entrepreneurship, independent contracting, and “peer-to-peer” work on platforms like TaskRabbit. Additionally, there will be major diversification of entrepreneurship as new platforms like crowdfunding and relocalized production become increasingly popular.

35 https://hbr.org/2012/05/the-rise-of-the-supertemp
As we veer from this traditional work model, Dane Stangler, vice president of research and policy at the Kauffman Foundation, says the government will end up losing major payroll taxes, and that’s going to create challenges for our fiscal system unless some “very significant policy adaptations” are made. He warns: “There’s a whole ripple effect if this is going to be an actual and growing part of the economy.” By 2040, the job market will consist of part-time assignments, portfolio careers, and entrepreneurialism. Instead of day-in, day-out work consisting of much of the same responsibilities, a “career, then, will be composed of thousands of [short-term] assignments spread out over a lifetime,” says the report.

As traditional jobs—with their health insurance, retirement planning, and tax withholdings—disappear, we will see more platforms and institutions develop to help workers and their families manage exigencies and mitigate risks.

In the past, talent agencies were reserved for performing artists and athletes, but in the next economy, talent agencies and headhunting firms will start to play a bigger role in the lives of the everyday professionals looking to further their career.

In particular, workers will be forced to think constantly about their next assignment, the skills required for that assignment, and the education and credentials required to gain those skills. There will no longer be specific guidelines or career ladders to guarantee a career trajectory. Instead, workers will have to be savvier than their predecessors, because life has gotten much more complicated. To be successful, individuals will have to be more entrepreneurial in thinking and planning their lives, meaning constantly selling themselves, defining one’s own work, and educating themselves for future assignments. In the next economy, work may be more lucrative and fulfilling, but the idea that you’ll be professionally rewarded because you’ve been loyal to a company will be a thing of the past.

Valuations are falling, financing is getting more competitive, and plenty of money-losing startups are cutting costs. But not all entrepreneurs have been greedily chasing investment dollars, and many have been building lean businesses, creating meaningful products, and growing organically. We’re likely to see a vindication of sorts for “lean startup” practices. For the heads of those businesses, anyway, there’s still tremendous opportunity to build sustainable ventures.

**GIGs are everywhere**

It’s been argued that by 2040, the economy will be “scarcely recognizable” as a result[^38]. But just how that shift will reshape the next generation of...

work is much more difficult to forecast, partly because it’s so hard to gen-
eralize about what roles freelancers will play in companies of different sizes
all around the world. Still, the watchword of the new global economy is
fluidity, thanks to the rise of freelance work.

• The rise of the freelancer is hardly an American phenomenon. A study
from the U.K.-based business group Approved Index recently explored
the rate of entrepreneurship on a global scale by calculating the
percentage of the population that owns or co-owns a business in each
nation. With a massive 28% of its workforce classified as self-employed,
Uganda ranks No. 1 in the world for entrepreneurship. That’s pretty
remarkable for a nation that was quite recently released from the grip
of a dictatorship. Not far behind Uganda is Vietnam, a nation with an ex-
tensive history of socioeconomic distress. By 2013, Vietnam had moved
up into the category of “middle-income” nations. The Approved Index
study reveals that 13.3% of Vietnam’s population is self-employed,
ranking it No. 5 for entrepreneurship across the globe. China is No.
11 (10.2%). The desire for autonomy is strongest in China, especially
among young people, indicating a generational shift towards greater
freedom, entrepreneurship, and specialist skills. According to the PwC
report, the “desire for autonomy is strongest in China, especially among
young people, indicating a generational shift towards greater freedom,
entrepreneurship, and specialist skills in this rapidly evolving economy.”
Half the Chinese respondents in the study said they don’t expect tradi-
tional employment to be available to them in the future.
Technology is revolutionizing the way we connect, communicate,
and relate to the world. Yet one thing that’s remained true of workers
regardless of geography is that all want to survive and succeed. As
technology penetrates more corners of the globe than ever before, that
basic desire is growing more complex. Not only do more people simply
want work, they now want more control over how they work—whether
that’s better work-life balance, choosing a passion-driven career, or be-
ing their own boss. Put simply, the gig economy makes all those things
possible on a scale like never before.

Here’s how the rising gig economy stands to reshape businesses of
different sizes:
• Startups: Entrepreneurs often need to understand that they can’t do
everything themselves. If they bring in a freelancer to do a specific task,
they’re often getting the best possible result for the lowest possible
outlay. Since freelancers are usually “management-light,” they also let
their clients get on with running their businesses rather than consuming
their administrative time.
• SMEs: Small and medium-size enterprises (SMEs) have been in a squeeze over the past decade. They don’t offer the dynamic environment of a startup, but they can’t always offer the same career-growth opportunities as the biggest corporations. In recent years, that’s made it difficult for SMEs to compete for high-quality employees.

• Corporations: Large corporations may well see huge benefits from the freelance economy, too, but for them it will require big changes in the way they manage their workflows. There’s an obvious advantage to taking on specialized talent for the most innovative and experimental projects, without big companies needing to sunder important relationships with their other major partners. One way companies can continue to survive and thrive in the new economic landscape will be to replace certain clearly defined hierarchies with looser talent clusters. As PwC researchers point out, “Looser, less tightly regulated clusters of companies are seen to work more effectively than their larger and potentially more unwieldy counterparts.”

The increasing number of independent contractors in the “gig economy” is quickly becoming a political issue. But for Samaschool, a nonprofit school with four locations in California and pilot locations in Arkansas, New York, and Kenya, the gig economy is not something on which to take a political stance. It is simply the best option many of its students have for work. “The average student we work with is unemployed for 16 months prior to the program,” says the school’s managing director, Tess Posner. “For them to take training that is months or years, they don’t have that time. For people who have been unemployed for a long time, these job opportunities provide a way to reconnect to the labor market in new, growing industries.” Samaschool is one part of the Sama Group holding company, which started with a program in Kenya that connects marginalized people with digital work from companies like Microsoft, Google, and TripAdvisor. “The real catalyst [for starting a program in the U.S.] was actually from negative feedback that I got on our model from a guy in Ohio who said that we were ruining America by outsourcing American jobs to Kenya,” Leila Janah, its founder and CEO, recently told Fast Company. Classes in both Kenya and the U.S. now teach students digital literacy and in-demand skills like data entry and social media marketing.

**Millennials and “Snapchat generation” are native freelancers**

It wasn’t that long ago that if you were a freelancer, you felt bad about what you did—like you were somehow less than your peers. It was something that you did as a default move—you went through a life change, or

you were trying to break into an industry that wouldn’t have you. That may never have been true; these days, it’s just dead wrong.

The Freelancers Union has partnered with Upwork (formerly Elance-oDesk) to commission our second annual independent study of the freelance workforce. The results are fascinating. Freelancers are a growing workforce. There are now almost 54 million Americans freelancing. That’s more than a third of the American workforce. Millennials are native freelancers, and it shows: They are freelancing at a higher rate than any other group.

Independent workers are freelancing by choice. Survey respondents told us that they’re freelancing because of the flexibility, freedom, and balance that it offers. In our survey, 60% of respondents said they started freelancing more by choice than by necessity. Critically, half of the freelancers we talked to said that they wouldn’t take a traditional job, no matter how much it paid. And because being a freelancer lets you work from anywhere, a third of freelancers say they have been able to move because of the flexibility their career provides.

Maybe most significantly, we found that full-time freelancers say they actually earn more than the average American worker, and a majority say they’re earning more money than when they had a traditional job. And nearly half predict that their incomes will go up in the coming year, with many directly attributing that to an increase in demand for their services.

The fixation on millennials—how they supposedly do and don’t work, what they supposedly do and don’t want from their careers—is overblown. Why? Because that conversation lacks focus. The oldest millennials are now turning 35—they’re hardly the new kids on the block anymore. And they share little (in terms of experience, working styles, and priorities) with Generation Z, the youngest demographic of new workers now entering the workforce. Gen-Z roughly encompasses today’s teens and young adults born after 1995, the oldest of whom is 21 years old—next year’s entry-level employees. As one observer writes, summing up recent research, “These are kids who grew up in a post-9/11 world, during a recession, and during a time in which 1 in 4 American children lived in poverty.” All that will have a major impact on Gen-Zers’ prospects and approach to realizing them.

A recent Northeastern University study on Gen Z concludes that the generation is “entrepreneurial [and] wants to chart its own future,” and goes on to point out that:

• They are confident self-starters. They believe entrepreneurship is the best approach, as 42% expect to work for themselves.
• 72% would prefer to design their own college courses and majors altogether. They seek hands-on experiences and practical skills.
• 79% want colleges to integrate work experience with coursework in order to give them a leg up in the workplace. 64% are concerned about being able to get a job.

Some of this trepidation is well-justified, in light of issues like the student debt crisis and college affordability. But many of Gen-Zers’ traits seem likely to propel them toward innovation and growth hacking in a wide range of current and emerging industries. The fact is that for independent workers, tomorrow’s entry-level employees, entrepreneurs, growing startups, and established corporations, sustainable growth and innovation are never one-time things. It takes a deeply emotional, systemic, and cultural stake in the changing climate, which starts, of course, with an understanding of it.

Are workers self-employed entrepreneurs, independent contractors or employees? Gig workers don’t have access to unemployment insurance, so during fallow periods they usually have to cannibalize their own savings. They can’t take advantage of tax withholding, employer-sponsored health care, or retirement savings programs. Freelancers are a large and motivated voting bloc. In our survey, 86% said they plan to vote. And 62% said they’d vote for the candidate who supports independent workers’ interests. That means millions of votes are up for grabs. But this isn’t just a discussion about electioneering—forging solutions for freelancers is the right thing to do. And not just because it would rectify the mistreatment of one segment of our society: With more and more Americans freelancing every year, the chance that you yourself will be freelancing one day is higher than ever.

These companies are also at the center of a debate surrounding the gig economy: Are workers independent contractors or employees? Critics say Stride Health’s (and other startups) service is a bandage that effectively lets companies like Uber avoid paying for health insurance, while supporters argue that policymakers need to rethink antiquated notions of what modern work looks like. About 50% of Americans receive coverage through an employer. But Uber drivers, for example, are classified as independent contractors no matter how many hours they work. As a result, they do not receive benefits like health insurance, which are extended to full-time employees.

Last summer, Uber appealed the California Labor Commission’s decision that a driver should have been treated as an employee, which would require Uber to pay her expenses. In response, Noal Lang from Stride Health wrote a manifesto “for the modern worker class” [43]. Rather than advocating for the status quo, he argued that policymakers should consider an entirely new classification for gig economy workers. Lang has suggested a potential third-category for workers: “dependent contractors.” In Canada, dependent contractors receive some protections, but they have more flexibility than employees.

Many workers who take jobs on “gig economy” platforms [44] like Uber, Handy, Instacart, and TaskRabbit are independent contractors who aren’t entitled to the same benefits, insurance, and other social programs as their on-staff peers. Requiring (or even allowing) platforms to provide this type of safety net might be a matter of policy, but the National Domestic Workers Association (NDWA) thinks that platforms can and should do more to help their workers.

In October 2015, the labor group, which has historically represented house cleaners, nannies, and caregivers, announced a pledge called the “Good Work Code” that provides a framework for innovating around the principles of safety, stability and flexibility, transparency, shared prosperity, a livable wage, inclusion and input, support and connection, and growth and development. “What we are trying to do,” says Palak Shah, the NDWA’s social innovations director, “is build a legitimate center of gravity of folks who are already thinking about this stuff, and folks who are willing to say, yes, we have a role in creating good work, and we want the work in the digital economy to be good work.”

**Startups for the on-demand economy**

Noah Lang is the 32-year-old cofounder and CEO of Stride Health [45], a San Francisco-based insurance broker service that makes health care recommendations tailored to specific needs such as gender, medications, income, and preferred doctors. His startup has $39M in funding to help Uber drivers and other gig economy workers find an affordable health plan. Those who sign up for a plan via Stride’s website or mobile app receive year-round support, including access to customer service reps who will sit on hold for hours with an insurance provider. Some of the largest gig economy companies, including Uber, Postmates, and TaskRabbit, have partnered with Stride Health. It operates in 39 states, including California, New York, and New Jersey.

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43 https://www.linkedin.com/pulse/manifesto-modern-worker-class-on-demand-contractor-noah-lang  
44 https://www.fastcompany.com/3053476/gig-economy-companies-pledge-to-improve-jobs  
Some executives want to do more to protect workers, Lang says, and that’s why they’re chosen to partner with Stride Health. But they are also under pressure to protect their bottom line, and avoid a sweeping action that would reclassify workers in a way that sets a legal precedent. “Many people think that Uber doesn’t care about its workers,” said Lang. “But the company has invested heavily in the supply side and that’s an asset they want to protect.”

Stride’s team opted to focus its efforts on the fast-demand gig economy in December of 2013. “I didn’t want to come across as a cheerleader,” said Lang. “I know that we need to raise the bar to support workers.” The strategy seems to be working. In the spring of 2014, just 72 hours after the public launch, Stride secured a partnership with TaskRabbit. Uber came on board in the fall of that year, followed by Postmates three months later. “These companies don’t want the turnover,” said Bob Kocher, a partner with Venrock, a venture firm that invested in Stride Health. “It’s totally in their interest to make available new tools that benefit their contract workforce.”

It’s not uncommon for independent workers to feel isolated. But the rise of co-working spaces in top urban centers is changing that, offering freelancers unprecedented support and resources. Co-working spaces are providing more than just a sense of community that comes from working around others. WeWork (recently opened several co-working spaces across China, India, Australia, Hong Kong and South Korea), for instance, is one of the most popular providers of workspace for independent contractors, and it’s expanding to major cities around the world. The company has raised the bar in part by focusing on creating a collaborative ambience you’d find at any cutting-edge startup. WeWork spaces even boast arcades, fresh fruit, and beer on tap. And more than 150 WeWork partners offer services like human resources, web consulting, and accounting help—removing some of onus on freelancers to do everything themselves.

Adam Neumann, CEO and founder of WeWork, mentioned about growth of the gig economy in China: “We will open several locations in China. In Shanghai, we will open locations in Yunan Lu, East Ocean Center (Yan’an Donglu) and Huaihai Zhong Lu very soon. In Beijing, WeWork Guanghua Lu is going to be opening in March and another location in the city will be opening by summer 2017.” “China’s fast growth of startups, and nationwide encouragement of innovation and entrepreneurship, is a great opportunity for startups. There is so much demand yet to be met, and these are great opportunities for innovation. Of course, for WeWork it is also a great opportunity to grow in the world’s second biggest economy.”

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46 http://www.chinadaily.com.cn/bizchina/qaceo/2017-02/10/content_28156443.htm
Co-working spaces were home for 72.3 percent of the 685 verified start-ups in Australia[^47] that responded to the 2016 Startup Muster survey, up from 49 per cent in 2015. “Over the past six years, high-growth small and medium enterprises (SMEs) that make up just 6 per cent of NSW firms created over 1 million new jobs,” Jobs for NSW chair David Thodey said. “We want to create more high-growth SMEs by providing a stronger entrepreneurial ecosystem.” “By helping to build and support the startup ecosystem in New South Wales we can encourage a pipeline for future growth businesses and jobs,” he said.

Financial services for SMEs could change dramatically over the next few years, says[^48] Will Beeson. After ridding the world of outdated, predatory incumbent banks in the interest of honest, hardworking, iPhone-wielding men and women, fintech was going to fundamentally address the woefully inadequate financial services available to small and medium-sized enterprises. However, nine years on from the 2008 financial crisis, retail customers still by and large seek financial services from incumbent organizations, and SMEs are hardly better off than they were before.

In the early days of post-2008 fintech, a number of prominent alternative lenders in the US and UK, including Kabbage, Funding Circle, MarketInvoice and others, stepped into the void when banks stopped extending credit to SMEs. In the same period, a few high-profile payments companies, including Square, Stripe and Klarna, developed payment services for small and medium-sized businesses. Unfortunately, since then, there hasn’t been much action in SME fintech. Until now. For the last year there were many representatives of neobanks and many discussions around them with a lot of attention. But most of them are neobanks for retail clients – and I think that neobanks for SMEs (like Holvi, Tochka, Tide, CivilisedBank[^49]) is booming right now and demand for digital banks for entrepreneurs will rapidly increase during the current year. Examining the geographic distribution of neobanks, we can observe that most of them are located in Europe, with some interesting solutions in USA and Canada, big demand in Brazil and low activity in Asia. Which motivates Asian banks and investors look closely at what is created abroad, invest in it and work in collaboration with the teams involved on how to bring these solutions to Asian markets. And bank branches, struggling to find their place in the digital economy, can be a mix of digital banks’ showrooms and co-working spaces for bank customers (like it is already happening in US, Italy and Poland).

[^47]: http://www.afr.com/leadership/entrepreneur/coworking-boom-has-no-room-20170208-gu86yf
[^48]: http://banknxt.com/59484/fintech-smes/
[^49]: https://medium.com/@slavasolodkiy_67243/4-simple-banks-for-smes-holvi-tochka-tide-civilised-bank-24ce1f87d533
Over two years ago, Spanish multinational banking giant BBVA acquired Holvi, a Finnish firm that specializes in providing online current accounts and related services for “makers and doers” – i.e. small businesses, freelancers, and entrepreneurs. “For us BBVA is the ideal owner– a bank with the understanding of the digital world that can give us the necessary room to grow, and then the scale and expertise to underpin that growth with a sound foundation,” said Holvi in a blog post. BBVA said that it’s looking to “expand its portfolio of digital businesses to complement the Group’s overall transformation process,” and although Holvi will continue to operate as a standalone business, there will now be a “two-way flow of knowledge, ideas and support” between the two parties. Terms of the deal were not disclosed.

Almost a couple years ago, Stripe introduced its Atlas program as a way to help international entrepreneurs get incorporated and set up with everything they’d need to do business in the U.S. Stripe Atlas was designed to provide the legal, financial, and operational tools necessary for startups to get off the ground. By partnering with Silicon Valley Bank for financing, Orrick for legal corporation affairs, PWC for tax guidance and AWS for cloud services, the Stripe program provided a way for companies to quickly incorporate as a Delaware C Corp and set up all the introductory banking, tax, and tech infrastructure they’d need. Now the payments startup is opening up the program as a way to facilitate company creation for founders that are already in the US.

Imagine paying your bills, checking your account balance, getting help with financial questions, and generally managing all your everyday banking needs via Facebook. Sounds hard to believe? Not for customers of Tochka Bank in Russia, where all of this is possible today.

Bots, of course, are big right now. But burgers and boarding passes are one thing. Paying your utilities or credit card bill is another. And talking to a representative of your bank about arranging a mortgage for a new property you want to purchase is yet another.

But all of those are available from Tochka, where clearly the bank’s leadership wants to not only present a modern high-tech appearance to the world, but also to deliver on that promise to customers. Over 12,000 clients used the Facebook bot on the first day, and an astonishing 50% of

51 https://techcrunch.com/2017/04/06/stripe-atlas-us/
them initiated a payment from the bot. Those are very significant numbers for a bot, since bots can be hard to find and start using, and the idea of communicating with a company via Facebook Messenger is still very new outside of the WeChat empire in China.

Boris Dyakonov, CEO and co-founder of Tochka bank, wrote[^54]: “I’ve wanted to have a purposeful business bot for years now. We at Tochka hesitated to launch the world’s first Facebook banking bot – with full payment functionality – for almost two years. The bot itself is only a moderate success, but it has certainly been a useful tool to explore how customers behave with such a toy. We have been trying to answer questions about whether a bank might need a bot in the first place, what platform it should run on, whether artificial intelligence would be useful, and whether our bot should have a character of its own.

The aptly named CivilisedBank wants to lead a charge to change banks’ culture. It became the first lender to swear a new “bankers’ oath”[^55]. This commits employees to act responsibly and “have the best interests of the customer in mind” – cue images of a Boy Scout pledging allegiance to the God and the Queen. It remains to be seen whether reading a few words of a sheet of paper, or even from memory, can herald a cultural shift. “I will confront profligacy and impropriety wherever I encounter it, for the conduct of bankers can have dramatic consequence for society”, bankers must pledge. Say goodbye to blowing that bonus on a Lamborghini then.

CivilisedBank announced[^56] that it has submitted to the regulators (the FCA and the PRA) its banking license application. It expects to receive its banking license later this year and to launch early in 2017. Over the coming months CivilisedBank will focus on meeting its regulatory capital requirements and on developing its technology and operations platform ahead of launch early next (2017) year. CivilisedBank will not have branches but will operate through a network of Local Bankers backed by an innovative, yet tried-and-tested technology platform being deployed for the first time in the UK. Its unique, branchless local banker network will help build one-to-one relationships, without the traditional costs associated with high street banks.

CivilisedBank will target owner-managers of small and medium-sized UK businesses by offering businesses current accounts with deposits, transaction banking, overdrafts, foreign currency exchange, investments, savings and loans. It will also address the UK retail market with specific savings and investment products.

[^55]: https://www.ft.com/content/014009d4-051d-11e5-8612-00144feabdc0
[^56]: https://www.finextra.com/pressarticle/64766/civilisedbank-applies-for-banking-license
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Chris Jolly, Chairman, CivilisedBank said: “Applying for a full banking license is a major milestone for CivilisedBank and places us firmly on track for a customer launch early in 2017. Customers remain poorly served by the incumbent banks, which is why our team of local bankers will be responsive to their financial needs. We will bring back the best of banking: one-to-one relationship banking for business customers, enabled by the latest banking technology.”

Here are 11 useful fintech solutions that are perfect for SMEs

If you take a look at all the news about fintech startups, you might get a feeling that the new financial services are built for retail clients and not for businesses. However, these are the entrepreneurs who may become drivers of fintech[57].

I believe the target audience for SMEs can be split into three segments that are most receptive to new technologies and demonstrate the highest customer involvement at the same time. These are cafes and restaurants, hotels, taxi services and fashion retail:

• They use products not just by themselves. Being bound to working with retail clients, they also engage them with their new services.
• Cafes, restaurants, apparel stores, hotels, cabs – end consumers spend quite a long time (quality contact) here and get more than functional satisfaction, they get emotional satisfaction (interaction with your brand and loyalty to your service).

1. POS-management systems (Mobikon, Square.Dashboard, etc)

Most entrepreneurs do their bookkeeping in copybooks or Excel, which is not very convenient, especially when the business is growing. They also don’t have extra time or money to develop new managing or technical skills. A new generation of online services allow you to automate your point of sale working process in a cost-efficient and intuitively way:

• Employees analysis (strongest/weakest etc.)
• Stock and its movements analysis (for further replenishment)
• Customers’ details storage – contacts, preferences, loyalty
• Feedback processing – multi-channels distribution, analysis
• Marketing campaigns and loyalty programs development. Automated context advertising, SMS- and email- lists management and analysis
• Booking/reservation modules (restaurants, hotels, yoga classes, gyms, psychologist consultation etc.)
• Selling goods and services through social networks (Ecwid) in accordance with enormous social networks and mobile penetration in Asia

57 https://e27.co/13-useful-fintech-solutions-perfect-smes-20150820/
2. Tablet-based cash-registers (Poynt, etc)
A cash register is the working desk of an entrepreneur. No one in the world would argue the fact that existing cash registers look like old IBMs compared to Mac laptops. In addition, your IBM is not just ugly and regressive, it’s also twice as expensive.
New-generation cash registers not only look nicer because they’re based on tablets, but also have a completely different architecture. A cloud-based software makes a reserve copy of all the data always available to you, it also provides you with automatic updates and allows you to choose a more convenient model of subscription and payment.
If the main function of traditional registers is money storage, then the new generation cash register makes an emphasis on storage of customers’ data, their preferences, stock analysis and employees productivity. “Earning more, not saving” – is the main paradigm of fintech.

3. mPOS-acquiring (Square, SumUp, SoftPay, etc)
All the new cash registers come with card-readers by default. However, a solution such as “smartphone + reader” is useful for answering a number of other needs in business development:
• for taxi drivers
• for waiters (saving time on carrying a bill and a traditional card reader back and forth)
• for couriers (especially considering the fast growth of e-commerce in Asia where most purchases are still made with cash-on-delivery)
In addition, almost all the solutions are equipped with extra functions, such as automatic bill split (if there are several customers in a cab or at a table and they want to pay separately), tips straight to your employee’s bank account (according to statistics cashless tips are averagely bigger than the ones in cash), bill design customization (let your bills advertise you, not your bank).
It’s very often that merchants aim to receive cash for a number of reasons:
• price of equipment and complexity of its installment (mPOS equipment is more functional and easy-to-use, it looks better and costs less)
• extra costs of bonding terminal data with your software. As an example: booking and accounting system at taxi stations (unlike banks, mPOS-services highly customize every solution individually for every client)
• the speed of money inflow and possibility to use it (mPOS-services transfer the money within one day)
Accepting payments from end consumers this way, merchants don’t just make everybody’s life easier, but also keep a great amount of data
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(for themselves) about their clients and their preferences. Moreover, based on this data they can understand all the specifics and strong sides of their clients’ businesses much better than if they were looking at naked numbers in companies’ financial reports.

4. O2O: beacons & Wi-Fi, card-not-present payments (Starbucks Wi-Fi, TIDE Analytics, etc)
Free Wi-Fi in a cafe, hotel or taxicab is more and more becoming a ‘must-have’ symbol of the modern age way of running your business. New-generation cash registers are supplied with a special Wi-Fi router and a number of beacons. Besides providing free Internet, this solution allows entrepreneurs to extend their knowledge of their customers:
• How many customers passed within a radius of 100 meters from your point of sale in total: how many of those just passed by, how many came in, how many bought something in the end. Did the passersby begin to slow down passing by your shop-window in case you’ve rearranged it?
• “Recognizing” your customers even before they approach the cash desk: how do they look, what’s their name? Are they a customer or a friend of other customers? Have they been here before, or perhaps they’re a loyal customer of your competitors?
• One of the main advantages is a possibility to pay with your smartphone without even taking it out of your pocket, activating any apps and coupons, or scanning QR-codes. Using open APIs, these cash registers can accept payments automatically through anything - PayPal, Paytm, or your bank’s mobile app. This is a great opportunity for banks to shake up all their mobile apps thanks to going offline and building synergy with their SME-clients).

5. Pre-ordering (Starbucks Card Mobile, AllSet)
Providing customers with an opportunity to independently place preorders after the first visit has a positive impact both on merchants and customers:
* Customers don’t have to wait to be seated anymore and step into your cafe right when the table is available and the dish is cooked and served (especially relevant for breakfast and lunch occasions). And when they’re done with their food, they simply leave without wasting time on paying the bill
* According to statistics, pre-ordering allows merchants to increase their turnover, traffic and customers’ loyalty level.

6. Working with feedback and loyalty (Square.Feedback, Mobikon, etc)
When your bank sends you an SMS confirmation of a transaction next
time, try replying that you didn’t enjoy the dish served to you, or the taxi driver was rude, or the quality of the dress was too poor. I think your bank would not even understand you: “Our business is to accept payments,” they would probably say.

At the same time, you can easily respond to any email- or SMS- receipt sent to you by one of the modern age financial services. And without even clicking any additional links, sending any emails, or making phone calls, your complaints would surely be heard. This kind of service makes it clear to merchants the importance of working with customer feedback (and not passively either - when you always ask them whether they were satisfied, or not). Routing, positive/negative/neutral tone classification, processing speed measurements, contact center outsourcing - all of these help automate interaction with your services.

The same applies to loyalty programs. All the mechanics are already well known (bring a friend, buy three for two, spend a certain amount and get a discount/present etc.). There’s no need to hire a specialist, when you can launch all these activities by simply pressing a button on a tablet and start tracking efficiency right away.

7. Do as Apple does: turn your customers into cashiers (Wallmob, Shopify, etc)

Besides cash register solutions that involve the actual device replacement, there are a number of services that turn your customers into your own cashiers. Here are two examples.

The first one is coming from fashion retail industry and is based on Angela Ahrendts experience. Since 2006 she was CEO of Burberry and in the fall of 2013 she became Head of Retail at Apple. Ahrendts began with 11,000 of employees: She provided each of them with a tablet, measured their brick and mortar stores sales rates and motivated them to demonstrate to all the customers how to shop online (self-service). This way customers could buy products by themselves at the store they were currently located or order delivery from any other branch. After all the experiments, Burberry (the oldest fashion house in England) made it to one of the generation Y’s top brands and drastically increased volumes of online sales compared to other fashion houses. Moreover, the company’s market capitalization grew 300 per cent in seven years, when most of the famous luxury brands either went bust or were acquired by bigger players.

Take a look at how Tesla is selling its cars and you’ll see the same principle. It replaced all the salons with showrooms – you can’t buy a car here (it’s only possible online), but what you can do is experience the brand.
8. Online acquiring (Stripe, 2C2P, etc)
Tourism is a huge market (with most travels being paid for online) and e-commerce is another rapidly growing sector. The ability to accept payments online poses another one - a need for easy-to-install and easy-to-use acquiring services. High development of local payment systems makes local players stronger compared to international ones because they understand their customers’ needs much better and react to them in a very local and focused way.
At the same time, due to their focus on cards and traditional bank accounts, banks are not able to follow and integrate with all the new wallets and payment systems, because their architecture is initially built on a proprietary basis.

9. POS-loans (Financelt, REVO, etc)
A number of businesses (travel agencies, furniture/appliance/apparel/accessories stores) would love to sell their goods to their customers on credit - this increases turnover and size of their business, and it’s also very convenient to their customers. But not being big retail networks, they are not interesting to banks as partners.
A tablet with an app set in a POS allows merchants to sell their goods on credit without painful negotiations with banks. It’s especially relevant for telecoms in a number of SEA countries where postpaid mobile plans with a phone included into the price are still not present. But data on customer’s previous transactions, made in other POS systems, helps to drastically reduce the risks.
Alternative sources of capital and their influence on marketing and loyalty (Kabbage, Square.Capital, PayPal Working Capital, FundingCircle, etc)
Despite the fact that the main stir among foreign media is caused by online- and p2p-lending for individuals (such as LendingClub and Kreditech), the market for alternative lending for business has grown a lot over the past few years. This sector is a way capacious in terms of growth potential, as traditional banks offer a historically bad service for SMEs. To date, the range of tools is wide enough[^58]:

10. Get money from online services that facilitate lending to business (online SME lending services)
11. Sell your receivables from counterparties and partners to another company or obtain a loan guaranteed by them (online factoring)
12. Attract private investment (P2B-lending)
13. Attract private investors as shareholders (crowdinvesting)

14. Ask potential customers for money to implement your product/service (crowdfunding)

15. As I wrote before, using the payment systems mentioned above (especially cash registers) you get a huge amount of data not only on the financial condition of your company (which is interesting to banks), but also on how you do your business (managing staff and stock, talking to customers). This positively affects two aspects:
   • risks reduction (a significant advantage is the speed of applications approval which is very convenient for the customers)
   • forecast of credit repayments pace (instead of monthly payments a credit start being repaid with the very first transaction of your customers).

As a company you can take credit from a bank or ask for the money at a P2P platform. In most cases, you will get a lower interest rate or better understanding of your business model from the platform. But best of all is to borrow the money from your own loyal customers. It’s a great way to involve them into the future of your company (and you already have their details for contacting them). Who knows everything about you and your perspectives better than your customers? I have a friend who owns an international pizzeria network called DoDo Pizza. He has recently gathered US$3M for network development from his frequent customers: As a result, he got cheap credit but more importantly, proved one more time that his strength is in his customers. For instance, not only young inventors are using crowdfunding services, but also huge companies (and they are not in need of the money for sure). On such platforms they test potential interest to their new products. If a customer is ready to ‘vote with his dollar’ for a new product it’s more valuable than the results of any focus groups.

16. Turn your SME customer into your bank branch (Ayannah, etc)

For several years, banks around the world have been trying to figure out what to do with their branches, which are expensive and often cost-ineffective. It’s unfeasible to open so many branches on the unbanked markets. The same holds true to investments in ATM networks. And now look around – at every corner you will see shops that have cash registers inside. Nowadays there are some services, which facilitate the mutually beneficial spread of financial services over nonbank sales points: Ayannah integrates with pharmacies, grocery stores, mobile phone outlets and offers to transfer money or top up eWallets of the largest Philippine mobile operator Smart/PLDT.

Why would one spend money on new distribution networks for financial services, when there are already sales networks in place? And if
they use a new generation of cash registers, they will allow you to top up your eWallet and pay everywhere with your smartphone. ATMs and bank branches are no longer needed (especially where they don’t exist).
3.4 Who will build the first fintech bank and where will it be?

The first six months of 2016 were record-high in fintech investments[^59]. And for the first time ever Asia has become №1 market in terms of the amount. However, it was trivial. Such headlines as “Last month \ quarter \ six months were record-high in fintech investments” are suitable only for media. From the market perspective, fintech (like any other new and fast growing industry) is growing at the exact rate it should be. It is neither good nor bad - it is normal. In reality, it will sound like “The mass of the Moon is 81 times less than the mass of the Earth: the market experts are concerned”. Yes, it’s less, so what?

But at the end of the year VC investments into fintech industry have not grown globally finally and the market has almost reached its saturation point in 2016[^60]. The amount of VC investment in 2016 was $23.6 billion, which is 16% higher than in 2015. However, excluding Ant Financial (Alipay) investment deal of $4.5 billion (which is abnormal for the whole tech industry, not even fintech), the fintech market decreased by 6% in 2016.

There are few reasons for this. In 2014 and especially in 2015, level of investment noise in fintech reached its maximum, which caused a massive inflow of “unprofessional” money from different investors, who just followed the hype, without deep investment analysis and understanding of the industry. Invested capital didn’t reflect the real operational and financial achievements of newly funded startups.”

Business metrics (customer base, transactional volume, revenue and income) of many notable fintechs in 2016 were not impressive at all (actually most of them are still unprofitable and growing not as fast as expected), that is why many investors finally cooled down. As an example, you can take a look at public fintech companies: they are still unprofitable or just reached breakeven (Square, Lending Club, OnDeck).

At the end, I have to mention that fintech undoubtedly remains №1 industry in the VC space by investment volume and it’s even increased its share to 19% of the whole VC market in 2016, while overall VC industry slightly decreased in 2016 (by 9%).

Asia's share of global fintech investment is 47% in 2016! Sounds impressive? What is even more impressive is that more than 80% of invested capital went towards firms in China, meaning that China has finally become the

[^60]: https://thenextweb.com/guests/investments-fintech-industry-not-grown/
dominant power on the global fintech landscape, surpassing the US and all others, which was never the case before 2016.

Unfortunately, 2016 was quite poor for notable exits in the fintech space. While quite a decent amount of M&As happened, only few of them can be considered as successful for founders and investors. Most of the fintech startups were acquired to get an access to their technology, not because of their business successes, meaning that multiples were quite low (similar to traditional software companies and much lower than in tech VC). IPO exits looked even worse—only a few traditional payment and financial services companies went public, no any bright startups.

Lending and payments startups still dominate on the fintech market, accounting for more than 50% of the industry both in number of investment deals and M&A deals. The fastest growing segment is insurtech, which doubled its share in 2016. Blockchain still remains a relatively small vertical: it accounts for less than 2.5% of the whole industry, despite a lot of noise and PR around it.

Even without considering Ant Financial ($60+ billion valuation and worldwide expansion ambitions), Chinese fintech giants occupy the Fintech Hill: Lufax, ZhongAn and JD Financial. And these companies are notable not only due to their huge customer bases, operational records and funding attracted. They create a unique customer journey by expanding their product line and significantly increasing the value proposition for the end-users. As an example, Lufax, started as a p2p-lender, successfully jumped into wealth management business providing an opportunity for Chinese customers to invest into foreign stock.

Who will be able to compete with these monsters from China in the next few years for the global leadership? I bet on Stripe, TransferWise and SoFi who seem to be the most sustainable or/scalable businesses in the fintech world. While Chinese players are fighting for local leadership, some of the US/EU players have successfully started global expansion and conquer emerging countries in Africa, LatAm and Asia.

At the moment, I would single out three much more important fintech issues, rather than “record high or low volume of deals”:

• Scaling – as little as 30 companies worldwide show that they are able to quickly export their products and services to other countries. All this amid 50 unicorns and more than 5,000 fintech startups all around the world. The problem is not only in their desire and ability: most markets are lacking BaaS-platforms for scaling, and local regulatory policy does not allow to quickly and cheaply license independently. For Asia, the problem of scaling is “the dual challenge” – so many countries, and all
of them so different. We still didn’t see any successful-in-scaling Asian fintech startup.

• “Round B problem” – both dry statistics and my personal experience evidence that medium-sized companies face the future funding problem. Such companies are already successful in one market and “burn” a lot of money, but in most cases, they are still loss-making, and further need either geographical expansion or extension of their product range. This year this issue will become especially critical. In Asia, there is no problem with seed capital, and there are many potential strategic investors or buyers; but with “round B” financing we can face the “bottleneck” effect.

• The third problem derived from the first two is the growth of companies through mergers and acquisitions. At this stage, neither “cash exit” for founders of acquired services nor acquisition of a ready-made business is applicable. Here arises the need to merge through the exchange of shares. However, at what price, what will be the role of CEOs and how to keep the team and corporate culture? The startups and their founders are not always mentally prepared for such changes or do not see the whole picture. The final buyers and strategic investors do not want to engage in this and find it easier to hire a “wrapper”, which is reasonable. While “wrappers” face the need for extra funds for “transitional period” and, at the same time, exorbitant risks (because everything can fall apart so that even initial small but successful companies will not survive). Any Asian “big guy” will tell you that he does not want to invest in local leaders - only in pan-Asian players. We can wait for their organic growth (for several years) or start to think about M&A (several Chinese companies already provided great examples of arrogant less development, look at Didi Chuxing case). It is “moment of truth” for all new potential fintech-hubs.
3.5 “Dances with drums” by banks

There are so many innovation labs and too few innovations[61]. I regularly meet with bankers worldwide and the first phrase I hear (especially in Asia) from those who decided to invest in fintech (there are few of them so far, and we should be grateful to them) is, “We want to invest only in those startups that will be synergic with our current business.” In other words, “we want to invest only in those alternative energy sectors that would keep oil prices high and our oil business profitable.” Ok. There is a huge difference between Simple mobile bank and even the world’s cutest mobile bank, which you may open only after you visit the banking branch and sign all documents.

Clayton M. Christensen in The Innovator’s Dilemma and other authors addressing the development of large and successful corporations able to innovate (read, for example, Jony Ive on Apple by Leander Kahney), note: first, you have to separate the team that makes a new business for you, their office and KPIs from your core business. Then join your old business (if able to integrate) to the new one, no other way around.

I will not list here all accelerators and hackathons built by banks recently, simply because they failed to create even a single star and generated no deals or following rounds.

The same is true for fintech hubs worldwide. In fact, their developers prove to be “advocates of traditional banks”, rather than those of “fintech startups”. In other words, their KPIs are not focused on bringing about more new startups and making them more and more successful, they are aimed at preventing them from causing a disturbance (God forbid!) to peace and success of existing banks. I should say, banks set up no startups and make no investments in them (historically). Startups are, therefore, put in some kinds of “cages” to have their digital revolution under control and prevent them from disturbing the “big guys”. Putting aside the number of released articles, set-up hackathons, accelerators and bonuses, only the UK can boast any real achievements. Historically, the USA can too.

Many countries have joined the rush for fintech development this year, in Europe (France, Switzerland, Austria, Sweden, Denmark, etc.), Asia (Singapore, Hong Kong, South Korea, Japan, Thailand, India and Taiwan), Australia and Canada; the only question is: where are simplified licenses for fintech startups to give them an opportunity to operate without banks? Where are hundreds of transactions and dozens of outputs? I don’t mean articles and accelerators here, I mean real business, where is it? In fact,
the explosive growth in Asia accounts for only a few China’s giants, take them away and there is no growth in Asia. It is impossible to build fintech in a single country (unless you are the USA, China or India), as all entrepreneurs may live any place, they move around easily and intend to build international businesses, rather than local ones. Expansion to Asia, Africa and the Middle East is curbed by the fact that they have no BaaS-platforms and banks have no open APIs.

For example, neo- and challenger banks existed previously only in the US, and have got the second wind and a new growth phase with the support of the British regulator, - but why we do not see their followers in Asia? Lack of talents? Not only. Most of the Asian markets are unbanked - and it is too early for them to join this party. Overbanked markets like Singapore, Japan, South Korea, Hong Kong highly controlled by megabanks, and local regulators support their safety and stability more than market innovations. It looks that only customers can shift this situation from zero-point. Or - iconic investors like Li Ka-Shing, who invested in N26.

The UK organized Brexit recently. I think, that it right moment to forget about “sandboxes“ and accelerators, and create real fintech hubs: 1, unite Asian banks via BaaS-platform with open APIs for fintechs; 2, originate new (light) type of licenses for newcomers; 3, provide financial leverage not for banks (they already rich, and they are not VCs), but for VC-funds (they have to do all preparation homework for the industry).

Last year was marked by an active “flirting“ of traditional banks with fintech [62]. American (Goldman Sachs, Bank of America, JP Morgan, Wells Fargo, BNY Mellon, First National Bank) and European (Unicredit, Barclays, HSBC, BBVA, Deutsche bank, BNP Paribas, Societe Generale, ABN Amro, IdeaBank, ING, Nordea) banks were more proactive in their work with fintech, than Asian (DBS, OCBC, UOB, Mandiri, Maybank, China Bank Savings, Mizuho, Siam Commercial Bank, KBank, BBL, State Bank of India, Airtel bank), Australian (ANZ, KIWI) and African (Africa’s First National bank) banks. Middle East banks are currently just eyeing the industry and have not been seen acting.

American banks are past “abruption“ and “ignoring“ phase - more and more they invest in startups, open APIs and their platforms for third-party developers. European players are still on a previous stage of market “probation“ and strategy formation - they launch accelerators and hackathons and partner with others. Asian banks are more of announcing their grandiose plans, then implementing them - even Australian and African banks seem to be more pragmatic in comparison.

Generally, all large banks are prone to make fuss over themselves at the start and then barely provide any information on their activities: it was an issue with the launch of the digital bank from Goldman Sachs in the beginning of April, followed by an autumn launch of their online-lending platform, and R3 banking blockchain consortium (are there any news concerning it besides information on another bank entry into and withdrawal from the consortium? It is exactly the same story like consortium of retails tried to compete with newcomers via CurrentC\(^{[63]}\) or a €200M venture fund from Unicredit, which has not given any updates since its launch.

Banks’ area of interest is currently very limited. Most of the deals and internal activities are focused on investments (online trading, robo-advisory, wealth management, PFM, PFP), online lending and blockchain. In mobile remittances and e-wallets/e-banking their activities are more restrained. Many segments and niches haven’t been exploited yet. The big potential lies in banks’ “openness” to collaboration with startups from any area, ability to engage with them via open APIs and bank-as-a-service platforms.

Just over three months after Ant Financial first made a move into Southeast Asia with an investment in Thailand, the Chinese web giant has taken a stake in a fintech company in the Philippines. The deal, for an undisclosed amount, sees Ant Financial, maker of China’s biggest mobile wallet app, take a “substantial minority interest” in Globe Telecom’s Mint, the companies jointly announced. Mint, with three million registered users in the nation, runs Gcash, an online service which - not dissimilar to Alipay - allows people to add phone credit, pay bills, send money, make donations, shop online, and purchase goods without the need for cash. It also operates Fuse Lending, which offers personal and business loans. This is the first ever investment in the Philippines for Ant Financial, a spin-off from Jack Ma’s Alibaba empire. Ant Financial wants to work with Mint “to provide simple, secure, low-cost, and accessible digital financial services to unserved and underserved individuals and small and micro enterprises in the Philippines,” said Ant CEO Eric Jing in a statement.

After that, speaking at Mobile World Congress, Benedicte Javelot, head of the group strategy at Orange, said\(^{[64]}\): “We will be launching Orange Bank in few weeks, which will be disruptive in France... It is quite exciting as an incumbent to feel like a new comer.” Javelot said the former UK telco plans to open its virtual doors to other customers across the continent. She said the company hopes to become a custodian of customer

\(^{63}\)https://www.paymentssource.com/opinion/technology-and-timing-doomed-mcxs-currentc
\(^{64}\)https://www.theregister.co.uk/2017/02/27/telco_orange_to_open_bank_next_month/?mt=1488293065068
data. “The digital transformation is a very big field to enter new business. We want to be number one partner in the digital life of our customers.” Speaking at the same event, Elena Gil Lizasoain, big data director at Telefonica, said her business was looking at ways to flog anonymized customer data to “help” its corporate customers. “We can help financial services companies... there are lots of examples [of new markets] for us.” Lebara is a mobile network business, which is universally recognized brand for the world’s migrant community - this [2016] year announced the plan [65] to enter the international money transfer market. Lebara Money appears to see migrants[66] as an attractive segment of the market to work with, rather than a group to be avoided. That partly reflects the company’s fintech foundations, says Selma Ribica, director of Lebara Money. “The risk appetite of traditional financial services providers is very low, and many are reluctant to work with customers for whom data such as a credit file doesn’t yet exist,” she says. “We use different types of technology to make decisions, which makes us much more agile.”

47% of Indians still don’t have bank accounts, and around 78% of the adult population owns a mobile phone of some type. This created a certain opportunity to a telco company Airtel, that has offered yet another avenue[67] toward cashless happiness, involving its subsidiary Airtel Payments Bank and your smartphone.

It’s not been more than 3 or 4 years ago that this industry emerged and started to draw a great deal of attention from the new entrepreneurs, clients, journalists, banks, telecoms, and web giants[68]. This was associated with fast-developing technologies, especially mobile-first services, that were massively changing the customers’ preferences, and those of Generation Y customers in particular. Traditional banks started lagging behind these changes for several reasons:

- Profitability vs solving real-world problems
  Regulators all over the world request that the banks should be money-making right here, right now, not at some point of time in the future. Whereas in the technology sector, everyone understands that developing a new technology or service can take a long time, and in the meantime you don’t make any profit and have no idea when and how you will finally start making money. The sentence above would sound absolutely absurd for bankers who only have owners and bank

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66 http://www.forbes.com/sites/davidprosser/2016/12/05/uk-start-up-targets-underserved-migrant-market/
68 https://www.techinasia.com/talk/8-reasons-buy-fintech-startup
heads in their world, and, for obvious reasons, they all want an increasing profit.

• Startup founders don’t found their companies by hitting bosses or stockholders with questions, but by asking the client where the shoe wrings - and then they help to solve the problem. In the technology sector, the widely accepted practice is to build the service by asking the client questions, looking for the best solution and then understanding how to make money with this solution. As Silicon Valley sees it, if you solve someone’s problem well, then it’s much easier to understand how to make money out of it, and this understanding will come eventually.

• Offline branches vs online systems
  Whatever the bankers say about their openness to online services, the banks are always offline, because even if they have (suddenly) managed to develop the best mobile bank, you need to go to their office and sign the documents in order to get access to it. Bank branches are, and have always been, the center of the bankers’ solar system.

• And startup founders only need a mobile phone. You can simply download your bank through the AppStore or GooglePlay and start using it. The same holds true to banks as clients: they don’t use cloud systems, instead they buy lots of servers, and as the servers need to be taken care of by employees, this creates some kind of significance and increases the salary of IT Head.

• System management
  There are times when it takes so long to build something that, in order to change it, it’s easier to destroy it and start from scratch. Take a look at the back-end and IT-infrastructure of any big bank: they seem like a pile-up of the broken condoms. Anyone knows that if a condom is broken, you should take it off and put on a new one. And the banks just write a new adscript every time, which results in a huge stack-up of ad scripts. Often nobody even remembers their history, because ”that guy” has already been fired. Whereas all new services are built from scratch, as it should have been in a perfect world, in line with the principles of open architecture and free interaction with other online services.

• Variety of services offered
  Banks have always worked with bank services only, while the new generation of the clients asks for a cocktail of financial, entertainment, informational, tourist, medical and plenty of other services. As a result, other sectors (e.g., retail) are learning fast to work with financial services, and in the meantime the banks keep stagnating.

• Staff and internal structures
  Finally, there are the people who work in banks. They can be anyone,
sometimes even good specialists and as honest men as ever lived, but they are not entrepreneurs. But the new economics (like in cases of Tesla or Apple) requires companies to have a new way of internal structure: small self-organized teams that can work without a precise plan and under uncertainty, that can generate new ideas and test them, that are challenged by their mistakes and failures.

• What do corporations acquire in the traditional sector when dealing with regular companies? They mainly buy future cash flows based on how the company has been generating and gaining them. In the fintech industry, most companies are loss-making while being valuated at a sight of money, according to experts. It’s your choice how to take things you don’t understand: either the others are idiots or you are not smart enough. So, either the people who buy them are bananas or they pay for something else.

8 reasons why market players buy fintech startups:

• To buy customer acquisition
Banks all over the world offer the same products, only rates may differ a little, that’s why the customer acquisition becomes more and more expensive. If a bank in the USA buys an SME customer for US$200 and a startup for US$20, the latter is purchased with a view to cut the expenses for customer acquisition by a factor of 10. After that, the clients are also offered traditional services and products, but with a higher margin.

• To buy market differentiation
Big banks spend tens of millions dollars annually on their advertising, millions go to campaigns, and billion dollars cover the fees of the creative agencies. Except that the commercials don’t differ much from one another: here is a smiling family with a dog, and there is another one without a dog; here’s a businessman looking to the future with confidence, and here you have a relaxed and happy businessman giving a hug to his wife while staring at the horizon. Fintech startups let you stand out in this advertising splutter by promoting a bank with a new product. We know that the clients’ memory is organized in a way that, having received a new and unusual message, they will set you aside from your competitors and project the image of innovativeness and sophistication to all your other products.

• To buy lower risks
Another constant pain for the banks is how to lower the risks for the provided loans, which are the main and the most profitable bank service. With fintech startups, it is possible to gather information about the clients before offering a loan. With fintech startups, it is possible to gather a lot of information about the clients before offering them a
loan. You will be able to provide the loan at a lower risk, and it will be
more targeted if you are aware of the client’s financial status, the num-
ber of his own clients and his relationship with them, his choice of the
range of services for his enterprise, his friends in social networks and
his way of communicating with them, his special offers and his clients’
feedback, as well as thousands of other factors that shows the overall
attitude and quality of the business in perspective.

• To buy time

You can of course get inspired by the best practices in your country or
worldwide, go to your IT-department and ask them to copy everything.
Even if this seems cheaper and of a good quality, you have just spent
lots of time on copying yesterday’s practices, and the market is already
ahead of you. So everything depends on how ambitious you are: either
you want to create the future or are constantly trying to catch up.

• To buy talent

You can buy a specialist, maybe a good one, even a lot of good special-
ists, but you can’t buy entrepreneurs and teams. Entrepreneurs want to
be independent and work for themselves, while a set of specialists can’t
just make a team when asked to do so by their boss – this is only possi-
ble if they have a common goal, spend time together, and share similar
values. When BBVA were asked why they had bought the unprofitable
company Simple for US$117M, they said they had just bought 36 out-
standing specialists who know where to go (forward), how to go there;
they don’t need a plan or a set of trainings to become a team. By the way,
buying startups is the main HR tactic for Google, Facebook, and Yahoo.

• To buy knowledge and access to new industries

A great attention is being paid to fintech startups abroad not only by
the banks, but by telecoms and web giants. They have money, a strong
customer base and the desire to offer more and more online products
to their clients. Currently, the financial sector is a sweet spot for them.
They don’t buy banks, but are eagerly buying startups.

• To buy internal company changes

Traditional banks often have several thousand or even dozens of thou-
sands of employees, who mostly work well and make profit. There is no
point in firing them, but it would be so hard for HR departments and
core management to change their way of thinking and seeing the new
world. In this context, buying a startup seems like a blood transfusion to
resuscitate an aging body.

• To buy “surprise”

If you haven’t yet seen the show about the invention of a portable PC “Halt
and Catch Fire”, I strongly advise you to do so. In those days, the idea itself
seemed very risky and there wasn’t enough financing, while giant corpora-
tions laughed at it. In Season 1 episode 4, we see the product leader writing the fourth word on the board listing the target characteristics of the computer, “lighter”, “cheaper”, and “faster”, and this last word is “to sur-
prise”.

Here is the story of my mistake: when LoopPay company came to me, I
didn’t invest in it, because, while realizing that it is really unique, I consid-
ered it to be overvalued and its sales to be too low. Three months later, it
was acquired by Samsung with the following comment: “We compete with
Apple and can sell everything on a planet scale, but we don’t have a pay-
ment solution that would be better than ApplePay, so we just pay for rising
in the clients’ esteem.” So I made a conclusion: don’t look at the figures
(they’ll come), look at the people, their vision, and their product. If they are
unique, you should invest in them and hold on to them.

Two banks that staggered me the most and that have also succeeded in fin-
tech are BBVA and Goldman Sachs[^69]. These are some lessons from them:

- **Investing early on for insights, not profits:** BBVA Ventures, which was
  started in 2011, has been making relatively small investments in start-
  ups, allowing the bank to gain access to the companies’ founders and
  early insights into how their technologies are playing out. The small of-
  fice on the edge of the financial district in San Francisco serves as a kind
  of listening post for the giant Spanish bank. “Investing is the first step
  in a working relationship,” says Jay Reinemann, head of BBVA Ventures
  (now – Propel Ventures).

- **Bank executives say they are most interested in forming partnerships:**
  They are not into competition, buying, white-labelling or doing well
  by themselves with the startups by making investments of as little as
  US$500,000, rather than focusing entirely on scoring huge profits like
  a traditional venture capital fund. “We want to be backing the best en-
  trepreneurs,” says Reinemann. “The ones that will have the best success
  at disrupting the industry,” he adds. Herein lies the central paradox for
  big banks pushing into Silicon Valley. Some banks want to borrow ideas
  from the startups or even buy their technologies outright.

- **Learn from startups instead of teaching them:** Startups that are having
  the most success at disrupting the industry’s profitable business lines
  may not be easily persuaded about the merits of teaming up with an
  established bank. For one thing, the culture of big, lumbering banks is
  antithetical to nimble startups. And at the moment, startups have their
  pick of venture capital investors. “These little companies really don’t

want to be a bank,” shares Reinemann. Goldman Sachs’ aim isn’t just to invest in tech companies but also to learn from them and even emulate them. The firm and its clients – big corporations, private-wealth customers and asset managers – are struggling to navigate the new markets technology is creating. Banking and finance, in particular, expect to be hit with big upheavals. Startups such as peer-to-peer banker LendingClub and Wealthfront, a financial advisory platform, are aiming to pick off just about every part of the industry. “We try to disrupt ourselves,” says Lloyd Blankfein, CEO of Goldman Sachs.

• Big banks’ corporate culture may kill startups: If they would be placed under a corporate umbrella. If branchless bank startup Simple is swallowed up in BBVA’s bureaucracy, not only does it risk losing its loyal customers, it may also lose the engineers and programmers who want to work there precisely because it was different from a traditional bank. Those technology experts have been vital to Simple’s success. BBVA executives say the startup will preserve its independence by maintaining its own board (although BBVA will have a majority of the seats). The expectation is that Simple accounts will be transferred to BBVA Compass, from its current partner bank, Bancorp. The real test for the startup is whether customers will feel comfortable conducting complex transactions such as mortgages entirely online. Larger banks say that the majority of customers still insist on doing much of their banking in the branches. But BBVA is not convinced, as proven by its backing of Simple.

• While banks are competing with other banks, somebody else will disrupt them: “Our biggest competitors are not necessarily other banks,” says Francisco González Rodríguez, CEO of BBVA, says in an interview. “They are Amazon and Google. Those are the companies setting the expectations of our customers,” he adds.

• Learn from your own mistakes: Banks are losing trust and startups may help them bring it back. Goldman Sachs said that old-guard financial firms like itself, are in danger of losing US$4.7 trillion to new fintech startups and suggested that partnerships and acquisitions were an important way for such companies to gain a foothold. That’s something of a departure from its earlier, more broad-based tech investment strategy, which includes rounds in newly-minted tech stars including Uber, as well as Dropbox and Spotify. There’s perhaps no bank more controversial than the investment firm of Goldman Sachs, due to its role in the financial crisis of 2008. So there’s probably some small irony in its latest area of focus: fintech startups. Over the past few years, the firm has invested hundreds of millions of dollars in a far-flung assortment of payments and alternative finance companies including Square, Bluefin
Part 3: Customers, workers, and places for fintech banks

Payments, Bill Trust, Revolution Money, as well as newly public OnDeck Capital. It’s also ventured into digital money, including the bitcoin start-up Circle.

- Make disruptive innovations, instead of sustaining innovation: Internal hackathons and fake accelerators create solid PR, but they don’t give rise to new entrepreneurs and unicorns.

- If you have money, you have to invest in new ideas and blood: Goldman Sachs, arguably the most powerful bank in the world, quietly, without fanfare, is making a play to become one of the most influential investors in tech startups. According to research firm CB Insights, the Wall Street bank has participated in 132 fund-raising rounds in private technology companies since 2009, with 77 of those deals made in the past two and a half years alone. Its activities rival those of the top venture capital firms in Silicon Valley. The bank has backed Uber, Pinterest, Dropbox and 12 other so-called unicorns, that once-rare breed of startup valued at US$1 billion or more. Sachs’ reach is truly global. It’s in startups ranging from an online pet store in China to a food delivery site headquartered in Germany, to a Korean app developer.

- Mindset matters: “You better spend a lot of time there,” Blankfein says of Silicon Valley. “And we do.” What’s driving the firm into venture territory? This is where the action (and the big money) is. Blackstone Co-founder Steve Schwarzman, 68, recently confessed that if he were 30 years younger, he’d move to California. “There’s so much disruption and so much amazing value creation [in Silicon Valley],” says Schwarzman. To win its place in the current financial market, Goldman Sachs is starting to change. “We have shifted our thinking in that the role we need to play is not just a role that you can measure in the four walls of Goldman Sachs,” says Don Duet, Co-head of the firm’s technology division. “The disruption technology is going to create and already has, in our industry is going to be profound. We have to make sure we are not left behind,” he adds.

- Banks must stay banks (and let startups do their job): They are good at this. Sachs’ approach to startup finance is complex and expansive, much like the bank itself. Deals can originate with investment bankers; the securities division, which can make strategic investments; or private banking. While some groups invest client money, others use the firm’s own and still others provide traditional investment banking services. The firm’s first deal with Uber, in 2011, was an equity bet; its second in January 2015, was debt. It needs to learn from them: to understand how they work, how they think and how they plan to dismantle just about every industry that it makes money in, including banking and finance.
Part 3: Customers, workers, and places for fintech banks

• Walk more in founder’s shoes: Among founders, the bank doesn’t carry the same clout as it does on Wall Street. Entrepreneurs aren’t swayed by big checks; often they want investors who’ve walked in their shoes, who’ve taken an untested idea and built it into a successful business. That’s why Netscape entrepreneur Marc Andreessen and PayPal and LinkedIn Co-founder Reid Hoffman are among the most sought-after VCs in Silicon Valley. And even entrepreneurs-turned-VCs have to hustle. “In this world, the men and women who run the company are the ones who decide who they want as investors,” says Jerry Yang, Co-founder of Yahoo! who now backs startups. “The rest of us, as investors, have to earn those rights to be part of a (funding) round.” The firm has also established a group called Emerging Entrepreneur Coverage that’s headed by Managing Director Miyuki Matsumoto. On her personal website, she describes her job as “identifying and developing relationships with promising, early-stage entrepreneurs.”

• Open the world with your startups: Many entrepreneurs say that Sachs’ biggest draw is its access to the international capital markets. Startups today must move faster into global markets than ever before. Founders used to be able to wait to think about international expansion; today, they have to think globally from the outset, partly because locals will quickly copy the best ideas. For example, an outfit called Rocket Internet has incubated Zappos, eBay and Square clones in Europe. From Day One, “You have to think, ‘How do I get big enough so I can compete on a global scale and knock off all these competitors who pop up?’” says Alfred Lin, a Partner at Sequoia Capital and former CEO at Zappos. Sachs has a network of clients around the globe who can help unseasoned entrepreneurs find their footing in new markets. Its wealth-management clients and corporate customers are some of the most influential business leaders in the world. They can broker introductions, explain regulations and be a local booster in tough markets such as China and India. When Travis Kalanick, CEO of Uber, was getting ready to expand into new markets, he brought Goldman Sachs in as an investor, for this reason. Asian tech giants do the same (but not banks). Alibaba and its two giant Chinese Internet rivals – search engine Baidu and gaming/messaging firm Tencent – a trio known as BAT, are pouring money into all manner of firms at every stage from seed to late rounds. BAT don’t much care where the innovations on this new intertwined platform come from or, it seems, how much they have to shell out to secure them. Many of the investments are bizarre on the surface, smacking of dumb money rushing in late in the cycle and driving up valuations for everyone. Why would an e-commerce giant spend tens of millions of dollars on a startup such
as Peel that’s outside of its core business, not to mention its core country? In a word: smartphones.

**10 rules to investing “like Yuri Milner”** [70]

1. He hasn’t financed most of the entrepreneurs he spends time with. While other investors endeavor to build institutions that will last for decades, Mr. Milner runs what is essentially a one-man show [71] with a rolodex that’s decidedly global. His firm, DST Global, is staffed primarily by a small team of ex-Goldman Sachs bankers based mostly in Asia who help with due diligence and fundraising. And in an industry of consummate networkers, he has taken it to the next level, hosting lavish parties for an eclectic network across various geographies and industries.

2. Invest in attention (not in revenue) – it is the most expensive thing today (and money will come). Twitter’s $14.4 billion IPO, he says, is a testament to the power of social media. He considers the company “the largest influence mechanism in the world,” he says. Why its extraordinary market valuation? “Because exercising or trying to exercise influence is something people do very often.” [72] He worked in finance for a few years before coming across a 1999 report by Morgan Stanley analyst Mary Meeker, describing the tech boom in the U.S. and how the industry was starting to grow in Europe. “This was a revelation,” says Mr. Milner. “How can it be that a company without any revenue could be worth $50 billion?” he asked himself. “I was like, ‘I like that! Brilliant!’ ”

3. Unlike many other investors, he often doesn’t take board seats and gives his votes back to the founders. In 2009, Mr. Milner put his first $200M into Facebook, a large sum at the time for an investor outside of Silicon Valley. One reason he thinks that he was able to get involved with Facebook is that he was willing to invest during the height of the financial crisis. Pre-IPO investments in even high-flying tech companies that are not yet profitable usually conform to a specific pattern: A prestigious VC firm gets certain preferences when it invests (i.e., it gets its money out first should the company go public) and gets seats on the board (which means it gets a direct voice in the future of the company—almost always one that advocates an IPO as soon as possible). Milner offers something radically or foolishly different: an investment with no such preferences and no board seats. In effect, his money is like IPO money—no advantages for regular share-
holders—without the burden of an IPO (the time suck of a road show, the administrative costs of being public, the short-term earnings pressure of the market).

4. He might be the most controversial money guy in Silicon Valley—sought after, feared, and derided in more or less equal measure. The message seems clear: Milner may have invested in virtually every social media powerhouse, from Facebook to Twitter to Spotify. He might be the vanguard of an entirely new financial philosophy. To many, Milner’s success is not just too much, too fast, but also somehow unfair. Which might help explain—and Milner very much wants to explain himself—how it is that he has gone from investing in a macaroni factory in Moscow to upending the American technology business. He is trying to say his success story ought to be just as appealing as any in the Valley. To many, Milner’s success is not just too much and too fast in a land of too much and too fast but … but … and here people start to petulantly phumpher … somehow unfair: Here’s an outsider who has handed out money at outrageously founder-friendly terms—paying huge amounts for relatively small stakes, essentially buying exclusive access to the most desirable companies on the web! It is his outsiderness that seems most irritating and even alarming. How is it that an outsider has spotted opportunities that the Valley’s best investors missed? Does Milner’s success suggest that the rest of the world is starting to horn in on what has been, to date, as American as apple pie—the Internet future and Internet riches?

5. Effect of “crazy dumb Russian money”. What Yuri Millner did to put Facebook back into the double-digit billions? Marc Andreessen mentioned: “Yuri came through Silicon Valley in 2008 or 2009 for the first time, and he basically said, “I’m in business and I want to invest.” Top American investors were bidding at the $5, $6 and $8 billion level for Facebook and Yuri came in at $10 billion. “I was on the Facebook side of this and I had friends who were bidding on and I’d call them up to say “You guys are missing the boat, Yuri is bidding 10. You are going to lose this”. They basically said: “Crazy Russian. Dumb money. The world is coming to an end, this is insane.” What Yuri had the advantage of at the time, which I got to see, was that Yuri and his team had done an incredibly sophisticated analysis. What they’d basically done is watch the development of consumer Internet business models since 2000 outside of the U.S., so they had these spreadsheets that were literally across 40 countries – like Hungary and Israel and...
Czechoslovakia and China – and then they had all of these social Internet companies and e-commerce companies that had turned into real businesses over the course of the decade but completely ignored by U.S. investors. What Yuri always said was that U.S. companies are soft because they can rely on venture capital, whereas if you go to Hungary you can’t rely on venture capital so the companies have to make money. So he had a complete matrix of all the business models across all of these countries and then came all of the monetization levels by user and then all adjusted for GDP. He had the secret spreadsheet and you didn’t.” The dumb money has just bought itself potentially unlimited access to what is arguably the most important company to hit the Internet in a decade. One of the fastest accelerations in digital history has just begun.

6. “Relationship investments” as trust and insurance for founders. “You need to stay close to founders,” Milner explains[75]. Milner’s approach is paradoxical. He shuns board seats on the premise that founders know what they’re doing, but he’ll visit them regularly to help build a long-term relationship. Till now hardly anyone knew that he’d also got a piece of messaging-success story WhatsApp, making him one of only two investors in the world (the other is Sequoia Capital) to do so. He bought a stake from the founders for $125M within weeks of Facebook snapping up the messaging giant for $19 billion last year. Milner won’t discuss the Facebook deal, but a source close to the messaging giant says he had to get a handshake agreement from the startup’s founder Jan Koum in January 2014. DST’s money was taken as a form of insurance in case the Facebook deal fell through.

7. “In order to believe you need to stay close.” On the surface, investing in Xiaomi looked incredibly risky. Hardware manufacturers in China were two a penny and Samsung and Apple were devouring global smartphone profits. Xiaomi wanted to sell its phone exclusively online but that business model had been tried and tested by Google on its Nexus phone, which wasn’t exactly a mainstream hit. Milner put those problems aside and found himself struck by Lei’s (from XIAOMI) methodical plan for a “triathlon” of hardware, software and Internet services. “You can’t just be good at one thing but all three,” Lei had said during the meeting. “Often you have ambitious entrepreneurs and they don’t know how to achieve it,” Lindfors says. “But he was the guy who had the whole package.” Hours later the DST trio filed out of Lei’s office and got into their car, with Chew in the front seat and Milner and Lindfors in the back. As they zoomed through Beijing traffic

they talked excitedly over one another. “We were making all kinds of speculation of where he could take the business over time,” Lindfors remembers. Milner turned to the others. “I really want to invest in this company,” he said. Lei later told them he never expected DST to invest, but after a few months of due diligence Milner’s company went on to spend $500M over multiple funding rounds, including three exclusive rounds, to amass a 7% stake worth about $3.2 billion at its latest valuation. How did he get the exclusive funding? “Maybe there were not too many others who really believed in this company,” he answers cryptically, before repeating his mantra.

8. Fintech - is the next big thing. DST and their partners personally are very hungry about fintech and invested in many big names like Stripe, Funding Circle, SavingGlobal, LendUp, Xapo, LendingClub, Klarna, etc.

9. Don’t hide and afraid of your mistakes – have your own “wall of fame” with missed opportunities. The one flub he admits to is Uber. DST was presented with three opportunities to invest in the riding-sharing companies that are now valued at upwards of $40 billion, but Milner passed each time because he was concerned that founder Travis Kalanick couldn’t handle legal battles with regulators and cities around the world. “I underestimated Travis. That was a big mistake,” he says, shrugging. “I have not been sleeping well.” Also, for example, DST didn’t invest in Square.

17. Milner may be a kind of prototype of a new generation of “globally Russians”—certainly he has achieved some sort of “global being” status. Traveling alone, or often with his wife and daughters and his mother-in-law, he seldom spends a consecutive week on one continent. Quite frequently he will do every continent, save Antarctica, in a week. This is part of the discordant behavior that makes him an anomaly, if not a sore thumb, in his new Los Altos Hills neighborhood. Silicon Valley, despite being at the center of the digital world, is a hopelessly insular and actually rather hermetic place. Even its famous immigrant culture emphasizes joining the SV way. For all its talk of innovation, it resists almost anyone who is not part of its mainstream. Before Milner, it was even difficult to buy your way in—money in the Valley, the best money, the money that gets the best deals, always has a certain pedigree. Even New York money, not to mention money from God knows where, is regarded as lesser and suspect. Milner was one of six technology figures who had been chosen to brief the leaders of the G8 nations at this year’s summit in 2011 in Deauville, France. It was a remarkable example of his rising profile and the amount of
power he has come to wield. The G8 Internet colloquiums included a series of high-profile speakers from among the digital elite: from the US, Zuckerberg and Google’s Eric Schmidt; from Japan, Hiroshi Mikitani, CEO of online retailer Rakuten; from France, Maurice Levy, head of ad agency Publicis Groupe, and Stéphane Richard, CEO of France Telecom. And then Milner. Why Milner? Partly because he has so ably insinuated himself into extraordinary networks, but also because he is the only one here who has roots in an upstart economy. That gives him unique perspective. He may be among only a handful of people who operate in multiple markets at the same time, without local infrastructure. This makes him a kind of free-floating state—a connector, a go-between, the ultimate independent player.
3.6 Why should you hire an artist as your next business consultant? The modern CEO should be a “Designer-In-Chief”

“Coming from a background in Marketing & Advertising, what made you transition over into the fintech industry?” - I get this question a lot [76].

In the early 1900s, large organizations needed another type of CEO [77]: Chief Electricity Officer. Before there was an accessible and reliable power grid to plug into, organizations that needed electricity employed a CEO to make sure they had steady and cheap access to this vital commodity. Now CEOs who are able to implement design thinking approach [78] will become Chief Innovation Officers too. Those who fail to implement “useless liberal arts” will become extinct, like the Chief Electricity Officers of the past, along with their businesses.

Anna Pickard [79], the 39-year-old Slack’s editorial director, earned a theater degree [80] from Britain’s Manchester Metropolitan University before discovering that she hated the constant snubs of auditions that didn’t work out. In less than two years Slack Technologies has become one of the most glistening of tech’s ten-digit “unicorn” startups. If you’ve used Slack’s team-based messaging software, you know that one of its catchiest innovations is Slackbot, a helpful little avatar that pops up periodically to provide tips so jaunty that it seems human. Such creativity can’t be programmed. Stewart Butterfield [81], Slack’s 43-year-old cofounder and CEO, is the proud holder of an undergraduate degree in philosophy from Canada’s University of Victoria and a master’s degree from Cambridge in philosophy and the history of science. “Studying philosophy taught me two things,” says Butterfield, sitting in his office in San Francisco’s South of Market district, a neighborhood almost entirely dedicated to the cult of coding. “I learned how to write really clearly. I learned how to follow an argument all the way down, which is invaluable in running meetings. And when I studied the history of science, I learned about the ways that everyone believes something is true--like the old notion of some kind of ether in the air propagating gravitational forces--until they realized that it wasn’t true.” The more that audacious coders dream of changing the world, the more such companies like Facebook and Uber need to fill their companies with social alchemists who can connect with customers--and make progressssemplac.
Part 3: Customers, workers, and places for fintech banks

John Maeda is a bellwether for the design industry[82]. His tenure at places like the Massachusetts Institute of Technology, the Rhode Island School of Design, and at the venture capital firm Kleiner Perkins Caufield & Byers illustrates his prescient understanding of where design is going, and his innate ability to get there first. He wrote[83]: “People are often surprised when they hear that I earned my master of business administration degree, or MBA, as a side-hobby while I was a tenured professor at MIT.” “Fortune 500 companies are beginning to use human-centered design to think about problem solving rather than traditional hypothesis testing, which is why we are seeing more than 10% of Fortune 100 companies place design as an executive priority. Creativity is becoming a strategic lever to create a competitive advantage in the corporate world. That explains why management consulting and strategy services firms are acquiring design agencies at a rapid rate. 42 design firms have been acquired since 2004, half of those in the last year alone.”

“With all top ten U.S. business schools having student-led design organizations, perhaps in the future the largest number of designers in new industries will come from business schools.” In his wide-lens look at the industry, Maeda doubled down on his original thesis[84]: That big businesses want, need, and will pay for design. Maeda closes on a slide highlighting the “Three Kinds of Design” currently at play. There’s design (“classical design”), business (“design thinking”), and technology (“computational design”). But “there’s a gap between what tech needs and what the programs are creating,” Maeda says. “Business schools can’t move as fast, so students are making design clubs in their schools.” Last year’s report celebrated the proliferation of student-led design clubs at MBA programs like Harvard, Wharton, and Stanford; it seemed like a harbinger of more sophisticated design education.

When John Maeda[85] landed in Silicon Valley in 2013 to take on a new role as a partner at Kleiner Perkins Caufield and Byers, he didn’t have a car—or even a place to stay[86]. But instead of booking a hotel, he decided to navigate Menlo Park via the sharing economy. “People said, ‘Oh, you must be learning so much in Silicon Valley from all the CEOs,’” he says. “And I’m like, ‘No, I’m learning through Airbnb hosts and Uber drivers.’” On blending the arts and technology he mentioned[87]: “I can see now that the best startups today can no longer compete with technology. They need the creative part. They need the design part. Bil-
lions of dollars are being invested in companies that are led by designers, led by artists, alongside technologists. It’s a great time for the arts.” As Drew Gilpin Faust, President of Harvard University, told[88]: “Let me invoke one of Silicon Valley’s heroes, Steve Jobs, who would show a slide of two “street signs” at an intersection: technology and liberal arts. This was someone who turned to design as the critical differentiator for a technical product. The liberal arts were very much a part of what enabled him to be as innovative and as inventive as he was.” Elena Evgrafova, chief-in-editor of Harvard Business Review Russia, wrote[89]: “Reading of smart books and discussing them imparts a special quality to the mind. I would call it an ability to see a picture of the world in all its complexity. A talent to identify internal laws and drivers distinguishes a smart person from a fool. And, it seems, intelligence depends not so much on innate speed of chemical interactions in brain, but on habit to think outside the box, to consider different approaches, to come to conclusions without reliance upon authority’s opinion.” “Reading of thick, complex books like these of Faulkner helps one to release his brain from pressure of conventional schemes and concepts.”

In 2005, Dax Dasilva founded fintech-startup Lightspeed, a provider of point-of-sale software. Over the next six years, it became one of Canada’s fastest-growing companies. In 2011, Dasilva bought what he calls an “amazing warehouse space”[90] in a hip part of Montreal called Mile-Ex. Previously owned and lived in by a film producer, the space had an outdoor pool theater and a “great vibe” overall. By fall 2014, Dasilva began to commit considerable time and his own funds into transforming the Mile-Ex space into a cultural nonprofit called Never Apart. “We’re in the spirit of Norwood, in that people come to exchange ideas, but we’re less of a social club than Norwood,” says Dasilva. Ultimately, Never Apart shares more DNA with alternative art galleries and music production studios, he says. “The liberal arts connect with a person’s authentic self,” says[91] Mary Raymond, associate dean of students and director of Career Development at Pomona College. In that view, a liberal arts education is as valuable as it’s ever been, for much the same reasons its advocates have put forward for decades. For students, that means figuring out how their passions connect with other, real-world opportunities. “I wouldn’t say go study classics and religion and read all summer,” Raymond says[92]. “Take a coding class. Take

88 https://www.fastcompany.com/3031331/drew-gilpin-faust
89 http://hbr-russia.ru/karera/lichnye-kachestva-i-navyki/a14213/
92 http://fintechranking.com/2016/05/17/finance-is-sexy-10-female-leaders-in-fintech/
something that challenges the other side of your mind." The next generation of workers will need to keep exploring, adapting, and broadening their experiences—something a liberal arts degree has always offered great training in.

Sean Monahan explained why organizations are turning to artists when in a brand-identity existential crisis: "Culture is changing faster than ever. If you want to understand what that means, you need more than someone … who can lead you through the cultural shifts\(^{[93]}\) in real time and who are actually engaged in the production of culture." Greg Fong broke down the challenge of using standard marketing research: "Everyone who is using the same market-driven data are coming to the same conclusions, and they realize there isn’t a competitive advantage to using the same information as everyone else, so they turn to outsiders who are thinking outside of the profit margin to show them their blind spots."

A century ago, the CEO was a fearsome whip-cracker. Fifty years ago, he was motivator dangling corporate incentives. And now, according to the 2015 Wolff Olins Leadership Report\(^{[94]}\), the CEO has evolved into something new: The designer-in-chief of corporate culture, a mentoring figurehead who gets into the trenches with his employees and inspires them to create the next great innovation. Now that the organization applies design thinking, ING also\(^{[95]}\) will be able to actually meet the customer’s demands now and in the future. “This is because design thinking forces you to constantly check if a change you are considering really fulfills the customer’s needs”, says Hill. “For instance, we observe trends like blockchain, artificial intelligence and robotics. How do these technological developments influence our business? To answer this question, we have developed a tool kit which we use for our own organization, but also to help our clients. After all, many of those developments influence other markets and industries as well. It feels amazing to help other companies with a tool which we initially created for ourselves.”

Billionaire investor Mark Cuban offered a perhaps bleak prediction\(^{[96]}\) on the future of jobs in an interview: “No finance. That’s the easiest thing – you just take the data have it spit out whatever you need. I personally think there’s going to be a greater demand in 10 years for liberal arts majors than there were for programming majors and maybe even engineering, because when the data is all being spit out for you, options are being spit

\(^{[94]}\) http://fastcompany.com/3042906/the-ceo-of-the-future-is-a-designer-in-chief
\(^{[95]}\) http://designabetterbusiness.com/2017/01/30/design-thinking-helps-ing-bank-to-put-a-strategic-plan-on-one-page/
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out for you, you need a different perspective in order to have a different view of the data. And so having someone who is more of a freer thinker.”

When I started thinking about fintech, reading articles, meeting with people - the industry was very small. In fact, even the word “fintech” didn’t yet exist. VCs didn’t want to invest into fintech - because it was “too risky” (to be focused only on fintech), “without huge opportunities in the future” (99.9% of the guys I met didn’t believe that fintech would have grown into such a big industry), “too difficult to enter” (entry price to the industry is very high, and your initial knowledge has to be deeper than just the basics of e-commerce, messengers, social networks, etc).

I started to educate myself about several terms such as “branch of the future”, “multichannel distribution” and “new internet services for financial industry” as a hobby, in my spare time. And I started to share my ideas verbally, via social media and by writing articles. I remember sometime later when Sergei Leontiev [our first LP and my mentor] asked me, “Why aren’t you investing in fintech”? I answered: “Because I am not an investment type of person and I have never invested in fintech before”. And he answered: “Ok, nobody has really invested in fintech before. But you have the “sense of fintech”, and insights about demand and trends. I find them more useful than the experience of other investment people, who don’t have the passion.” This listener soon became my strategic partner. He first handed me $10M to ‘try’, to test my capabilities. Then, I received $30M more. And we made many great deals after.

Right now, hiring marketing or design professionals are very common: McKinsey just bought design agency, Kleiner Perkins hired John Maeda. When a startup is small and just starting out, the company focuses more on the design and marketing of their company, to attract the attention of their customers, rather than understanding financial models. Design emphasizes that marketing attracts attention - not financial models. Steve Jobs once said: “I am not a businessman, I am an artist in a suit of businessman”. I am not saying that the financial models are not important - due diligence, competitive analysis, structuring of deals: all of these are extremely important too. Life.SREDA’s partner, Igor Pesin, covers all these questions, he is a superstar in this area. We are like “yin and yang”. I am all about the dream, he is all about realizing the dream.
3.7 Sweden and India as two examples of real fintech hubs

When we decided to relocate the Life.SREDA fund from Russia, a number of countries – Great Britain, Estonia, Latvia, Hong Kong, Singapore – invited us to move there and do business with them. Here are some reasons, according to my expertise, why Singapore is one of the best places in the world for financial innovation⁹⁷: Four years ago, I saw a similar surge over fintech in the United States – a large number of projects, a lot of discussions, and the customers who are ready for innovation. Many fintech companies emerged in Europe and other parts of the world, but the real big play didn’t happen (excluding the UK and Germany). There is a record number of projects in Asia at the moment and the market is boiling.

The US fintech market is all about products and technologies, while the Asian market is about execution. The specifics of each of the Asian markets is so high that people and their knowledge of local peculiarities become the most important.

The US and Europe created fintech for freaks and geeks, while there is a huge number of unbanked people in Asia. Bill Gates has recently written that fintech future belongs to the unbanked countries. It’s great to provide people with better instead of good. But the real magic is to provide an opportunity to jump from the cash-past to the fintech-future: without ATMs, credit cards, and often without banks as we know them. The way it has happened in Africa with mPesa.

Another sector – cryptocurrencies. I do not like “bubbles” and speculation about bitcoin, but the ideas of cryptocurrency and blockchain technology are very sound. In Asia, there is a huge number of countries with different currencies, often with a weak banking system and a large number of remittances. Singapore is the financial and technological center and I believe that a unitary Asian cryptocurrency (like Esperanto) will be developed here. This cryptocurrency will not require paper, printing, and storage, it will be easy to use, convert, and transfer to other countries. Historically Singapore takes a neutral political stance in the region and at the same time has tremendous economic ties with each country. Therefore, I assume it’s the best choice for “arbitrator” to create and manage a unitary Asian cryptocurrency.

Another advantage of Singapore is that the city originally positioned itself as the “lab”: here you can create something outstanding, test the idea with local partners and clients (as they are the most open-minded), and quickly

⁹⁷ https://www.techinasia.com/talk/lifesreda-emigrussia-inspirasia
expand to the surrounding markets - the whole city infrastructure is designed so that you are surrounded by the best teams and technologies for prototyping and then can quickly expand to new countries.

Other benefits of bringing business to Singapore: your intellectual property rights and private property are protected as much as possible with British law and a reliable judicial system. The transparency of financial relations is guaranteed by the local financial regulator, the tax rates are some of the lowest in the world. You can register your company in a few minutes.

Such government agencies like EDB, Infocomm, Spring, NRF do a lot to attract business to Singapore – grants, tax incentives, co-investments, conferences, and much more. If you have the support of one of these government agencies, your rental charges are very low: state-owned corporation JTC has built a creative “city within a city” for venture capital firms and startups - LaunchPad. It’s a great place with interesting architecture, lots of young and talented people, and great atmosphere just across the road from INSEAD business school.

Why is it necessary to live in Asia to invest in Asia? Before we lived in Moscow and had no problems investing in New York, Portland, London, Munich, and any other part of the world. When we decided to make remote investments in Asia, we failed. There is very little public information about companies and their performance results. No one responds to your emails and no one does Skype calls, if someone didn’t introduce you. Your company brand and personal experience play a much smaller role than personal relationships. As a result, we decided to move here to be closer to local talented guys, and to better feel the mood and needs of local customers.

There are no traffic jams in the city. Once I had 11 meetings in different locations per day - in Moscow I would spend the whole day just bypassing 11 different locations. People are not aggressive; they are smiling and they are helpful. The crime rate is very low: you can leave a purse or bag on a table and come back half an hour later to find it there. No beggars. In practice, zero unemployment rate. Highly environmentally friendly. Everybody speaks English. One of the highest levels of education in the world. Perfect weather, with 28-30 degrees all year round. A huge amount of entertainment, parks, galleries. If you want to work and not waste time and nerves on unnecessary fuss, then in Singapore you will have the most comfortable environment to focus on your idea and company.

But... As I wrote before, in 2016 China became a new leader in fintech worldwide with 39% of global volume. Vice versa, investments into fintech in South-East Asia region dropped by 40% (from $245M to $143M), meaning that SEA accounts to less than 0.5% of global market volume, while the
demand from the market shows that it should be up to 10–20% of worldwide size in the nearest future. I bet for a horizon of 2–3 years. It means that fintech industry can be 30–50 times bigger than it is now in South-East Asia.

Despite the decline in funding amount in South-East Asia, the number of deals remained the same (58 deals vs 57 a year ago), meaning that cheque size decreased, growth barriers, lack of infrastructure (availability of BaaS and APIs), and investors are being careful with targets. Singapore remains an absolute fintech leader in South-East Asia region with $81.5M invested in 2016 and 60% of market share (both by number of deals and money invested). Singapore is well differentiated, but most of the companies are young and growing, so no any dominance in any particulate vertical yet. Philippines and Indonesia are following the trend, together hold 1/5 of all companies funded.

We eye on 120 fintech companies in Singapore, while if taking into accounts all accelerated young pre-seed stage startups (from incubators, banks’ innovative labs, etc.), it can be up to 200–300 and even more soon. The most developing fintech verticals in Singapore are wealth management and online-trading, followed by payments, remittances and (suddenly!) blockchain, which has got a lot of funding in 2016 and became one of the major vertical here. In comparison with other markets, insurtech, lending startups and neobanks in Singapore are not so well funded, however it will be changed soon, due to many strong players in this area.

To cope with the rapid growth rate of its fintech industry, Chinese state-owned companies (Hong Kong-listed Credit China FinTech Holdings, Shanghai Xinhua Distribution Group, China Huarong International and 8 other major organizations in the mainland) launched a $1.5B “Asia FinTech Merger and Acquisition Fund of Funds” [98] to support emerging fintech startups and technologies. To provide leverage and support local VCs, which focusing on fintech-investments, would be a very useful step from Singaporean (and other SEA-based) state-owned strategic investors too. It could re-boost dropping market.

On the contrary, we can take as an example two countries that do not hold so many fintech conferences, awards, hackathons, and accelerators, but are much more successful in fintech achievements - these are India and Sweden[99].

Let’s start with opportunities for independent existence of fintech companies. Last year, India following the UK example launched new licensees for

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digital banks[100], which allow new players to exist independently of traditional banks. Hong Kong and Singapore have chosen a way of creating “sandboxes”. But “you can’t put a wild thing in a sandbox” – this is not the solution. The play in “friendship with fintechs” clearly shows who “advocates for banks” and who really wants to change something. As Ricky Knox, founder and CEO of UK-based neobank Tandem, said me: “If you want to create sandboxes – maybe it will be better to work in a kindergarten?”

The second ground for comparison is the presence of Baas-platforms and open APIs. Integration with a bank is a nightmare in most Asian countries (in contrast to the US and the UK). Meanwhile, the Indian government has rapidly implemented a unique project “India.Stack”, which allows[101] start-ups to launch faster, cheaper and more efficiently than before (the platform’s single drawback is that it doesn’t let you scale to other markets).

Next is the availability of capital. Singapore central bank has allocated SGD225M to support fintech – but the money has gone to traditional banks never reaching venture firms and startups. At the same time, Indian Prime Minister Narendra Modi launched[102] a number of initiatives to support the country’s start-ups, including USD1,5B fund and a string of tax breaks for both the companies and VCs too.

According to “Doing Business 2017” ranking[103], New Zealand is the easiest country for business, #2 - Singapore (was #1 for previous 10 years), #3 - Denmark, #4 - Hong Kong, #5 - South Korea. Well, it’s easy to open a company in Singapore, but what about banking accounts? The same holds true to visas and work permits. What do I have to do with the obligation to hire local people, if I’ve just founded a startup of 3-4 people and do not have the budget to hire extra employees? USA[104], Canada, Malaysia and other countries introduce special startup-visas and many other concessions to attract technopreneurs. In order to develop an ecosystem like Silicon Valley, where most tech vendors hail from outside the US[105], Singapore needs to make it easier[106] for entrepreneurs from other parts of the world to set up a startup and work in the country.

In the fourth place is the influence of fintech on shaping a cashless society. One can talk about innovation, give hugs, kisses and awards: but look how

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101 https://yourstory.com/2016/07/india-stack/
102 http://in.reuters.com/article/india-tech-idINKCN0UU0PZ
effectively Sweden is struggling with cash\textsuperscript{[107]}, and then try to pay by card or smartphone for street food or a taxi\textsuperscript{[108]} in Hong Kong or Singapore\textsuperscript{[109]}. The Swedish Government has started\textsuperscript{[110]} to gradually prohibit cash, thus, stimulating the development of fintech startups in turn.

There is a lot of hype around fintech, but also a lot of rubbish\textsuperscript{[111]}. In this situation, countries such as Malaysia and Austria\textsuperscript{[112]} can successfully take into account the mistakes of some countries and achievements of the others and quickly become the new real fintech hubs, instead of PR-hubs.

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107 http://www.newyorker.com/magazine/2016/10/10/imagining-a-cashless-world
109 https://www.facebook.com/lim.jialiang/posts/10155850593381844
110 https://www.fastcoexist.com/3052540/will-sweden-be-the-first-country-to-get-rid-of-cash
111 https://e27.co/bullshit-people-dont-go-deep-fintech-still-make-loud-titles-big-numbers-around-life-
sredas-vladislav-solodkiy-20160823/
112 http://www.forbes.com/sites/federicoguerrini/2016/07/08/austria-wants-to-attract-startups-with-a-
204-million-program/
3.8 China shows the way

Asia’s share of global fintech investment is 47% in 2016! Sounds impressive? What is even more impressive is that more than 80% of invested capital went towards firms in China\(^{113}\), meaning that China has finally become the dominant power on the global fintech landscape, surpassing the US and all others, which was never the case before 2016. Only two years ago, Asian fintech was twice smaller than the US and 2016 became the first year when the US lost its dominant global leadership in the fintech.

Another interesting observation is that we see a lot of megadeals from China, while those fintech startups are quite young (2–4 years old), meaning that large investors understand the huge potential of the fintech industry, and invest not into companies, but into the market, in other words, rely not on company performance, but on its future potential (is it the right way or not—you decide, time will tell).

Chinese fintech giants occupy the Fintech Hill: AliPay, Lufax, ZhongAn and JD. And these companies are notable not only due to their huge customer bases, operational records and funding attracted. They create a unique customer journey by expanding their product line and significantly increasing the value proposition for the end-users.

Why it happened and how China grew so fast? Local large players—internet and IT giants, traditional banks and insurance companies, funds and financial holdings—many of them realized in time an enormous potential of the fintech market in China and from the beginning the play really big, providing huge massive investments to several companies on the market: AliPay, JD, Lufax and others.

Advanced technology, backward banks and soaring wealth make China a leader in fintech. Jack Ma has built up not one but two tech giants. Alongside his US$250 billion Alibaba empire there’s Ant Financial, maker of China’s top mobile wallet app. Everyone involved in the world of fintech ought to be sitting up and taking notice of Ant Financial Services Group’s purchase of global remittance giant MoneyGram. Alibaba founder Jack Ma’s payments spinoff, Ant Financial Holding, owns the glue that holds the whole Alibaba ecosystem together\(^{114}\): Alipay. With its proposed US$880M purchase of MoneyGram, one of the world’s savviest fintech companies is picking up in one fell swoop MoneyGram’s 350,000 retail outlets in 200 countries and territories.

In the years following the Hangzhou powerhouse’s record-breaking $25 billion raise, that cash has instead opened the door for Alipay to follow in

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\(^{113}\) http://telegra.ph/In-fintech-China-shows-the-way-AliPay-mobilizes-for-world-wide-expansion-03-02
\(^{114}\) http://blog.mondato.com/alipay-moneygram/
the footsteps of Chinese travelers around the world, slowly but steadily increasing the size of its global footprint. In addition to Paytm, other investments and acquisitions have included Ascend Money in Thailand, KFC (Kentucky Fried Chicken) in China, and last year optical-biometric outfit EyeVerify, based in Kansas City Missouri. And just to prove that the IPO cash is burning a hole in his pocket, just this week Ant announced it was buying a “substantial minority” stake in Mynt, a mobile payments company in the Philippines owned by the grand-daddy of mobile money, Globe Telecom.

From those moves into India, Thailand, the Philippines, the US, and – earlier this week – South Korea, we now have a clearer snapshot[115] of Jack Ma’s playbook:

1. Go after people not served by banks. There are a lot of them. Only 12 percent of MoneyGram’s revenue from transfers derives from US consumers sending cash within the country - 38 percent of it is outbound transfers, while the remaining half is all outside the US. As with all major money wiring services, the recipients don’t need to have a bank account. In this way, Ant Financial is after the so-called unbanked population – people with little or nothing in the way of financial services, often not even debit or credit cards, from the traditional banking sector. Ant’s four investments for expansion across Asia further prove that. India has 233 million unbanked people, while there are a further 370 million across Southeast Asia.

2. Focus on mobile. Seek out people that are mobile-first. Ant’s new Asian territories are also emerging markets where there’s rapid adoption of smartphones and internet usage. Being relatively late to the web, people are skipping past PCs and laptops and going straight for mobiles. In Korea, Thailand, and the Philippines, Ant Financial chose working partners that are focused on mobile apps and services.

3. Get more data. Big data. Lots of data. With 1 billion transactions per day, Alipay has no shortage of data on its customers’ financial lives. And as Ant expands and gathers more data, it gleans new information that helps it optimize its financial products. Online loans give a clear example of this. In countries with no widespread credit scoring system, companies need to turn to unconventional data to weigh up an individual’s or small business’ riskiness – with social media activity, buying habits, and other online behavior often the preferred way to do that. Ant might soon have the power to create its own credit scoring system for India and much of Southeast Asia. Indeed, its Alipay app has already done so in China, with a credit scoring service that pulls in data from Ant Financial and Alibaba

services, among other institutional sources. That score affects loan applications within the app.

Jack Ma’s playbook will be seen in future investments and acquisitions by Ant. And there will be many – the company has vowed to reach two billion customers globally by 2025. During expansion, the firm will remain flexible, picking services according to what each nation needs. “We are leading first with payments and related services but we may very well offer other products and services market by market,” said Ant’s senior vice president Douglas Feagin late last year after branching into Thailand. Recently the Chinese company announced that they are investing \(^{116}\) US$200M into South Korea’s Kakao Pay, a soon-to-launch subsidiary of messaging app KakaoTalk that will allow people to make cashless payments through their phones both for purchases on the web and in stores. KakaoTalk, first launched in 2010, is a chat app that’s pretty much ubiquitous in South Korea – the company claims 97 percent of smartphone owners in Korea are active users of the social network. It’s backed up by an array of companion apps, like Kakao Music, Kakao TV, and Kakao Taxi. The upcoming Kakao Pay will be the latest addition. “South Korea is an important market for Ant Financial in its global expansion, and we see many opportunities in the market for innovative services and growth in mobile payments,” said Douglas Feagin, president of Ant Financial International.

Just over three months after Ant Financial first made a move into Southeast Asia with an investment in Thailand, the Chinese web giant has taken a stake \(^{117}\) in a fintech company in the Philippines. The deal, for an undisclosed amount, sees Ant Financial, maker of China’s biggest mobile wallet app, take a “substantial minority interest” in Globe Telecom’s Mynt, the companies jointly announced. Mynt, with three million registered users in the nation, runs Gcash, an online service which - not dissimilar to Alipay - allows people to add phone credit, pay bills, send money, make donations, shop online, and purchase goods without the need for cash. It also operates Fuse Lending, which offers personal and business loans. This is the first ever investment in the Philippines for Ant Financial, a spin-off from Jack Ma’s Alibaba empire. Ant Financial wants to work with Mynt “to provide simple, secure, low-cost, and accessible digital financial services to unserved and underserved individuals and small and micro enterprises in the Philippines,” said Ant CEO Eric Jing in a statement.

Due to comparative maturity of Chinese fintech VC market (also followed by India), 25% of all deals in Asia are at series B, C and above ($15M+) which is quite a high share and shows that the market is growing up.
Part 3: Customers, workers, and places for fintech banks

biggest cheques (series B, C and above; $15M+) mostly went to Indian and Chinese companies (where lending, payments and insurance represent 80% of all companies). The second highest cheques (series A, series B; $3–15M) mostly went to Indian startups working on lending and big data. Early-stage deals (pre-seed, seed, pre-A, series A; $0.1–3M) mostly went to India and Singapore, however, very mixed and saturated from everywhere. Wealth management and payments startups dominate at an early stage, but holding only 35% of all investments.

I believe that China has succeeded so much in fintech for a number of reasons:

• The Chinese have balls: they prefer actions to empty talks about fintech;
• Actions of all market players (the state, large companies, startups, venture firms) are very synchronized: each player supports the other at every growth stage;
• The state very quickly supports the new industry: both regulatory (fintech is clearly separated from traditional banks and is given full freedom in the implementation of new ideas and technologies), and with funding (direct and as a leverage for small and large VCs) - and it’s a big game for them: they have never intended “to make a try” (spending millions), instead, from the very beginning they set themselves the goal of becoming leaders (spending billions);
• Due to the high level of the unbanked population, fintechs don’t fight with each other and traditional banks, but immediately become mass solutions for hundreds of millions of people who used cash yesterday.

I assume that, in addition to well-known achievements in the field of e-wallets and online lending, one of the biggest breakthroughs has occurred in the sphere of big data and online-scoring.

When NETFLIX released[118] six new episodes of the hit show Black Mirror - in “Nosedive” Lacie Pound (Bryce Dallas Howard) lives in a world where anyone can rate your popularity out of five stars from both friends and strangers due to technology inside phones and standard smart lenses that display everyone’s name and current rating. Obsessed with being received well, she currently has an approval rating around 4.2. She lives with her brother Ryan (James Norton), who has a lower approval rating than her because he doesn’t worry as much about it, and she is eager to move out. She learns that in order to be able to afford to live in an exclusive estate, she must have a rating of 4.5 or above, and is advised that the best way to improve her own rating is to socialize with highly-ranked people because

their ratings carry more weight. Her old friend Naomi (Alice Eve) contacts her and asks her to be her maid of honor, which Lacie delightedly accepts. Naomi, who has a rating of 4.8, has many upper-class friends and lives on an exclusive and idyllic island. Lacie believes if she nails a perfect maid of honor speech, she will be flooded with enough 5-star ratings to pull her approval up to the 4.5 she needs.

And now imagine the world where an authoritarian government monitors everything you do, amasses huge amounts of data on almost every interaction you make, and awards you a single score that measures how “trustworthy” you are. In this world, anything from defaulting on a loan to criticizing the ruling party, from running a red light to failing to care for your parents properly, could cause you to lose points. And in this world, your score becomes the ultimate truth of who you are - determining whether you can borrow money, get your children into the best schools or travel abroad; whether you get a room in a fancy hotel, a seat in a top restaurant - or even just get a date. As Independent wrote\(^{[119]}\), it could be China by 2020.

“China is moving towards a totalitarian society, where the government controls and affects individuals’ private lives,” said Beijing-based novelist and social commentator Murong Xuecun. Yet in Communist China, the plans inevitably take on an authoritarian aspect: this is not just about regulating the economy, but also about creating a new socialist utopia under the Communist Party’s benevolent guidance.

Citizens were classified into four levels: those given an “A” grade qualified for government support when starting a business and preferential treatment when applying to join the party, government or army; or applying for a promotion. People with “D” grades were excluded from official support or employment. The project provoked comparisons with the “good citizen cards” introduced by Japan’s occupying army in China in the 1930s. On social media, residents protested that this was “society turned upside down,” and it was citizens who should be grading government officials “and not the other way around”. Or with the yellow badge (or yellow patch), also referred to as a Jewish badge, was a cloth patch that Jews were ordered to sew on their outer garments to mark them as Jews in public at certain times in certain countries, serving as a badge of shame.

Who will be acquired (by Chinese?) in fintech within the next 2 years and for what reasons? Right now, Chinese e-wallets (like AliPay and WeChat Pay) are expanding mostly through Chinese tourists going abroad - as they travel and spend more year by year, and local sellers (and banks) are

\(^{119}\) http://www.independent.co.uk/news/world/asia/china-surveillance-big-data-score-censorship-a7375221.html
Part 3: Customers, workers, and places for fintech banks

gradually opening for Chinese payment systems and e-wallets. There is no value for non-Chinese clients so far in using AliPay and WeChat Pay. Thus, there is an opportunity for foreign-born mobile banks (with better local market sense and adaptation to it) to be acquired by Chinese giants in the mid-term perspective. The only crucial point of competition among other players (like ApplePay, Android Pay, Google Wallet, Samsung Pay, etc) is their geographical coverage (and a number of connections with local banks). Sooner or later the question will arise: what value do these wallets bring to their users? And if they are not able to develop new functions in a manner similar to that of PayPal, they will only be able to evolve by purchasing mobile banks (which have worse figures, but better solutions), remittance services, mPOS-acquiring startups, etc. Also, new players appear on the field – smartphone makers like Xiaomi and Huawei. As the client base of every player will dwindle, the issue of differentiation from competitors will soon become the most important one (and this event will mark the beginning of a long M&A period for startups, which test their products on local markets).

Neobanks complement many other fintech verticals, creating many opportunities for M&A deals and partnerships with a high level of synergy. E-wallets have either a weak functionality (Apple Pay, Samsung Pay and Android Pay) and low level of customer retention or poor scalability (AliPay, Paytm). Asian messengers, such as WeChat, KakaoTalk, and Line, are much better monetized than their American counterparts are, due to their high diversification of the product range: an application enables you to order a taxi, shop online, pay bills, play games, make payments and transfer money. WeChat has 846M users, 300M of which use WeChat Pay. In the American and European countries, startups like TransferWise, Azimo, CurrencyCloud and WorldRemit are more active in remittances via messengers than messengers themselves are. Most likely, they will be finally acquired, as it was predicted by the market two years back.

Chinese p2p\p2b\online- lending is booming, but as described above, almost all startups in this field work within the borders of one country, while the necessity to unite lenders and borrowers from different countries is becoming more and more audible. The developed markets (Japan, Korea, Singapore, Hong Kong) are well endowed with money and have low interest rates. The developing economies like India, Brazil and Indonesia are in need of capital (preferably at lower interest rates, which are still high enough for investors from the developed markets). In order to make the movement of capital possible, platforms need to work their way to international expansion and have a sufficient level of trust (brand awareness, sufficiency of the present audience and experience in risk management).
Most probably, in the near future we will see the services, which will give people an opportunity to lend and borrow money across borders, leveraging advantages of the best-in-class services in each country.

It should be noted that if you look at the overall pattern of investor behavior in Asia (excluding China), the VCs very rarely lead investment rounds preferring to co-invest with other players. In the context of a conservative mentality, it is difficult to imagine that they are capable of taking an increased risk of mergers and acquisitions. While the Chinese have already demonstrated that they are able to aggressively invest both at home and abroad (one-third of deals in Silicon Valley[^120] are performed with the participation of money from China), and now they are even launching special funds for mergers and acquisitions worth $1B[^121] and $1.5B[^122]. China benefits from this not only in terms of investments, but also in the operational sphere, as most of its fintech unicorns are extremely successful at home, but are absolutely unable to scale to other markets and acquisition of their likes will help them to accelerate their expansion. Taking into account that the largest number of new fintech unicorns comes from China and the country itself is the leading industry investor, if you miss the moment for mergers and acquisitions, you can possibly forget about fintech without a constant prefix “Chinese”.

Chinese fintechs are very strong in terms of execution and distribution (but only inside China, to be honest), and not so advanced in product and technology innovations. Sometimes striving to be “trendier”, they end up being “too innovative”: they peek in bathrooms in order to assess credit risks; they settle payment obligations to investors with bottles of spirits; they accept nude female photos as collateral, as well as publicly flog for poor performance.

The New York Times wrote: “one upstart lender, China Rapid Finance, supplements data analysis with on-the-ground spade work. The company’s investigators, in more than 90 cities, check for the number of toothbrushes or towels to determine how many people are living in a house. They look for dirty dishes in the kitchen. They take photos of a potential borrower at work to confirm employment status.” Lenders have to be creative (and look after their bathrooms), as cash reigns, fraud is rife and even the most basic details can be difficult to verify. Online lending in China still has a Wild West aspect - for both the lender and the borrower.

The other peer-to-peer lending website Chinatou.com experiencing a liquidity crunch, which said it would settle all payment obligations to inves-

tors with bottles of an expensive Chinese liquor called Baijiu. As of May 15, Chinatou.com owed 230 million yuan to 1,850 investors, according to the data from their website. 230 million yuan, or about US$35M, will buy an awful lot of hooch.

The following “innovation” was introduced in the southern province of Guangdong in China, where female college students were told to hand over nude photos of themselves holding their ID cards, with lenders threatening to make them public if they failed to repay their microloans. While these loans were brokered on Jiedaibao (raised $380M at $7.8B valuation), the P2P online lending platform denied direct involvement as the two parties subsequently agreed on terms over another channel. Blackmailing with nude photos joins a long list of threats including property destruction and bodily injury committed by loan sharks attempting to collect unpaid loans.

Chinese banks try to compete with fintechs, but not in terms of technology innovations. A video has surfaced online showing staff at a Chinese bank being publicly spanked for poor performance during a training session, sparking outrage. The video, first posted by the People’s Daily, shows a trainer asking eight employees why they did not “exceed themselves” at training. He then spanks them with what looks like a stick. Reports say he later also cut and shaved their hair. Two executives at the bank have been suspended. The incident took place at a training session for more than 200 employees at Changzhi Zhangze Rural Commercial Bank in northern China. The above mentioned is not «as good as» the recent news about another company in China, which allegedly makes their female workers kiss their boss on the lips every day before they start work.

And finally let’s talk about cryptocurrencies as the most “high-profile” segment in blockchain and fintech, which is at the same time the least interesting one for the real innovations (and only shareholders benefit from it). There are more than 150 cryptocurrencies in the world, of which there are about 30 “famous” ones, with 10 of those accounting for the lion’s share of transactions. Most of the mining capacity is situated in China, with 60% of mining controlled by four Chinese pools and Russian-American BitFury being the largest miner outside of China. There are about 50 active exchanges with another 50 recently leaving the market. Nine exchanges are the major ones and the three largest are in China. The most traded currency pair is not BTC/USD, but BTC/RMB (Chinese yuan). China demonstrates a fabulous ability to blow and burst bubbles - take, at the very least, the example of People’s Bank of China, which has started to mop up the online lending market, polluted by numerous fraudulent and (near)bankrupt firms. A speculative topic calls for support by speculative tools: high-fre-
quency trading and trading with leverage are the most actively developing segments, together with derivatives being issued (and second derivatives), and more and more index funds appearing every day. It all looks like Ponzi scheme to an outside observer, the only question is - who is going to win and who is going to pay for it?

Big companies in the rest of the world worry that it is more than that: an unfair advantage in China’s home court, and perhaps elsewhere. A report by a European business group said the “Made in China 2025″ program, which calls for enormous Chinese government assistance to 10 industries, would force out competitors from abroad and lead to government-subsidized global players that would compete unfairly. Indeed, the Chinese government’s plan says Chinese industries that benefit should own as much as 80 percent of their home market in just eight years. The Chinese government has long worried that the country’s economy is still too concentrated. The plan’s mechanism is simple: It would provide large, low-interest loans from state-owned investment funds and development banks; assistance in buying foreign competitors; and extensive research subsidies, all with the goal of making China largely self-sufficient in the targeted industries. The United States Chamber of Commerce in Washington plans to issue a similar report. “Chinese high-tech investments need to be interpreted as building blocks of an overarching political program. It aims to systematically acquire cutting-edge technology and generate large-scale technology transfer. In the long run, China wants to obtain control over the most profitable segments of the global supply chains and production networks,” according to a report on “Made in China 2025” released in December by the Mercator Institute for China Studies, a German think tank.
Part 4: The Arrival

The Arrival

PART 4

The First Fintech Bank for SMEs

ARIVAL

The First Fintech Bank for SMEs

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ARIVAL

REVENUE BY CATEGORIES

3 mounth: 1.23 ml

LAST TRANSACTION

Invoice for the Krumba: +1 500 USD
Invoice for Key Store: -2 847 USD
Office rent St.Petersburg: -3 200 USD
Key Store: -2 874 USD
Office rent St.Petersburg: -3 200 USD
Adobe Creative Clouds: -2 670 USD

TOTAL AMOUNT: 214 974 763 USD

4xxi USA, Russia: 878 764 USD
4xxi US: 1 434 123 USD
Newtonew Media: 974 763 RUB
4xxi UK: 646 121 GBP
4.1 Crypto-related clients are playing cat & mouse with banks

Traditional banks keep freezing and closing accounts of crypto-related customers

Cryptocurrency companies have traditionally had a hard time finding banks to accept them as customers. Almost all crypto-related customers aren’t accepted by traditional banks (even by newborn neo or challenger banks). Almost all major banks refuse to accept money after the conversion of the cryptocurrency\(^1\). Various banks around the world are not happy about people buying bitcoin. We have seen multiple banks closing customer accounts because of this activity\(^2\).

Banks have “little or no appetite” to get involved with bitcoin and cryptocurrencies due to fears of a bubble and illicit activity associated with it, the chief executive of Credit Suisse said\(^3\). The chief financial officer of ING also weighed in on cryptocurrency worries, saying that, although digital assets are an effective means of exchange, the bank was not advising clients to invest in them. A few months ago, Visa announced it would suspend\(^4\) all crypto debit cards outside of the European Economic Area. It now turns out Mastercard will be doing the exact same thing.

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Part 4: The Arrival

- NYC-based Metropolitan Bank has ceased all cryptocurrency-related international wires effective immediately. The bank could not verify the compliance of international wire transfers for cryptocurrency accounts. It "does not accept cryptocurrency-related wire transfers from non-U.S. entities." Coinbase is among the companies that use Metropolitan for wire transfers, deposits, and its Shift bitcoin debit card.

- Tether’s primary banks in Taiwan were being blocked by U.S. correspondent banks.

- Cryptocurrency trader called out National Australia Bank, ANZ, the Commonwealth Bank of Australia and Westpac for freezing customer accounts and transfers to four different bitcoin exchanges.

- An Israeli company has gotten its business rejected by all 11 banks in the country.

- British banks are shunning companies that handle cryptocurrencies, forcing many to open accounts in other countries. British lenders have distanced themselves from engaging with cryptocurrency companies and digital coins in general, because of their reputation of being used in illicit activity.

- South Korea banned its traditional banks from dealing in virtual currencies.

- Singapore's Cryptocurrency and Blockchain Industry Association had heard from 10 companies which had encountered problems with their banking relationships in Singapore.

- Finnish company Prasos has had four accounts closed. One of the Nordic region’s biggest Bitcoin dealers has one lifeline left.

- The Thai central bank has prohibited financial institutions in the country from five key cryptocurrency activities.

- Crypto exchanges BTCXIndia and ETHExIndia have informed their customers via email that they are stopping trading activities, citing the "stress" on their business caused by governmental actions discouraging crypto.

This hatred is stemming from the lack of understanding, fear of uncertainty and laziness rather than anger. Why is bank compliance not willing to understand your issues? First, they already have a large and understandable business (with which they are familiar), and they are not interested in a new and small (albeit fast-growing) business because its profitability is still small, the risk of losing the current big business is big, and there are many issues they will have to deal with. Second, imagine a specialist in compliance. Their mindset is built on the past (instead of the future) and their decisions are conditioned “how to avoid something bad to happen” (instead of “how to help something good to grow easier and more convenient”). They see a lot of transactions daily and finally they see some odd transaction after the conversion of the crypt, and … they block it. Why? Not because they are bad people. Simply because they don’t know anything about blockchain, cryptocurrencies and ICO - and in their world "everything that is odd is forbidden." They could even address the matter and the client, but it would take too much time and no one would give them a premium for this. But if they make a mistake, they will be fired. Therefore, they send a page or two of dreary questions, and then simply block the account.

If you reach some large amounts within its cash flows (in fact the business strategy of such partner banks that agree to such an additional risk is to "drown" your transactions in their core business so that they are not noticed, and receive additional income for the risk), the risks that this bank will be approached by senior bankers (regulators and correspondent
banks) and asked to stop working with you are not eliminated but simply deferred to a later date.

Are there any “workarounds?” For sure. In return to one or two pages of questions provide ten to twenty pages of meticulous and detailed answers; thus, “starving the bank out.” However, you need substantial capital for this purpose as you will have to spend money on your back office (lawyers and accountants) in order to collect and accurately store all papers, electronic statements, and screenshots of all transactions on mining, receiving, buying and selling of the cryptocurrency; to be able to quickly reply with exhaustive explanations (with schemes and conclusions) about blockchain, cryptocurrencies and ICO; describe how you and your contractors underwent KYC, AML, source of funds procedures; provide full review and conclusion during your partner exchanges. Even better, you should hire a large audit company (such as Deloitte or E&Y) $50-100K, which will verify what kind of business you do, who you cooperate with and how, where your crypto comes from and how you spend fiat money. You will also need to come up with different purposes of payments from your bank because the “receiving bank” will have questions about the origin of funds, and regular similar transactions with the same justifications will raise questions.

USA 🇺🇸

PNC bank recently threatened[5] one of their customers for purchasing bitcoin. The bank wanted to shut down the customer’s account. TD Bank is actually trying to block[6] bitcoin purchases as well, although the company is mainly performing routine checks by the looks of things.

Major credit card issuers and financial service providers including Citigroup, Discover, JPMorgan Chase, and Bank of America are disallowing their clients from purchasing cryptocurrencies with credit cards. Bank of America announced[7] that both individual and institutional clients will no longer be able to invest in the cryptocurrency market using its credit cards, even on well-regulated cryptocurrency exchanges such as Gemini and GDAX. The statement from Bank of America follows a similar decision from Citibank. Citibank noted that it may reconsider its policy on cryptocurrency investment in the future, as the market evolves and matures. Although banks have disabled credit card usage on major bitcoin and cryptocurrency exchanges, investors are still able to use debit cards and ACH bank transfers to purchase bitcoin with fiat currencies like the US dollar. Experts discourage investors from excessively investing in the

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5 https://news.bitcoin.com/bank-threatens-to-close-customers-account-for-buying-bitcoin/
7 https://coinjournal.net/credit-card-companies-disallowing-users-purchasing-cryptocurrencies/
cryptocurrency market, especially without fundamental knowledge of
the market and technologies behind most cryptocurrencies. Emphasiz-
ing the importance of responsible and balanced investment, Cornell pro-
fessor Emin Gün Sirer stated, “You should only invest in and hold coins
which you believe will be used, extensively, in the long run. If you bought
coins on a whim, without an investment thesis, based on hype, well, they
are pure speculation.”

NYC-based Metropolitan Bank Holding Corp, which is used by crypto-
currency companies and investment firms for wire transfers and deposits,
has ceased all cryptocurrency-related international wires effective imme-
confirmed to Fortune that his investment firm was notified on 11th of Jan-
uary that the bank was “ceasing all international crypto-related wire trans-
fers to and from” it effective immediately. The reason for the shutdown,
according to the customer, was because the bank could not verify the
compliance of international wire transfers for cryptocurrency accounts.
The move is alleged to be a response to an incident of international fraud
associated with one of the bank’s clients. A Metropolitan Bank represen-
tative said in a statement to Fortune that it “does not accept crypto-
currency-related wire transfers from non-U.S. entities.” Additionally, the bank
sent a reminder to customers of its policy in response to “certain crypto-
currency-related wire transfers from non-U.S. entities that were sent to
the Bank in error.” Fortune reviewed a customer’s documentation of wires
from a non-U.S.-based entity to its U.S.-based cryptocurrency-only fund
that includes the word “Crypto” in the bank account’s name. The custom-
er added that he had previously worked with the bank on numerous oc-
casions to ensure the international wires went through. Digital currency
wallet Coinbase is among the companies that use Metropolitan for wire
transfers, deposits, and its Shift bitcoin debit card. It’s worth noting the
bank’s cryptocurrency customers may have alternative banks that cater
to their needs, such as Silvergate Bank (The Digital Currency Group, a
cryptocurrency venture capital firm, has reported[^9] they have invested in
the Silvergate Capital Corporation, which contains the Silvergate Bank.
The Silvergate Capital Corporation had posted on its site, without dis-
closing the investors, that they had sold 9.5 mln shares of Silvergate stock
through a private placement for a total of around $114 mln.) or Cross
River Bank. In other words, a bank diversification strategy is usually em-
ployed to reduce risk in this type of scenario.

silvergate-bank
Correspondent banks

Alternatively, you can find some small bank in a third world country that will not ask you questions. But in practice the questions will not disappear anywhere and will arise each time you make a payment outside your bank. Let’s assume you have found a bank that is friendly to this type of operation, or have armed yourself with lawyers/accountants/auditors and defeated your clear and large traditional bank. The problems will still be there. If you make transactions in US dollars (and most transactions are sooner or later transferred to dollars at some stage), then you face the “problem of correspondent banks” in the SWIFT system. If suddenly your bank “is on the radar” of the correspondent bank (and sooner or later, especially with the growth of such transactions, questions arise), then your friendly bank will get to know who it should (not) be friends with.

In January 2018 the Royal Bank of Scotland has informed Gibraltar International Bank that it will no longer process its transactions if they are connected with cryptocurrency firms (only a few days after Gibraltar began offering regulatory licenses to blockchain firms). GIB doesn’t handle cryptocurrency itself, but it has been accepting blockchain firms as clients since October 2017.

In April 2017, Tether’s primary banks in Taiwan were being blocked by U.S. correspondent banks, including Wells Fargo. In January 2018, Tether announced: «Since that announcement, we have been diligently working on other payment avenues and channels, including third party payment processors and banking relationships in countries with friendlier correspondent banking connections.» «We have been busy establishing a global network of money-transfer channels designed to be resilient against further aggressive action from correspondent banks. We have also opened an escrow-based relationship with a U.S.-based institution to service qualified corporate customers.» «Large customers are still able to move money into and out of Tether. Depending on the jurisdiction, smaller retail-type customers will continue to encounter difficulties in moving funds using traditional payment rails.» «Euro payments should become less problematic, as transactions may be routed through a UK-based (and FCA-regulated) payment processor with whom we are working. While our banking challenges are troublesome and distracting, tens of millions of dollars are able to flow in and out of Tether daily using the channels we have established. Although not available to all users, these flows have been sufficient to bring markets supporting Tether-based trading pairs back into alignment with markets supporting USD-based trading pairs.»

11 https://tether.to/tether-update/
Australia

At the end of December 2017 bitcoin investors were claiming Australia’s banks are freezing their accounts and transfers to cryptocurrency exchanges, with a viral tweet slamming the big four and an exchange platform putting a restriction on Australian deposits. Cryptocurrency trader called out National Australia Bank, ANZ, the Commonwealth Bank of Australia and Westpac Banking Corporation for freezing customer accounts and transfers to four different bitcoin exchanges - CoinJar, CoinSpot, Coinbase and BTC Markets. After hundreds of shares and responses to the social media posts calling the banks’ alleged behaviour “disgusting” and “appalling” with some threatening to move their accounts, some users said their activities with the cryptocurrency had still been described as a “security risk” by their financial institutions. One Twitter user, Michaela Juric, said she had business accounts closed by 30 banks and posted a picture of a letter from ANZ, saying it was closing her accounts effective 30 January 2018 in accordance with its terms and conditions. She shared letters with Fairfax Media from 10 different banks informing her they were closing her accounts, with one saying she had received fraudulent funds. She said banks were not the “be all and end all of accepting payments” for Bitcoin and there were other avenues to transfer funds.

Three of Australia’s ‘big four’ banks have issued comments regarding their respective policy positions with regards to their customers’ ability to purchase cryptocurrency using accounts issued by said banks. The statements come weeks after reports surfaced detailing an apparent banking embargo on the part of Australian banks targeting cryptocurrency businesses.

According to the Australian Broadcasting Corporation, a spokesperson representing Australia and New Zealand Banking Group (ANZ) stated that the bank “does not prohibit customers buying digital or cryptocurrencies, or accepting them as a form of payment.” ANZ’s spokesperson added that the bank “monitors transactions for unusual behavior to protect against potential fraud and in line with our regulatory responsibilities.” ANZ however, does not provide banking services to “businesses that operate as issuers, dealers or exchanges of digital or cryptocurrency,” with the spokesperson stating that “these businesses are currently unregulated and therefore not within ANZ policy”.

Westpac has indicated a permissive stance with regards to its customers’ ability to purchase virtual currencies, with a spokeswoman stating “We cur-

rently have no restrictions on credit card use to purchase cryptocurrency.” However, the representative refused to comment on whether the bank is considering introducing a prohibitive policy in future like those currently enforced by Westpac’s U.K. and U.S. based counterparts.

National Bank of Australia (NAB) has taken a more cautionary tone, with a representative stating that “[the Australian Securities and Investments Commission] advises that, as most of the virtual currency exchange platforms are generally not regulated, customers may not be protected or have any legal recourse if the platform fails or is hacked.” As such, NAB stated: “To reduce the risk for our customers, and to help protect their money, some card transactions may not be processed,” adding “We take the protection of our customers’ information and accounts extremely seriously.” The Commonwealth Bank of Australia (CBA) declined to respond to the Australian Broadcasting Corporation’s request for comment, however anecdotal reports have long indicated that CBA has prevented its customers from conducting wire transfers to major cryptocurrency exchanges.

Israel

An Israeli company that was created in January has gotten its business rejected by all 11 banks in the country\(^{15}\), and is now suing them. Without a bank account, an Israeli exchange would not be able to legally receive fiat transfers from clients, effectively preventing it from starting operations. Bitflash LTD, a new Israeli company which was established to provide digital currency trading services based in Acre, has asked the Tel Aviv District Court to order all 11 banks in the country to open a current account without credit for it. The company claims that the banks’ refusal to open an account for it is in violation of the law and shows lack of good faith, as some of them manage similar accounts for competing companies.

The lawsuit states that there is a concern that the banks have illegally incorporated as a cartel and unjustifiably prevent the opening of the account to the plaintiff, thus thwarting its activity and causing it ever increasing damages on every passing day it is unable to operate. Unfortunately for Bitflash, the court ruled last year that a bank can refuse to work with a bitcoin exchange in the case of Bits of Gold vs. Leumi. However, by focusing on the banks as a cartel instead of each individually the company might persuade the court that they should not have the collective power to prevent the growth of a new industry.

According to Bitflash, it approached a number of branches of each Israeli banking corporation for the purpose of opening an account, but was

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\(^{15}\)https://news.bitcoin.com/israeli-bitcoin-company-sues-banks-for-not-letting-it-open-accounts/
outright refused on the grounds that its business in digital currencies is not to the liking of branch managers. In some of the branches the company was told explicitly that “the bank’s policy is not to open accounts for those who deal with digital currencies, regardless of the nature of the business.”

According to the plaintiff, through its attorney Alon Huberman, the company emphasized to the representatives of the banks that it has no need for credit, its account will be in perpetual positive credit balance, and that it needs only a current account that will allow the transfer of money from its clients inside Israel to its account. According to company, some of the banks justified the refusal by claiming that they would not be able to trace the source of the funds deposited in the company’s account, but even after it was made clear to them that the account would only be used to transfer funds from individuals and entities with a bank account at the same bank, removing this fear completely, they still refused.

In a bid to reduce systemic risk, the Israel Securities Authority has announced[16] that it will not include companies operating in the cryptocurrency industry in the country’s stock exchange indices. News of the determination has been published alongside a public warning issued that seeks to inform prospective investors of the risks associated with cryptocurrency exposure. ISA Chairperson, Ms. Anat Gueta, stated “We decided to avoid exposure to passive investors for companies whose operations are mainly in [crypto]currencies,” adding “These are companies in which the investment is high risk, speculative and volatile.” The ISA states that the determination has been made in response to “the exceptional trading in securities of companies on the Tel Aviv Stock Exchange who announced in recent months that they intend to operate in the cryptographic currency sector.” In some instances, the regulator asserts that just the announcement a company may be exploring blockchain technology “led to a sharp rise in share prices, even before they have true activity.” Israel’s financial regulator described the objective of the amendment as “prevent[ing] public companies operating in this risky and speculative field […] from entering the stock exchange indices and [being] included in the portfolios of passive investors.” The ISA hopes to introduce said amendment for “a limited period of one year,” after which the law “will be re-examined in accordance with developments in the market.” The ISA has expressed concerns if it had not intervened, that the “combination of cryptographic and stock index companies would have let [to] mutual funds and ETFs […] acquire shares in these companies,” thus “indirectly expos[ing] passive investors to” the “potential for […] significant loss[es].”

UK

British banks are shunning companies[^17] that handle cryptocurrencies, forcing many to open accounts in other countries. British lenders have distanced themselves from engaging with cryptocurrency companies and digital coins in general, because of their reputation of being used in illicit activity[^18]. The Bank of England Governor, Mark Carney recently called for greater regulation of cryptocurrencies, calling the huge price moves and volatility “speculative mania.” Meanwhile, a group of British lawmakers launched an inquiry into digital currencies to look at the risks posed to consumers, businesses and the government.

Barclays closed down student’s account[^19] after his dealings in bitcoin. Britain’s biggest bank has become the first to announce a ban on customers using credit cards to buy Bitcoin amid fears they could run up huge losses. Lloyds, which includes Halifax, Bank of Scotland and MBNA, told[^20] its 9 million credit card customers that it will block any attempts to buy Bitcoin after the digital currency lost more than half its value in just two months. It is believed that hundreds of thousands of British people invested in the cryptocurrency last year amid its extraordinary 13-fold increase.

Back in December, RBS chairman Sir Howard Davies said that Bitcoin seems to him to be a “frothy investment bubble”[^21]. He has warned American exchanges not to trade using Bitcoin, but don’t want to be too overt in their criticism for fear of being branded Luddites. UK blockchain firms have been searching for more welcoming climes for while now because British banks are refusing to open accounts for their businesses. Iqbal Gandham, head of eToro UK, said: “The moment you mention crypto to a bank, it’s like you are a drug dealer.”

The FCA has expressed worry about this collective cold shoulder: “We are concerned that denying certain customers bank accounts on a wholesale basis causes significant barriers to entry and could lead to poor competition in certain markets.” However, as there is no cryptocurrency regulation in the UK, it has been left to the banks themselves to decide if they want to take the risk. Apart from Gibraltar, Poland and Bulgaria are two

destinations popular with such companies. As Brexit approaches, Gibraltar will surely be receiving a much heavier influx of British blockchain businesses.

**South Korea 🇰🇷**

In December 2017 South Korea banned[^22] its traditional banks from dealing in virtual currencies. The hyper-wired country has emerged as a hotbed for crypto-currency trading, accounting for some 20 percent of global bitcoin transactions - about 10 times its share of the world economy. About one million South Koreans are estimated to own bitcoins. South Korean government also will ban[^23] minors and foreigners from trading in virtual currency or creating bank accounts for them in the country.

**Singapore 🇸🇬**

Anson Zeall, the head of Singapore’s Cryptocurrency and Blockchain Industry Association, or Access, said his organization had heard from 10 companies[^24] which had encountered problems with their banking relationships in Singapore. Chia Hock Lai, president of the Singapore Fintech Association, said some of his organization’s members also experienced account closures.

**Finland 🇫🇮**

Finnish company Prasos has had four accounts closed[^25]. One of the Nordic region’s biggest Bitcoin dealers has one lifeline left. Closures followed ten-fold transaction volume growth in 2017. The company exchanges cryptocurrencies into euros, and relies on banks to help it with those transactions. But banks are increasingly saying no to Prasos and firms like it, for fear of getting into trouble with anti-money laundering rules. Prasos says it’s now waiting and hoping regulators will set clear guidelines that allow it to continue doing business.

There’s no law telling banks in the Nordic nation how to treat cryptocurrency dealers. But there are anti-money laundering rules that stipulate lenders must know their customers and the origins of the funds they handle. One of the selling points of cryptocurrencies has long been the anonymity they offer, which is a red flag for banks.

Prasos says the sudden growth of its transaction volumes to about 150 million euros ($185 million) last year, almost ten times the vol-

ume a year earlier, is something banks treat with suspicion. “We’ve re-
alyzed that the growth in international transaction volumes started
to disturb the banks”. “Along the way, we’ve been given very little in-
formation by the banks on what we could do to solve the problem.”
Meanwhile, Prasos has sought to improve client identification and clear
up misgivings about the origins of the funds. “We’ve created identification
practices, which we have taken into use in March, and they comply fully
with anti-money laundering laws and regulations, even though authorities
do not even require this from us as our business in not under regulatory
obligations.”

The company announced that the cooperative S-Bank, the OP Group,
Saastopankki and Nordea Bank AB closed the company’s accounts last
year. Representatives from the four banks declined to comment on an indi-
vidual customer relationship. OP Group takes a cautious stance toward the
kind of anonymous activity associated with virtual currencies, Laura Niemi,
a manager in the corporate security department at OP, said in an emailed
response to questions. Tomi Narhinen, CEO of Saastopankki, says “in most
cases it’s practically impossible or at least very hard to do business with
cryptocurrency dealers and exchanges, because it can be impossible to
determine the origin of the funds.”

Prasos’ website shows the company can still receive funds in its account at
POP Bank. “The risk is that we’ll see our last bank account closed before we
can get the next one opened”. “That would freeze our business.”

Thailand 🇹🇭

The Thai central bank has prohibited financial institutions in the country
from five key cryptocurrency activities. Mr. Wisit Santiprabop, the central
bank’s governor, signed the circular which outlines five key cryptocurrency
activities, that banks are banned from: investing or trading in cryptocur-
rency, exchanging cryptocurrencies, creating platforms for cryptocurrency
trading, allowing clients to use credit cards to buy cryptocurrencies, and
from advising customers on cryptocurrency investing or trading.

The central bank stated that “cryptocurrencies were not legal tender in
Thailand,” the publication conveyed, adding that “it was worried that they
may be used in illegal activities such as money laundering or supporting
terrorism.”

A major Thai financial institution, the state-owned Krunghai Bank, has
“shut down crypto trade accounts”[27]. The bank has become the second in
Thailand “to terminate transactions involving cryptocurrencies trading with

Thai Digital Asset Exchange (TDAX),” a local cryptocurrency exchange. The first bank was Bangkok Bank, which decided to terminate TDAX’s accounts with the bank. TDAX is a privately-owned Thai cryptocurrency exchange. According to the publication, the exchange still has bank accounts with two other financial institutions: Kasikornbank (Kbank) and Siam Commercial Bank (SCB). Kbank confirmed that it was still providing service to TDAX.

A source from another major domestic cryptocurrency exchange, Bx.in.th (BX), revealed that “Bangkok Bank has already terminated the exchange’s account, but did not reveal whether the termination occurred on the same day as TDAX’s termination.” Yuthavithi Rootwararit, founder and CEO of Crypto Trading Co Ltd, said, “BX’s trading volume and value are more than ten times larger than those of TDAX.”

India 🇮🇳

Crypto exchanges BTCXIndia and ETHEXIndia have informed [28] their customers via email that they are stopping trading activities, citing the “stress” on their business caused by governmental actions discouraging crypto.

According to the email, BTCXIndia was opened in 2014, and the exchange then opened ETHEXIndia opened two years later. BTCXIndia customers are told they have until March 4, 2018 to withdraw their funds in either Bitcoin (BTC), Ripple (XRP), or the rupee (INR) before an annual wallet maintenance fee is applied. The exchange’s Ripple/INR trading will be halted on March 5.

ETHEXIndia customers are told they had until Feb. 28 to withdraw their funds in rupees or Ethereum (ETH), and that trading will halt on March 1, 2018. ETHEXIndia is currently ranked 163 in exchanges by 24 hour volume on CoinMarketCap, with a 24 hour volume of around $15,724 by press time. BTCXIndia’s email cites the Indian Finance Minister’s Feb. 1 budget speech that spoke negatively of crypto’s use in “illegitimate activities” as the reason behind their decision to halt their crypto trading. “As we heard in the budget speech, the Indian government is discouraging cryptocurrency trading. This has been clear also by government actions in the last year, and has put our business under a lot of stress and putting us in a position where we don’t feel that we can continue our business in a professional manner any longer.” India’s Minister of Finance had also referred to Bitcoin as a “ponzi scheme” back in December of last year, and in January 2018, several large banks in India limited

or suspended accounts of crypto exchanges, citing a risk for illegitimate transactions. India’s Finance Ministry has also underlined that there is no active crypto ban within the country.

**Three banks started to open accounts**

Coinbase Inc., one of the largest cryptocurrency exchanges, said it obtained an e-money license in the U.K. as it expands services in Europe. The firm also opened an account at Barclays[^29], easing deposits and withdrawal for clients. San Francisco-based Coinbase, which helps investors buy and sell Bitcoin and other major virtual currencies, said business in the EU grew at double the pace of any other market last year, and that it’s hiring in the U.K. to meet demand. The company said it will start supporting institutional clients’ transactions via the U.K.’s Faster Payments Scheme, a network used by the traditional financial industry. The firm has also established a “full banking relationship” with Barclays, said Coinbase’s U.K. chief, Zeeshan Feroz, in an interview. Ultimately, deposits and withdrawals for U.K. customers will be routed through the British financial giant. Such an account is notable because some major banks, under government pressure to track money flows for signs of illicit activity, have been reluctant to handle funds from firms dealing in often-opaque cryptocurrencies.

“We’ve been looking for accounts for over a year and have spoken to several banks,” Feroz said. Coinbase plans to maintain its relationship with LHV, its current European banking partner in Estonia, he said. The exchange also has worked with Cross River Bank, Metropolitan Bank and Silvergate Bank in the U.S., a person familiar with the matter said in December.

The U.K. bank is embracing the cryptocurrency sector, even as many other banks shun it for being too risky[^30]. Coinbase, which has nearly 12 million users[^31], also said: while U.K. users could top up money in pounds, they were unable to withdraw it easily back to their bank account in the same currency. Instead, it would have to go through a long process, converting the money into euros then back into pounds, leaving some users stung with exchange rate charges. Barclays has been one of the larger U.K. banks more open to engaging with cryptocurrencies. As early as last June, it’s U.K. Chief Executive Ashok Vaswani told CNBC it was talking to financial technology firms and the regulator about bringing virtual currencies “into play.” The deal represents the first major partnerships between a UK bank

and a cryptocurrency exchange [32]. Feroz said Barclays “approached it with the right mindset” and closely scrutinized Coinbase’s compliance processes. “We’ve got some institutions that use the platform. These could be funds, these could be other regulated businesses that are offering exposure to cryptocurrencies to their customers. We provide liquidity to them. It’s actually a very mixed bag with a range of businesses.”

Estonian bank LHV [33] is launching in the UK. The bank plans to work with fintech businesses. LHV’s UK head is predicting a “second wave” of fintech driven by Open Banking reforms. LHV was founded in 1999 and is part of the largest financial group in Estonia. The bank already works with UK-headquartered online money transfer service TransferWise, whose co-founders are Estonian, and the European branch of Coinbase, the US cryptocurrency exchange. LHV, which is licensed by the FCA, aims to have five staff working in the UK by the end of the year helping to sign up new customers. Kitter says the bank will work with companies at an earlier stage than traditional lenders. “I think large banks aren’t in a position to look at fintechs in early stages because they need more time and more focus to make sure you really understand what they’re doing and that it’s suitable for the bank’s processes,” he said. “We work with quite a few small companies. We have our technical platform which is capable of delivering service changes quite quickly to the market.”

AS LHV Pank, a subsidiary of the listed Estonian financial services group LHV Group, is to pay the group 2.2 mln euros in dividends [34] on March 1. The net profit of LHV Group last year totaled 22.2 mln euros. LHV Pank (originally Lõhmus, Haavel & Viisemann) [35] is an Estonian banking and financial services company headquartered in Tallinn. LHV Pank employs over 180 people. More than 50,000 clients use the Bank’s services. LHV Pank has been identified as a partner in the virtual E-residency of Estonia program, enabling e-Residents to open a bank account in Estonia.

ING confirmed [36] that cryptocurrency exchange Bitfinex has an account with the Dutch bank. The ING spokesperson did, however, state that the bank performed “more extensive due diligence” on transactions conducted by cryptocurrency companies, though this did not extend to companies which occasionally transact with cryptocurrencies. According to Bloomberg, he said in an email: “With companies that are active in the crypto market we are very reserved ... not with companies that are in tra-

34 http://www.baltic-course.com/eng/finances/?doc=138133
36 https://www.coindesk.com/dutch-bank-ing-confirms-bitfinex-account/
ditional markets and receive or do payments with cryptocurrencies, but with parties that are in the chain of cryptocurrencies.” This marks the first major financial firm to confirm a working relationship with Bitfinex since Wells Fargo suspended transactions early last year. Since then, Bitfinex has apparently operated without a major banking partner until it opened its account with ING. Bloomberg reported that Bitfinex may have had an account with the Polish Bank Społdzielczy late last year, but this relationship was not confirmed.

Opinions from different US regulators

Governments around the world are finally starting to regulate cryptocurrencies[^37]. Their approaches have run the gamut, from a massive crackdown in China to an exchange-licensing regime in Japan and a largely hands-off system in Switzerland. Some countries, most notably the U.S., have yet to formulate a comprehensive strategy. But on the whole, oversight is increasing.

U.S. Treasury Secretary Steven Mnuchin said[^38] on 12th of January that the Financial Stability Oversight Council, a government body that assesses financial system risks, has formed a working group focused on cryptocurrencies. “We are very focused on cryptocurrencies,” Mnuchin explained, pointing to discussions with other regulators within the U.S. government and later stating: “We want to make sure that bad people cannot use these currencies to do bad things.” Mnuchin added that the issue was one that the U.S. government would engage with the G-20 international group as well. “I want to make sure that consumers who are trading this understand the risks because I am concerned that consumers could get hurt.”

One month later, a joint appearance of leaders from the Commodity Futures Trading Commission (CFTC) and Securities And Exchange Commission (SEC) before a meeting of the U.S. Senate Banking Committee[^39] had just one topic on the docket: cryptocurrencies and the U.S.’s role in the market’s regulation. Rather than calling for a crackdown on crypto trading and ICOs, the tenor of the high-profile meeting was generally pro-innovation while encouraging a measured but deliberate approach to regulating the emerging sector of blockchain technology. SEC chairperson Jay Clayton and Christopher Giancarlo of the CFTC spent most of their time discussing the challenges of regulating the burgeoning cryptocurrency market and reiterating the need for oversight, while also pointing to the potential of distributed ledger technol-

ogy (DLT) to streamline the more traditional side of the financial sector. Giancarlo’s testimony primarily covered the inter-agency coordination between the CFTC, IRS, SEC, the US Treasury’s Financial Crimes Enforcement Network (FinCEN), and international regulatory partners. Giancarlo asserted in his testimony that distributed ledger technology, such as bitcoin’s blockchain, has real-world utility outside of trading and speculation. In his statements, he cited a report claiming that DLT could save mainstream financial institutions as much as $20 billion in annual infrastructure and operational costs. He cited another report suggesting that “blockchain could cut trading settlement costs by a third, or $16 billion a year, and cut capital requirements by $120 billion.” “Moving from systems-of-record at the level of a firm to an authoritative system-of-record at the level of a market is an enormous opportunity to improve existing market infrastructure,” said Giancarlo in his concluding statements on the promise of blockchain for the financial services sector. In his remarks on policy considerations for the CFTC, Giancarlo referenced a Clinton-era regulatory position toward regulating the Internet: do no harm. Although Giancarlo said he “[believes] that ‘do no harm’ is the right overarching approach for distributed ledger technology,” it doesn’t necessarily imply a laissez faire, totally hands-off strategy. He said that “[appropriate] Federal oversight may include: data reporting, capital requirements, cyber security standards, measures to prevent fraud and price manipulation and anti-money laundering and ‘know your customer’ protections.”

Clayton’s closing remarks echoed Giancarlo’s. He said “we should embrace the pursuit of technological advancement, as well as new and innovative techniques for capital raising, but not at the expense of the principles underpinning our well-founded and proven approach to protecting investors and markets.” How or if the U.S. approach to regulation and oversight will change remains uncertain. But the forward march of bitcoin and its cousins, the smart contracts and decentralized organizations its distributed ledger technology facilitates, and investment and speculation in this emerging class of blockchain assets promises to give regulators a lot to learn. Here are the 10 most important takeaways from Jay Clayton’s remarks[40]:

- Bitcoin and Ether are not necessarily currencies. “Simply calling something a currency or a currency-based product does not mean it is not a security.”
- Most utility tokens are securities. “Merely calling a token a ‘utility’ token or structuring it to provide some utility does not prevent the token from being a security.”

[40] https://hackernoon.com/top-10-points-made-by-the-sec-and-cftc-congress-testimony-on-cryptocurrencies-f4c71712624c
• Therefore, most ICOs are the sale of securities. “By and large, the structure of ICOS that I have seen involve the offer and sale of securities and directly implicate the securities registration requirements.”

• Exchanges where investors trade tokens are not, in fact, exchanges because they have not registered with the SEC. “Many trading platforms are even referred to as ‘exchanges.’ I am concerned that this appearance is deceiving. In reality, investors transacting on these trading platforms do not receive many of the market protections that they would when transacting through broker-dealers on registered exchanges or alternative trading systems.”

• No ICOs have been registered with the SEC, and the SEC has not approved any Exchange Traded Funds or other assets related to cryptocurrencies. “If any person today says otherwise, investors should be especially wary.”

• ICOs to date have been vulnerable to digital hacks. “10% of proceeds generated by ICOs—or almost $400M—have been lost to such attacks.”

• Anti-money laundering and know-your-customer laws must be implemented. “Market participants should treat payments and other transactions made in cryptocurrency as if cash were being handed from one party to the other.”

• ICO promoters, such as platforms and marketing agents, should be careful not to engage in selling unregistered securities. “Engaging in the business of selling securities generally requires a license.”

• The market is ripe for fraud from many different actors. “Experience shows that excessive touting in thinly traded and volatile markets can be an indicator of scalping, pump and dump, and other manipulations and frauds.”

The new Cyber Unit in the Division of Enforcement is going to be more aggressive with enforcement actions against those who violate the law. “I have asked the SEC’s Division of Enforcement to continue to police these markets vigorously and recommend enforcement actions against those who conduct ICOs or engage in other actions relating to cryptocurrencies in violation of the federal securities laws.” One month later, The U.S. Securities and Exchange Commission (SEC) has subpoenaed 80 cryptocurrency companies[41], including the $100 million cryptofund of TechCrunch founder Michael Arrington. Arrington said he has no problem with the subpoena. He said the government has to figure out its rules for the market to follow. Jason Gottlieb, a partner and head of the cryptocurrency litigation team at Morrison Cohen, said SEC offices in New York, Boston and San Francisco has issued subpoenas. SEC inves-
tigations, along with regulatory uncertainty, have driven some cryptocurrency activities offshore, Arrington said. He said it is a shame that the U.S. has “frozen itself.” From an investor’s point of view, Arrington said he has become more interested in projects from China and nearby Asian countries, characterizing them as “uniformly high quality.”

But while large financial institutions have the resources and procedures to handle such requests as a matter of course, complying would be a tall order for a startup. The lawyer said: “For any normal person trying to respond, it would be hellish.” Still, there was an alternative: instead of producing reams of documents, emails and messages, the recipient of the subpoena could instead just meet with the SEC. “Just come in and talk to us” is how the lawyer, who spoke on condition of anonymity, paraphrased the invitation. (For instance, after Circle’s acquisition of crypto exchange Poloniex, New York Times reporter Nathaniel Popper tweeted out a slide deck apparently showing that the SEC told Circle it would not pursue enforcement action against Poloniex if Circle moved promptly to seek the appropriate regulatory approval to operate the token exchange business. “On the eve of major SEC action, [Poloniex] sells for $400 million ... it appears to have been given a huge pass,” Van Cleef said. And what that shows is that going forward, “for entities dealing with possible noncompliance, there’s a need for an appropriate balance in the dialogue with the SEC and other government agencies.) A failure to manage that dialogue appropriately will make the hurt much more significant.”

“This is the tool they have to understand the world,” said another industry lawyer of the agency’s practice of issuing subpoenas and requests for information. According to industry sources who have seen several ICO subpoenas, the requested information typically includes lists of investors, emails, marketing materials, organizational structures, amounts raised, the location of the funds and the people involved and their locations. Not only issuers and advisors have been contacted, several sources said, but also exchanges and even investors have received requests as well.

Robert Cohen, head of the SEC’s cyber enforcement unit, said at least a dozen companies have put their offerings on hold after the agency raised questions. The SEC scrutiny is focused in part on “simple agreements for future tokens,” or SAFTs (Telegram, a popular messaging app, used such an agreements earlier this year to raise an astounding $850 million from 81 investors, according to an SEC filing by the company. It isn’t clear if the SEC has issued any information requests or subpoenas related to the Telegram fundraising.), which are used in some of the most prominent crypto-fund-
raisings. The agreements allow big investors and relatively well-off individuals to buy rights to tokens ahead of their sale. The rights can be traded, or flipped for profits, even before the sale begins. The SEC is concerned that such agreements are potentially being used to trade like securities without conforming to the strict rules that apply to securities.

There’s no need for Congress to establish a new cryptocurrency regulator or a new regulatory system, Coinbase said later. “Federal regulators already have sufficient authority,” said Mike Lempres, chief legal and risk officer for the San Francisco-based digital currency wallet and exchange company, which claims 20 million customers. However, there is a need for clarity in letting exchanges and consumers know where one regulator’s authority ends and another begins, Lempres told a House Financial Services Committee hearing in his prepared testimony. He pointed out that Coinbase is already subject to numerous regulators at the federal level, including the Securities and Exchange Commission, the Commodity Futures Trading Commission, the Federal Trade Commission and the Financial Crimes Enforcement Network (FinCEN). Rather than new regulators, Lempres said, what’s needed is more coordination between regulators to determine who should regulate what. As he put it in his testimony: “Today's environment calls to mind the parable of the blind mice and the elephant - each agency looks at tokens from its own narrow perspective.

Liberal California Democratic Rep. Brad Sherman, on the other hand, said digital currency should be treated not as a security, or commodity, but as a scam. “Cryptocurrencies are a crock. They help terrorists and help startup companies commit fraud,” the California Congressman told the hearing. Chairing the session, Michigan Republican Rep. Bill Huizenga took a more positive view. He said Congress is not going to sit by “idly” if more investor protection is needed for cryptocurrency purchasers. At the same time, he praised initial coin offerings for giving investors opportunities to diversify their holdings in cryptocurrencies.

4.2 12 digital banks for makers & doers

Business banking is opaque, expensive, and behind the times

The incumbent banks are trying to be everything for everybody - but often it means poor products and customer support “for nobody”. Many startups in fintech are attempting to disrupt the banking world with consumer-focused apps, but the real and most lucrative prize is going to be in the small business space.

George Bevis, the affable 40-year-old founder of digital business bank Tide, has a film recommendation[^45], which he says provides an unlikely portrayal of what it’s like to work in burgeoning start-up scene. “The best film about small business is A Most Violent Year,” he says. By its own billing this movie is “a searing crime drama”, depicting the ordeals of a small heating-oil company owner. Played by Oscar Isaac, in Eighties New York, the entrepreneur is trying to make it amid “simmering rivalries and unprovoked attacks” from mafia bosses and political kingpins. It sounds intense. “The trailers are all people with guns and whatever,” he concedes. “But really it is all about the incredibly difficult negotiations of a small-business owner. For two hours, to understand the real moments of suffering in a small-business owner’s life, you couldn’t do it better.” “I don’t think anyone runs around shooting anyone else. Our experience is not as dramatic,” he laughs. “However, I absolutely know entrepreneurs who have had moments of high drama. There are constantly examples of deals that have been agreed on a handshake, where later on one of the parties to the deal denies what was agreed on the handshake and there’s no written record of that. In the business I used to run, a number of times we got close to not being able to hit payroll. We did always, I probably had to fund it out of my own bank account a few times. “But these things are much more common than I think is widely understood, because people who run businesses have to keep it secret.” Bevis is a former banker - he has stints at Capital One, Barclaycard, RBS and WorldPay on his CV - and knows all too well where big lenders have been letting small businesses down.

Traditional banks make account opening cumbersome and much more difficult than it should be, whilst simultaneously charging exorbitant fees for making payments or international money exchange. There’s also a long list of other unmet needs, such as tracking employee spending and automating accounting and invoicing.

The digital business bank space in the US is far more nascent than in Europe

Oddly enough, while Silicon Valley is the place where much of the digital world is invented, the core guts of finance and capital in the area are often neolithic. The nature of digital world is that you have to constantly scale to new markets; if you want to exist in one country, you shall start a traditional offline business. The internet has long had an “infrastructural deficiency”. What resulted was that – almost 30 years into the web – people were confronted with dated finance industry tools and legacy infrastructure, an economic system that simply wasn’t native to the internet. Accepting online payments may seem simple now, but the process involves many complications, such as numerous payment methods, off-site redirects, checkout flows, international sales requirements, multiple languages, and the myriad rules within each country. All of this can be a headache for any fledgling business owner – it’s tough enough planning a brick-and-mortar operation, but scaling it to the global arena comes with an excessive amount of stress. “We ultimately concluded that business owners want a fully digital bank that’s easy to use and that has the apps and products they need to help them scale quicker, save more time and money,” co-founder and CEO of Penta Lav Odorovic tells.

According to a recent survey,[46] small businesses are falling through the cracks of the banking industry. Big banks don’t always offer the service small businesses need, and community banks don’t always provide the technology small business customers are looking for. The challenges small business owners face with their banking services can have a real impact on their business. According to a new survey conducted by Researchscape on behalf of Seed, one-third of small businesses aren’t provided with online and mobile bill-pay; that same percentage pays monthly, often hidden fees to their banks. Perhaps most surprising, 32 percent of survey respondents are not properly separating their personal and business bank accounts, which can lead to serious accounting, tax, and reporting challenges for business owners. And, despite the rise of mobile, more than half of small businesses said that they don’t have access to an intuitive, simple mobile banking app, while 65 percent have banks that don’t offer phone and in-app messaging support. The lack of mobile banking support makes it impossible for these business owners to manage their business on the go and leads to unnecessary time spent in a branch. Meanwhile, managing cash flow is the number one financial challenge every small business has, but according to Seed’s survey, banks are not helping. Less than one-third of banks offer financial insights and only 24 percent

46 https://seed.co/smallbiz/
of banks provide owners with advice on how to manage their business. The SMB market has become something of a classic target for financial services startups: part of the reason is because smaller businesses have often fallen in the gap between consumers (who as a group produce low margins but make up for it in scale) and big businesses (there are fewer of these but they are far more stable and higher-margin when you finally land them as customers). “Traditional banks have struggled to take care of their small business customers because they only have two banking options to offer – consumer or enterprise. Consumer banking products don’t offer all of the features and service small businesses need, while enterprise offerings are unnecessarily complicated and expensive,” said Brian Merritt, co-founder and CEO of Seed.

The neobank space in the US is far more nascent than in Europe. The proliferation of “neo” or “challenger” banks in Europe has yet to take hold in the U.S. Regulatory barriers have so far prevented these upstarts from making waves, however, those barriers likely won’t hold back the threat these players represent to traditional banks forever. U.S. banks make a tempting target for neobanks hoping to replace them with superior digital offerings. A recent survey of nearly US digital banking users by banking software provider D3 and Harris Poll found that 68% of the respondents had been frustrated with their digital banking experiences. Additionally, 32% of the respondents were willing to leave their bank for a better digital banking experience. This means U.S. banks will likely catch the eye of overseas neobanks as they mature and look for new opportunities. Even though neobanks haven’t been able to gain banking charters here yet, they still have avenues to market. They can, for example, apply for industrial loan company (ILC) charters that allow non-banks to obtain FDIC insurance, a path that Square and others are already taking. In the end, it’s highly unlikely the U.S. can sit out this trend as new players sprout up around the world and deliver new experiences consumers here crave. That can be difficult for many banks to execute. Banks will have to be careful in launching and managing such digital-only platforms within their organizations. For the vast majority of banks, trying to link this type of digitally native organization with its own legacy infrastructure and processes will only hamstring that organization’s ability to satisfy customers. The digital brand must be charged with rapidly developing new products and services and iterating on them, not with making the brand just another part of its parent organization.

As Brian Merritt, co-founder and chief executive of Seed, sees it, the stakes for letting people sign up for accounts online are as high as they get. “Banks

have to go online to grow – otherwise they will die,” he said. With over 28 million small businesses in America, according to the U.S. Small Business Administration, it would stand to reason that banks should already have an online system to sign them up [49]. In fact, onboarding has remained one of the thorniest challenges in digital banking because, well, it’s cumbersome at best and literally impossible at worst. According to a 2017 Javelin Strategy & Research report, only six of the top 30 banks serving business customers offer some form of digital-checking-account application.

U.S. small businesses are strong and their revenue is projected to be even stronger as more people, especially millennials, look to entrepreneurship for more flexibility and opportunity [50]. A recent poll found that 59 percent of young people say they want to ditch their jobs and work for themselves, but entrepreneurship can be challenging even for those with top skills. Technology is also rapidly changing the dynamics of what it means to be a small business owner and one of the few remaining tools that have not kept up with the times is the core business bank account. “If you walk into a bank and try to open a business account it is still pretty wonky and not easy,” according to Azlo’s CEO Brian Hamilton.

Due to stringent rules from traditional banks many entrepreneurs have been forced into using a personal bank account to operate a business - causing copious amounts of issues when it comes to managing taxes and managing the finances of a business efficiently. Millennials are now the largest generation in the current workforce [51]. Amid growth of contract-based work in North America, a new study released by TransferWise revealed that 30 percent of freelancers and other non-traditional workers in Canada are owed over $18.7 million in unpaid invoices. As a result, the survey – conducted by Maru/Matchbox on behalf of TransferWise – found that Millennials are seeking out jobs in international markets. Findings of the survey include that 50 percent of Canadian freelancers said “they had at least one unpaid invoice at the end of 2017, with an average amount $1,701.80 owing per freelancer,” the company said in its report. According to prior media reports, contract, freelancer and non-traditional workers in North America make up between 35 and 40 percent of the total workforce. The survey showed that Millennial respondents earn 27 percent of their total income from international clients, which compares to 18 percent for all freelancers in the poll. “Additionally, over two-thirds of young freelancers (69 percent)
are looking to grow their international clientele in 2018, hoping to take advantage a bigger client pool and get paid in higher value currencies,” authors of the report said. Regarding the method of payment, the poll found that 34 percent use bank transfers while 23 percent use online payments and 21 percent rely on mail. The report noted that banks and payment providers “charge high receiving fees on international currencies.” And the next generation of on-the-go small-business owners, including members of the gig economy, will expect an experience that doesn’t waste their time. “They’d be aghast if told they had to come in and fill out papers,” said Alenka Grealish, a senior analyst at Celent. “That’s just a foreign world for them.” Even today, the gap is already costing banks business. Aite Group estimates that between 5% and 15% of online applications are abandoned by small businesses because of the irritations of manual workflows and repetitive questions. Banks are well aware of their shortcomings. According to the same October Aite report, more than 75% of large and midsize banks admit their current onboarding process is not up to speed.

**Business banking in the UK has until recently been dominated by big players**

A Competition and Markets Authority study into the SME banking sector three years ago found that the largest four lenders accounted for more than 85pc of current accounts and 90pc of business loans at the time. The banking sector has changed, but there is still more to do, according to a panel of challenger bank executives and risk consultants at a panel event [52](https://www.globalbankingandfinance.com/banking-sector-still-has-some-way-to-go-to-demonstrate-value-to-society-and-rebuild-trust/) examining whether banking culture has changed since the 2008 Global Financial Crisis. The event coincided with the 10-year anniversary of the flash sale of Bear Stearns, one of the major early casualties of the crisis. Speakers included Philip Acton, CEO of CivilisedBank; Jon Hall, Managing Director at Masthaven; Graham Olive, Deputy CEO at OakNorth; Damien Burke, Partner and Head of Regulatory at 4most, and; Gary Wilkinson, CEO of Redwood Bank. Philip Acton said: “According to our research, a quarter of UK business executives still think nothing has changed in banking since the crisis, and 3 in 10 are undecided as to whether behaviour has changed for the better. Many of the familiar complaints such as a focus on profit over integrity, closure of branches and poor customer service remain, all of which indicates that despite good work being done this has not resonated with the wider public.” Graham Olive said: “Banks remain hamstrung by a lack of confident decision making and an inability to effectively manage some aspects of the regulatory environment - for example, there’s no real appetite for
residential development and extremely painful account opening procedures." “The ‘one stop shop’ banking model is broken, and in a few decades time there will be students graduating who will never have held a current account because they haven’t needed one. This has created the conditions for the rise of challenger and specialist competitors.” Anne Boden, founder and chief executive of Starling and a former RBS and AIB banker, told the Telegraph\(^{53}\) that business lending had been “highly concentrated with a few big players for too long”. “It will be very easy to get up and running, taking five minutes or less,” she said. “At the moment opening a business account can take many hours at a branch. Business owners are far too busy for that.” “In a market with almost no meaningful competition, entrepreneurs and small business owners have for too long been marginalized and taken advantage of by big banks,” said chief executive Anne Boden.

“Business banking is radically transforming for almost everyone on earth and this can help unlock global growth by democratizing access to entrepreneurship,” said Estonian e-Residency program director Kaspar Korjus\(^{54}\). (“We’re delighted that Holvi has decided to invest in our borderless digital nation by offering borderless business banking specially tailored to our growing community of e-residents. This partnership with Holvi will further lower the barriers to entrepreneurship and help expand e-Residency to many more people around the world who have until now been unable to establish a trusted company with the tools needed to conduct business globally.”) According to Holvi CEO Antti-Jussi Suominen, entrepreneurship is on the rise and regardless of location, these businesses all currently share one common problem – they are underserved in their financial matters.

**Seed (US)**

National study reveals big banks aren’t empowering small businesses; Seed’s banking app is designed exclusively for the modern small business\(^{55}\). Seed is providing an alternative to traditional banking by offering a full-service online banking service designed specifically for the 28 million small businesses in the US. “Seed is solely focused on serving the small business community. We’re responding to the frustrations of small business owners by offering an alternative to the status quo – a complete online banking service designed just for them,” said Brian Merritt, co-founder and CEO of Seed. In response to these challenges, Seed provides a full suite of banking fea-

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53 https://www.telegraph.co.uk/business/2017/10/04/starling-takes-big-banks-business-lending-play/
### “Simple banks” for SMEs and GIGs

<table>
<thead>
<tr>
<th>LIVE</th>
<th>HQ</th>
<th>Other markets</th>
<th>Clients</th>
<th>Banking license</th>
<th>Foreigners-friendly</th>
<th>Crypto-friendly</th>
<th>Integrations with 3rd-party fintechs</th>
<th>Baas-platform for other fintechs</th>
<th>Funding</th>
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<tr>
<td>Holvi 2011</td>
<td>+</td>
<td>🇫🇮</td>
<td>Europe</td>
<td>n/a</td>
<td>+ (via e-Residency program, excluding US users)</td>
<td>+ (mPOS: SumUp, few)</td>
<td></td>
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<td>$4M total. Acquired by BBVA in 2016</td>
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<tr>
<td>Seed 2014</td>
<td>+</td>
<td>🇺🇸</td>
<td>-</td>
<td>n/a</td>
<td>+ (The Bancorp, “three deals with other banks”)</td>
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<td>CivilisedBank 2014</td>
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<tr>
<td>Tide 2015</td>
<td>+</td>
<td>🇬🇧</td>
<td>-</td>
<td>30K+ plans</td>
<td>(e-money) (Prepay Solutions)</td>
<td>-</td>
<td>+ (lending: weec)</td>
<td>-</td>
<td>$14M (A) $16M total</td>
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<tr>
<td>Qonto 2016</td>
<td>+</td>
<td>🇫🇷</td>
<td>-</td>
<td>5K+</td>
<td>- (Treezor)</td>
<td>-</td>
<td>+ (mPOS: (Zettle, transfers: Kantox))</td>
<td>-</td>
<td>$11.3M (A) $14.3M total</td>
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<td>Asto 2017</td>
<td>+</td>
<td>🇺🇸</td>
<td>-</td>
<td>n/a (BBVA)</td>
<td>-</td>
<td>+ (mPOS: Square, acquiring: Stripe)</td>
<td>-</td>
<td>n/a (backed by BBVA)</td>
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<td>Penta 2018</td>
<td>Beta</td>
<td>DE</td>
<td>-</td>
<td>n/a (Europe, Asia)</td>
<td>- (SolarisBank)</td>
<td>-</td>
<td>- (plans)</td>
<td>-</td>
<td>$2.7M (seed)</td>
</tr>
<tr>
<td>Arival Bank 2018</td>
<td>Beta</td>
<td>🇺🇸</td>
<td>-</td>
<td>n/a (waiting list)</td>
<td>- (planned)</td>
<td>- (planned)</td>
<td>+</td>
<td>+</td>
<td>$1M on pre-seed ($10M raising now as seed)</td>
</tr>
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</table>

### Neobank or fintechs for retail clients, which have launched business accounts recently

| Transferwise 2011 | Beta | 🇬🇧 | Europe, US, Asia | 2m+ (retail) 1k (business) | (only for remittances) (cards: Wecard) | + | + (N26, StarlingBank) | - | $280M ($379M total) |
| Revolut 2015 | Beta | 🇬🇧 | Europe (plans: US, Asia) | 1.5m | (applied) (now: Wecard) | n/a | + (N26, StarlingBank) | - | $990M total ($160M raising now) |
| StarlingBank 2015 | + | 🇬🇧 | “tens of thousands” (retail) | - | - | - | + (many) | - | $990M total ($160M raising now) |
| N26 2015 | Beta | 🇳داف | Europe (plans: US) | 850k+ | - | n/a | - | + (deposits: Raisin, transfers: Transferwise) | $160M ($215M total) |
| Denizen 2017 | + (but only for retail customers) | 🇬🇧 | Europe | n/a | - (Wecard) | - | - | - | n/a (backed by BBVA) |

Holvi, Penta, Seed, StarlingBank, Arival Bank are able to offer a full-fledged business bank account, and not a freelance or retail bank account labeled as business, like some other challenger banks or fintechs (N26, Tide, Revolut, Transferwise) do.
tures built into easy-to-use, beautifully designed online app, including a Visa® Business Debit card, free bill pay, transfers, mobile deposits, and electronic vendor payments via ACH or paper check. In addition to standard banking services, Seed offers unique features and benefits designed for the small business owner:

- A complete mobile business banking solution so that you can run your business from wherever you are. Seed is live now for iOS and the web.
- Personalized attention and support via phone and in-app messaging.
- An online knowledge-base to help answer the many vexing questions small businesses need answered.
- Automated monthly cash flow reports that save time spent on accounting.
- Real-time data can be categorized, searched, and edited with memos, making it effortless to keep tabs on your finances at all times.
- Bills, receipts, and documents can be stored alongside transactions and all data is available on accounting platforms and via download.

Banking services provided by The Bancorp Bank, Member FDIC. The Seed Visa Business Debit Card is issued by The Bancorp Bank pursuant to a license from Visa U.S.A. Inc. and may be used everywhere Visa Debit Cards are accepted. The company, which is part of the Winter 2015 Y Combinator class[^56], wants to shake up banking, bring it into the API era, and rip out unnecessary fees to make it, according to its CEO Brian Merritt, as “easy as possible to start and manage a business.” Merritt and his co-founder Ryan Hildebrand are both former Simple bank (invested by Life.SREDA VC) denizens, a consumer-facing banking tech firm that sold for BBVA in 2014 for more than $100 million. And given that it wants to cater to growing companies, the firm has a perfect backyard of companies to get onto its platform while young – Y Combinator is not known for incubating aging corporate incumbents, after all. Seed is not a bank, a technical term that comes with heavy regulatory structure. Instead, it’s a banking service that sits on top of an extant bank. That doesn’t mean that Seed doesn’t offer normal bank bits, like deposit insurance. In fact, instead of offering the normal $250,000 in FDIC insurance, Seed will insure up to $50 million.

Since 2014 the neobank Seed has been reimagining one of the sleepier areas of banking: deposit accounts for small businesses[^57]. Rather than walk into a branch – Seed, of course, has none – yoga instructors, food truck owners and other would-be customers can apply for accounts in less than five minutes on the startup’s web or mo-

bile app. If approved, they receive a business debit card in the mail. Now Seed is selling banks software to help them solve one of their most pressing problems: finding a way to open accounts online as branch transactions continue to decline. “It’s the second phase of our business,” said Brian Merritt. “It’s not a pivot or change.”

It’s a model a handful of fintech companies have adopted in their quest for more revenue sources. Banks license technology from the neobank Moven, for instance. The online lender Kabbage white-labels its software to financial institutions, for another. How they go about it can vary. Each institution, after all, has specific issues, such as whether newer technology is compatible with what’s already in place at the bank, or if a piece of software jibes with its know-your-customer practices. Seed is offering the KYC procedures it uses – which include importing images of identity documents like driver’s licenses – but it said it can configure the software to adapt the required data, rules and risk profiles that a bank partner prefers.

Seed has signed three deals with banks (all of which are said to have pursued the partnership with the startup), and the pipeline is very promising for the neobank. Knowing just how big the market is – and how it is only growing with the rise of the gig economy – is, in fact, why Seed wanted to sell banks the same technology it uses. Merritt views community banks as critical resources and is the first to say he wants to help them survive.

Like other fintechs, the San Francisco-based Seed will continue to operate its own brand – which offers U.S. small business owners digital accounts, with deposits are held at The Bancorp Bank – in addition to selling technology to banks.

**Penta (Germany)**

Germany’s Penta is the latest European startup to throw its banking wares into the ring. The burgeoning company is launching a new digital bank account targeting SMEs. Running on top of Banking-as-a-Platform solarisBank, the new offering perhaps resembles something like Tide in the U.K., and is designed to meet all of the banking needs of small to medium-sized businesses, including, of course, startups.

The premise for Penta is that SMEs and startups are currently underserved by banks and that “business banking can be really awful,” co-founder and CEO Lav Odorovic tells. Through its partnership with solarisBank, Odorovic says Penta is able to offer a full-fledged business bank account, and

[58 https://techcrunch.com/2017/12/12/penta/](https://techcrunch.com/2017/12/12/penta/)
not a freelance or retail bank account labeled as business, like some other challenger banks do.

And, in a nod to marketplace banking, beyond a business bank account, the startup isn’t planning on developing additional financial products of its own to up sell, but instead wants to integrate the best third-party fintechs and other service providers. “We strongly believe that we can create the most value for our customers by partnering with the best fintech and business app providers and offering their products directly to our customers in our Business App Store,” says the Penta CEO. “Partners can include someone like TransferWise or Revolut for FX, or Debitoor/SMACC for accounting”. To that end, Odorovic say Penta’s typical customer is a high-tech startup founder who uses Slack or Trello with their team on a daily basis. “Their startup is a team of two or as big as 50 and is building tech that is hopefully solving a problem and making people’s lives easier!.” he says.

This is also reflected in Penta’s pricing model: the digital-only bank is offering a completely free account for “bootstrapped” or very early-stage businesses that doesn’t charge a monthly account fee and provides 10 free transactions per month. Thereafter, each additional transaction costs €0.10 cents per transaction.

For now, Penta is only available to businesses registered in Germany. The startup bank plans to go Europe-wide next year.

Berlin-based challenger bank Penta has raised €2.2 million (or $2.7 million) in seed funding[59]. The funding, led by London-based VC Inception Venture Capital, will be used to further expand Penta’s team, as well as product development. It launched publicly in Beta to businesses in Germany in December 2017, although there was initially a wait list. Part of the seed round will be used to launch the Penta marketplace of third party products. These will include automated accounting, low-cost FX, and multiple MasterCards with limits and permissions that can be given out to an SME’s various employees.

TIDE (UK)

Tide, a UK-based, mobile-first banking service targeting small and medium enterprise customers, has picked up a Series A of $14 million[60]. The investment was led by Anthemis (invested by Life.SREDA VC, exit as secondary deal) and Creandum, and is joined by Passion Capital and Local-Globe, which backed Tide in a $2 million seed investment last year. To that end, Tide has secured over $16 million in funding to date from VCs includ-

59 https://bankinnovation.net/2018/02/german-sme-challenger-bank-penta-raises-2-7m-seed-funding/
ing also LocalGlobe, Errol Damelin (Wonga), Alex Chesterman (Zoopla/ZPG) and William Reeve (Lovefilm, Graze, and currently CEO of Goodlord). Eileen Burbidge of Passion Capital is also Tide’s chairperson.

The plan is to open Tide in other markets outside the UK starting next (2018) year. The funding will be used to help Tide continue to build out its service. The company is not disclosing its valuation or revenues but CEO and founder George Bevis said in an interview that it is on track to have “tens of thousands” of business customers banking with it; it is growing at 10 percent each week; and it has ambitions to expand to more markets to serve the tens of millions of small businesses that are in existence today.

Tide promises faster account activation and a number of other services to speed up a businesses banking and accounting activities. These include faster and cheaper systems to generate invoices and get them paid. Tide’s unique selling point is that it provides a less expensive and faster service to smaller businesses who lack the staffing to run the accounting and admin sides of their businesses efficiently. “People who run small businesses waste time with crappy administrative tasks, so we work out smart ways with software to automate these things,” Bevis said.

The company has a transparent and low fee structure: among them, it charges 20 pence for any money transfer and £1 for any ATM withdrawals, but no transaction fees on card purchases, and no account fees – making Tide attractive to those businesses that have small turnovers but typically still face bank charges that are designed for larger businesses.

Typically, the amount of money that an SMB customer deposits with Tide is in the region of thousands of pounds, and less than £10,000, making them less attractive to average banks, while still subjecting those smaller companies to those bigger banks’ too-high fees and cumbersome processes. While part of Tide’s USP is built around the various tech tools it has created to help manage its customers’ money, the other part of how the business works is based on how it’s been stitched together behind the scenes. For now, Tide does not have a full banking license, and instead it partners with Prepay Solutions, which is partly owned by Mastercard and provides it with a white label service. It also ultimately bundles the values of all the accounts to hold them in bulk with Barclays, Bevis told us. Longer term, the company may choose to apply for a full license, but for now this is a better solution for how Tide is building its business, said Bevis, who points out that getting a partial license as Tide has done is not uncommon among fintech startups targeting small businesses.
Alongside this, Tide is announcing a new partnership with European online lender iwoca, to initiate its first loan program, offering up to £100,000 starting later this summer.

Several months later TechCrunch has learned that founder George Bevis is planning to step down as CEO[^61], and that the nearly three-year old company is actively headhunting for his replacement. The decision to start recruiting for a new CEO was instigated by Bevis in discussion with the Tide board, who are fully supportive. The thinking from the Tide founder is that now is a good time to look for a CEO experienced in scaling a company as the early-stage founding job is materially complete, including developing the core Tide product and finding market fit.

It comes at a time when Tide — which counts 30,000 small business sign ups — is said to be entering ‘scale-up’ mode, with a headcount approaching 100 employees, and ambitions to expand internationally. The company also announced that it had got a regulatory upgrade and is now authorised as an electronic money institution by U.K. regulator the FCA. This gives Tide more direct access to banking infrastructure and means that over time it will be less reliant on third-party providers and can have more flexibility in how it serves customers. Currently 7pc of all new business current accounts being opened in the UK are with Tide[^62]. “We want to grow a massive global business,” Bevis says. “We have a target to work with 50m customers by 2026.”

Earlier the service saw a rebrand, including a new ‘vertical’ design for the Tide card[^63] and the slogan “Do Less Banking,” a reference to the startup’s mission to make the lives of small business owners easier. Created by Tide’s in-house design team, the card ditches the traditional landscape format used by most banks for a portrait version instead. The design aims to reflect how people actually use cards today, says Tide head of design Caitlin Rich, such as by inserting them into ATMs to withdraw cash, slotting them into terminals when paying in shops and restaurants and keeping them in the back of their smartphones. The card has the user’s name and details on the back, with the aim of making the front look more “clean”, says Tide. The company adds that this feature also improves security as personal data is more hidden and therefore harder to copy. The front of the card features Tide’s new logo, a circular symbol with a small, raised swell. The logo takes inspiration from the Old Saxon version of the company’s name, tīd, which means time and nods to the company’s mission to make banking

[^61]: https://techcrunch.com/2018/03/22/tide-ceo-change/
quicker for its customers. Dark blue has been chosen as the brand’s core color, with the aim of looking “refined” and “understated”, says Rich.

**CivilisedBank (UK)**

CivilisedBank, the new UK business bank with a Local Banker network, has received a further round of funding from current investor Warwick Capital Partners [64], a London-based investment manager, subject to regulatory approval. Warwick has provided the majority of the funding for the build phase to date, and has taken up the opportunity to invest in the latest round of fundraising. CivilisedBank is also currently talking to existing and potential new investors about funding the Bank’s launch and growth.

Completion of the build phase, which will deliver the technology and operations to launch Local Banker services to business customers and online savings to retail savers, is on schedule for a launch in the first half of 2018. CivilisedBank will be the first challenger bank to introduce a business current account for established SMEs since Metro Bank’s launch in 2010.

Philip Acton, Chief Executive Officer, CivilisedBank said: “By eliminating sales targets, paying a competitive base salary as well as a share of company profits, we enable Local Bankers to focus on building long-term relationships. This is reinforced by our commitment to the Banker’s Oath - pledging all our staff to the best possible customer service.” “The CivilisedBank business model will reinvent traditional banking through a network of Local Bankers who visit customers at their business premises. With the support of a new technology platform, designed to enable relationship banking and taking speedy credit decisions, Local Bankers will be able to provide their SME customers with the best-in-class service that they have to date been missing out on.”

In September 2017 the Bank appointed [65] Philip Acton as CEO to lead the bank through its build phase towards launch in early 2018. The appointment follows the successful license application phase under previous CEO Gordon Dow, which culminated in May 2017 with the bank being granted Authorisation with Restriction (AWR) by the Bank of England. CivilisedBank has been given the green light from the City watchdog [66], paving the way for its launch next year as a digital lender focused on serving small businesses. The branch-free bank, which will roll out “local bankers” to forge relationships with businesses across the country, has received

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64 https://www.finextra.com/pressarticle/72704/civilisedbank-secures-further-funding-from-warwick-capital-partners
66 https://www.ft.com/content/93a3d317-93fd-3831-bad4-e9934596b5e3
regulatory approval from the Bank of England’s Prudential Regulation Authority. The digital lender will serve established companies – rather than start-ups – with a turnover of up to about £25m, by focusing on relationship-banking in a model akin to Sweden’s Handelsbanken. “A local banker can have a laptop, a phone, and all the systems that go with that.” Civilised plans on having up to 80 bankers over the next five years in most of the major towns across the UK.

The bank, which is planning to launch this year, will start by offering savings, loans and overdrafts, and will then aim to roll out business current accounts. “This is all about having a relationship, so a business current account makes big difference.” In order for businesses to make cash deposits and do basic branch banking activity, the new lender is striking a partnership with a traditional high street bank.

**StarlingBank (UK)**

Challenger bank Starling - which launched an app-only current account in April 2017 that has gained tens of thousands of users - is launching business accounts as it targets a pot of cash being paid out by RBS[^67]. It comes as the company targets “Pool A” of grants worth up to £120m for the development of business current accounts. The grant funding will come from Royal Bank of Scotland as a remedy for competition concerns stemming from its bailout by the UK government. “Having spent the past year building an award winning bank and personal current account, today we’re happy to announce that we’re launching a business account which offers all of the same great features and more to small businesses and entrepreneurs,” said chief executive of Starling Anne Boden.

Business which sign up for a Starling account will be able to use accounting and invoicing platforms from select partners through an in-app marketplace. Starling recently also announced its intention to launch a solution which will allow businesses to accept card payments directly into their Starling account. Throughout the year, new features will also be added to the product to cater for more complex businesses. This will include being able to make cash deposits at the Post Office. It will initially be designed for entrepreneurs, sole traders, and small business owners[^68]. Starling will launch in Ireland soon, where testing has already begun with select customers. It is planning a further £40m ($54 million) fundraising in the middle of this year to help fuel international expansion. Starling was given banking passport rights in neighboring country Ireland in June 2017, in a move seen to mark its first expansion to a European Union country.

[^68]: https://www.telegraph.co.uk/business/2017/10/04/starling-takes-big-banks-business-lending-play/
Part 4: The Arrival

Its plan to raise the cash follows the bank’s initial fundraising round in January 2016, which raised £48 million ($65 million), and was led by American trader Harald McPike[69]. An analysis[70] of documents filed with Companies House by Business Insider shows that McPike’s investment came in three tranches: December 2015: £3.15 million; July 2016: £14.84 million; April 2017: £30 million. An additional $54 million would bring the bank’s total investments up to $119 million.

The firm launched its Marketplace, a concept which allows third-parties to add their products to an ecosystem accessible via the Starling’ app. Starling Bank has been granted approval by the Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA) to offer customers a wide array of financial products by the mobile-only bank[71]. Starling Bank received a license to operate as a bank by the Bank of England in 2016. The digital-only challenger bank will now be able to provide; mortgages, consumer loans, ISAs, and other investment products via their App. Starling Bank is the first of the UK challenger banks to be granted such permission in an online marketplace. Starling Bank has decided to partner with a wide variety of financial service providers to facilitate choice and access via their digital bank. “I founded Starling to empower consumers to take control of their financial life, and this license will allow us to provide customers with easy access to products offered by other financial services companies from within the Starling app. This gives customers transparency and choice – something which the big banks have kept from them for too long.”

Holvi (Finland)

In 2016 Spanish banking giant BBVA has made another M&A play as it looks for a bigger role in the next generation of financial services: the company has announced[72] the acquisition of Holvi, an online-only bank for entrepreneurs and SMBs based out of Finland. (“Holvi” means “vault” in Finnish.) Holvi was founded in 2011 and had raised just over $4 million from investors that included Seedcamp and Speedinvest.

Its products include an online sales platform, an invoicing platform and a cash flow tracker. BBVA said Holvi will remain a continuing and separate business, with operations in Finland, Austria and Germany with plans to expand to other markets to target what it estimates are some 40 million startups and other small businesses in Europe. The company already

72 https://techcrunch.com/2016/03/07/bbva-continues-its-fintech-acquisition-run-buys-holvi-an-online-only-business-bank/
had a license as an Authorised Payment Institution, and is currently regulated out of Finland. “They use digital to bring a new approach to small business banking, where services essential to a business’ future such as invoicing are built into their core offer,” said Teppo Paavola, chief development officer and general manager of New Digital Businesses at BBVA. In May 2017 Estonia’s e-Residency program has partnered up with Holvi that will launch borderless digital banking[^73] for its borderless digital nation. The e-Residency program enables anyone to apply to become an e-resident of the Republic of Estonia, after which they can register a global EU company that can be managed online from anywhere in the world. The newly-announced partnership with Holvi also eliminates the need for Estonian e-residents to travel to Estonia in order to access business banking. Partnering with Estonia’s e-Residency program will allow Holvi to serve more location-independent entrepreneurs around the world, and the new partnership means that, for the first time, a complete EU company with a fully digital EU IBAN business account can be established anywhere with an internet connection via the e-Residency program. E-residents are able to open a company within a day and run the company remotely, apply for a business banking account and credit card, conduct e-banking, use international payment service providers, declare taxes and sign documents digitally. Holvi can be used by business-owners to manage a range of tasks including selling online, invoicing customers, managing expenses and generating reports for bookkeeping. E-residents from the U.S., under FACTA obligation or from high-risk and non-cooperative jurisdictions according to the Financial Action Task Force (FATF) are ineligible to apply for Holvi payment accounts. Setting up an account costs €35.00 (£30 per month) and applicants get a Mastercard as part of the deal[^74]. Business accounts registered with the company additionally come with an EU international bank account number. Previously, Estonia’s parliament changed the country’s laws to allow bank accounts to be opened remotely but it took some time for the remote account creation to become a reality.

**Azlo (US)**

Azlo, the US digital banking start-up, will launch in March 2018[^75]. The business challenger bank is majorly owned by Spanish BBVA, which is expanding to attract a more digital consumer base. The challenger, which targets SMEs and freelancers in a “gig economy”, was created within a BBVA division that funds fintech start-ups. It will use BBVA’s banking license as a partner bank, and its payment infrastructure in the

[^74]: http://www.wired.co.uk/article/eu-bank-estonia-eresident
US, although will be run independently, according to CEO Brian Hamilton. Azlo, which was founded in early 2017, has been testing an early version of the service in the past few months. According to the CEO, customers will be able to open the account online and will have access to digital tools for businesses, such as a service to send invoices to clients and request payments. Azlo, a digital small business banking account geared towards new entrepreneurs, freelancers and the gig economy is building a new platform designed specifically to make starting a business easier. Azlo, backed by BBVA Compass, is making its mark by eliminating the barriers to entry for these entrepreneurs by offering a no-fee, no-minimum business banking account. But no-fees does not mean no frills. The platform is leading the way with easy digital onboarding, automation and in-app invoicing. While the proliferation of digital solutions has substantially unbundled financial services, there is a new movement in fintech that is leveraging partnerships that create more value for customers. Azlo is making integrations with fintech partners a priority, and will be enabling its customers to interact with their accounts not only through mobile and web applications, but also through a set of user-accessible APIs. With Square and Stripe already built into the platform, and other payments services, accounting platforms and marketplaces coming soon, Azlo is providing integrations and partnerships with all the tools that people use to get paid.

“The nature of what it means to be a ‘small business owner’ is changing as the technology that revolutionized consumer digital interactions with their money begins to catch up with the business tools ecosystem. We’re especially excited about democratizing access to these services for a diverse set of founders in the new economy, where freelancing and side-hustling is becoming the norm, and banks have been slow to adapt” said Brian Hamilton.

Azlo noted, there are 44 million people in the U.S. who currently have a “side-gig,” and it is expected that by 2020, 43% of the U.S. population will be freelancers. Azlo is hoping to be the service that will fill the banking needs of those entrepreneurs.

Azlo expects to expand to other global markets in the future. Its goal is to cultivate an international community of entrepreneurs seeking financial independence and to provide valuable growth and advisory services. It is also aiming for a “full-service experience” that integrates with e-commerce, point-of-sale and marketplace providers - across languages and

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socio-economic boundaries, something which could prove valuable with plans to move beyond the US in the pipeline [79].

**N26 (GERMANY)**

If you’re a freelancer or self-employed person, you can now open a dedicated business account with N26 in just a few minutes [80]. These business accounts are pretty similar to the consumer accounts with one additional feature — you get 0.1 percent cashback on all your card purchases. Business accounts are available in all European countries where N26 already operates. You can’t open an account for a full-fledged company yet, but N26 says that more business features are coming soon.

It’s clear that the startup wants to recreate a retail bank for European consumers first and foremost. In its current state, business bank accounts seem like an afterthought. But it’s interesting to see that it took little effort to customize the product for freelancers and self-employed persons.

Business bank accounts also seem like another market altogether. Especially useful for freelancers [81] is the tags feature, which allows you to tag transactions associated with one project with as many hashtags as you want to and pull overviews for just that project. This also immensely simplifies splitting the business from the personal purchases for tax reporting.

In March 2018 N26 confirmed $160M the Series C funding round [82]. It takes the total raised by the 5-year-old German startup to $215 million. The startup has grown rapidly and now has over 850,000 customers (Monzo announced that it now has half a million digital current account holders) across 17 countries in Europe. It claims to sign up more than 2,000 new customers every day [83]. The company currently has 380 employees. It has processed €9 billion in payments to date.

The bank’s growth has attracted global attention and early investors include Valar Ventures, the investment vehicle of Silicon Valley billionaire Peter Thiel, and Horizon Ventures, the investment vehicle of Hong Kong businessman Li Ka-shing. Valentin Stalf, CEO and cofounder of N26, said in a statement: “We are very pleased to have Allianz X and Tencent leading our Series C.” N26 said the funding will be put towards international expansion, targeting US and UK launches later this year.

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80 https://techcrunch.com/2017/04/19/n26-launches-business-bank-accounts-for-freelancers/
83 https://www.ft.com/content/2abdba90-2b99-11e8-9b4b-bc4b9f08f381
N26 opened early access to users in the US in October 2017[^84], and this new capital injection will likely help it to bring its services to market in the country. It offers services including instant overdrafts, international transfers, as well as savings accounts from banks across Europe via its deal with German deposit marketplace Raisin. While N26 has seen great success in Europe, expanding to the US may be more difficult. The move to the US will put N26 in a completely new regulatory environment that is often made complicated by the country’s state-by-state laws. The neobank would therefore be wise to establish a separate US compliance team to ensure it stays on top of relevant regulations. Additionally, getting a banking license in the country is known to be very difficult, which is likely why N26 has opted to partner a US bank for the expansion. N26 should therefore think carefully about how to tailor its products for the US market to ensure high demand. (Monzo voicing interest and Revolut also allowing customers to sign up for early access too.)

**Revolut (UK)**

Revolut, the London fintech startup that offers a card and current account features, coupled with low currency exchange, is launching a new product aimed at businesses[^85]. Available in the U.K./Europe, the new Revolut offering enables companies to sign up for multi-currency accounts, where they’ll be able to hold and transfer money across 25 supported currencies at the interbank exchange rate, as well as doing things like issuing employees with corporate cards for “global fee-free spending”. “Additional features will include free and instant money transfers between companies that are signed up to Revolut for Business, real-time spending notifications, [and] dedicated customer support,” says the company. However, unlike TransferWise, which offers its account for free but generates revenue via a transparent fee whenever you exchange currency or transfer money out of the account, Revolut is charging a monthly fee ranging from £25.00 – £1,000 per month, depending on your business requirements. To encourage companies to make the switch, the first month will be free.

TransferWise offers account numbers for the U.K., Europe and the U.S., meaning that for most functionality it is just like having a local bank account in those supported countries. It also lets you store money in 15 other currencies. Similarly, Revolut provides a local U.K. current account, and a multi-currency IBAN number for the other 23 currencies it supports.

TransferWise is also planning to launch a card, but, for now at least, Revolut has the upper hand here with the ability to issue a company’s employees...

[^85]: https://techcrunch.com/2017/06/13/revolut-launches-business-accounts/
with free corporate cards for spending abroad. It is also worth noting that, unlike TransferWise, Revolut’s new business offering isn’t initially available to sole traders or freelancers.

With all of the above said, it’s probably a mistake to frame both TransferWise and Revolut’s new business product as taking chunks out of each other. The real enemy here are incumbent banks and the high currency exchange rates and inflexible multi-currency business banking they typically provide.

The company launched “current account” functionality in February 2017, putting it into neobank territory, and followed up in March by offering credit in partnership with Lending Works. Revolut, which has raised $90 million (€73 million)\(^{86}\) from Index Ventures, Balderton Capital and Ribbit Capital, among other investors, was founded by Mr Yatsenko and Nikolay Storonsky in 2013 and launched in July 2015. It now has 1.5 million customers across Europe and is shortly to expand into the United States, China, Singapore and Australia. Revolut said it is now signing up 6,000-8,000 customers a day, to give it 350,000 daily active users and more than 800,000 monthly ones, and that it has processed more than 60 million transactions worth a total of $10 billion (€8 billion). The UK-based digital banking alternative now boasts more than 300 employees. Revolut also said that it has broken even for the first time, a feat made possible due to rising monthly transaction volumes that have now eclipsed $1.5 billion, representing a year-over-year increase of 700 percent. The firm has also applied for a European banking license in a bid to add more traditional financial services.

Revolut has also launched an in-app cryptocurrency trading platform\(^{87}\), making it one of several fintech startups to adopt this functionality even as legacy institutions demur. One factor that sets Revolut’s cryptocurrency platform apart from those managed by other upstart firms is that it lets customers use their crypto asset holdings for overdraft protection. If a user accidentally overspends his or her fiat balance, the system can automatically convert his or her cryptocurrency holdings into fiat so that the transaction is not declined. Granted, cryptocurrency trading still represents a small component of Revolut’s business model, which continues to center around the company’s foreign exchange service. And as the firm expands into the US and other major crypto asset markets, it seems likely that interest in this service will continue to increase.


\(^{87}\) https://strategiccoin.com/bitcoin-friendly-startup-revolut-adding-8000-users-day/
**Qonto (France)**

French startup Qonto has some ambitious goals and wants to become the best bank account you can get when you start a company in France [88]. Just like N26 Wants to be a more modern bank for everyone, Qonto wants to do the same thing, but for business accounts. The premise is quite simple. You can open an account in just a few minutes and instantly pay and receive money thanks to an IBAN, physical and digital cards. After that, it’s all about providing the right features to the right set of users.

For instance, an employee might be able to pay with a corporate card for business purchases. Company members will need to upload receipts to file taxes later on. Accountants also want to see statements to figure out what’s happening. Qonto plans to provide all of this. And of course, Qonto also wants to integrate with other fintech products so that you can easily transfer money in other currencies, manage payments and more.

Behind the scene, Qonto partnered with Treezor for the back end. Treezor is the company that is actually going to manage your money. Treezor generates current accounts and debit cards for Qonto. On the other side of the equation, Qonto tailors the experience and handles the relationship with its own customers.

Founded in 2016, Qonto’s goal is to make banking more collaborative, efficient and connected using only a current account and a Qonto Mastercard. The company raised $1.7 million (€1.6 million) from Peter Thiel’s Valar Ventures (is also an investor in N26 and TransferWise) and Alven Capital. In July 2017 Qonto received €10 million additional funding from its two main investors, Valar Ventures and Alven Capital. Now with €11.6 million ($14,3M) in funding and more than 60 employees in their Paris-based headquarters, Qonto is set to make business banking great again.

Alexandre Prot, co-founder & CEO of Qonto, added [89]: “In 6 months we attracted more than 5 thousand business customers.” “We officially launched Qonto in July 2017, and by December we already had 5000+ companies using the service, it’s amazing. I do think we’re making a real change in the business banking experience. Our customers are really satisfied with Qonto, our Net Promoter Score is +60 (when it’s -14 for traditional banks, source: Deloitte report). We feel grateful because a lot of customers share their love for Qonto on social media and also by email with the team.”

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88 https://techcrunch.com/2017/01/16/qonto-wants-to-become-n26-for-business-banking/
“We created Qonto Finance Hub: we’re partnering and integrating with the best services our users ask for. So far, Qonto Finance Hub includes: iZettle, the European leader of mobile card readers; Legalstart, the leading French Legaltech: they take care of the admin hassle to incorporate a new company; Kantox, the best Fintech for FX transfers.” “We are working on adding new services to the Finance Hub: factoring, insurance and lending. Also, our international expansion is planned for early 2019, so stay tuned to hear more about Qonto launch in other EU countries!”

For €9 per month, you get a MasterCard, a French current account with an IBAN to receive payments and the ability to manage transfers and debits[^90]. But that’s just the beginning as you can order new cards for €5 per month or create virtual cards for €2 per month. Qonto lets you manage your user base. If you hire a new sales person, you can give them a physical card and let them access their transactions in the mobile app and on the site. You can block and unblock your card from the app, change the PIN code and get real-time notifications for each transaction. Administrators can adjust card limits and share transaction information with accountants.

**TransferWise (UK)**

TransferWise is quietly launching its new “borderless” accounts and linked debit card to just 1,000 consumers on January 9, 2018[^91]. TransferWise first announced the “borderless” account, which lets people hold up to 28 currencies through one account, last May. TransferWise’s new account is linked to a debit card that lets people spend in local currency around the world on one card.

The new consumer product brings TransferWise into competition with Revolut, the fast-growing London startup that also lets people hold multiple currencies through one account and spend it through a prepaid debit card. Both Transferwise and Revolut are backed by venture capital firm Index Ventures. TransferWise chairman and cofounder Taavet Hinrikus said in a statement: “The borderless account is a game changer for anyone living or working between countries. Opening a bank account abroad is incredibly difficult without a local proof of address, but the borderless account can be opened in minutes. For expats, second homeowners, freelancers, sole traders and more the borderless account is invaluable.”

London-headquartered TransferWise was founded 2011 as a platform for people to send money internationally online. More than £1.5 billion is sent over its platform each month. TransferWise has se-

lected Wirecard to issue a debit card for customer’s borderless accounts [92]. TransferWise privately launched the debit card service to 1,000 existing customers, with a full launch planned for later in 2018. The company noted that its borderless account “is like having a local bank account in another country, without ever having to set foot there. Both businesses and freelancers can get local account details (i.e. a unique account and routing number) for the U.S., Europe, and the U.K.”

In November 2017, TransferWise has raised an additional $280 million to fund its continued expansion [93]. U.S. asset management company Old Mutual Global Investors and Silicon Valley venture capital firm IVP led the investment round. The current funding brings the total amount of money TransferWise has raised since its founding in 2011 to $397 million. The latest round values the company at $1.6 billion. That is $500 million more than the valuation of the company during its last fundraising round in May 2016. Sapphire Ventures, based in San Francisco, Japan’s Mitsui & Co., and U.S.-Japan venture capital firm World Innovation Lab also joined the funding round as new investors. Previous backers of TransferWise, venture firm Andreessen Horowitz and U.K. asset manager Baillie Gifford, as well as billionaire Richard Branson, reinvested as part of the fundraising. TransferWise, which employs about 800 people, plans to use the money it is raising to continue to grow worldwide, with a particular emphasis on the Asia-Pacific region. TransferWise said it currently has two million users every month, who collectively transfer in excess of 1 billion pounds. The firm reported revenues of £67 million ($94 million) in the year ended March 31, 2017, more than double the previous year. It made an adjusted operating profit of £2 million, its first profitable year [94]. Matt Briers, chief financial officer at Transferwise, said the company would achieve another profit in the year ended March 31, 2018.

Denizen (US)

A Silicon Valley startup backed by Spain’s BBVA is launching the world’s first global bank account that will allow account holders to receive money in one country and pay it out in another without incurring any payment fees [95]. Denizen, created at BBVA’s in-house incubator and funded by the bank’s digital business unit, will target Spanish expats living in the US but will add up to 10 other EU countries by August.

“National borders act as barriers to the free movement of money, inhibiting individuals and limiting the potential for global commerce,” said Joa-

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[95] https://www.ft.com/content/cf1478ac-2e6b-11e8-9b4b-bc4b9f08f381
quín Ayuso de Pául, Denizen co-founder and chief executive. Denizen aims to “simplify banking for global citizens”, he said. The payments service TransferWise already offer borderless accounts, but with charges. Denizen charges no foreign exchange fees, provides a regular debit card rather than a prepaid one and allows clients to maintain a single balance across jurisdictions. A fee schedule for holding the account is currently advertised but the bank is understood to be reviewing the charge, according to a personal familiar with the plans.

The start-up is licensed as a payments company, not a bank. It will offer its borderless bank accounts through partnerships with BBVA and other banks in countries where BBVA is not licensed. Ian Ormerod, BBVA’s global head of new business, said it was suitable for “more than 50 million expats and 250 million migrants”. Britain’s departure from the EU is set to increase the number of Europeans living and working across national borders, as many professionals plan to leave their families in London and commute to their new company bases in the EU. Denizen employs about a dozen people and has hundreds of BBVA staff also working on its offering. At launch it will offer only current accounts but plans to expand into credit and other products.

Expats, immigrants and frequent world travelers are often forced to maintain multiple accounts across countries, and then transfer money between them to pay bills, deposit payments, and more. This results in significant fees and even delays access to funds. Denizen is co-founded by Joaquin Ayuso, the former co-founder and CTO of Tuenti, described as “the Spanish Facebook”[96]. Denizen’s initial funding round was provided by BBVA’s New Digital Businesses unit. Denizen is currently available to expatriates living in Spain and the United States. The service is set to expand in 2018, adding as many as ten top European Union countries in the second half of the year as well as the United Kingdom.

The firm is also planning to offer a white-label equivalent[97] to multinational companies with staff relocated overseas, providing an own-branded bank account that would enable users to keep their existing direct debits and regular payments in one country, and set up new ones in other countries.

Did I mention the GIG economy is no joke?

The millions of freelancers, contractors, temps and on-demand workers all have one thing in common: They’re all part of the ever-expanding gig

The gig economy may be bigger than you think. A broad definition of “gig economy” from WhatIs.com encompasses long-standing offline positions that would accurately be described as gig work: “an environment in which temporary positions are common and organizations contract with independent workers for short-term engagements.” The U.S. Bureau of Labor Statistics’ preferred term, “contingent worker,” aligns well with that definition of the gig economy, referring to temporary forms of employment that have existed long before the Ubers of the world. This definition included a wide range of alternative employment arrangements, such as workers employed by a temp agency or contract company, on-call workers, freelancers, and independent contractors.

Smaller businesses have often fallen in the gap between consumers (who as a group produce low margins but make up for it in scale) and big businesses (there are fewer of these but they are far more stable and higher-margin when you finally land them as customers). With slow sign-up processes, hidden charges and poor customer experience, traditional business banking has failed to meet the needs of the modern small business owner. Respondents raised concerns that bank staff are pressured to make short-term sales to boost low basic salaries, rather than focusing on long-term business development and client relationships.

If you’ve got a new business you should open an account in three-five minutes on website. Normally it takes weeks with a traditional bank. Banks have not learned lessons from the last financial crisis and SMBs believe banks are putting profits before customer service - it’s clear that customers want to see change. Despite many initiatives since the financial crisis in 2008, a quarter of executives at SMEs still think nothing has changed in banking. As an industry, banking needs to get back to the future and revisit customer service and personal relationships, something that has been lost over the years. As a sector, banks need to reconnect with SME customers. The current status quo isn’t reliable or effective enough if we are to foster a truly vibrant and innovative GIGs-driven economy.

How big is the gig economy?

A look at American freelancers: The 2017 Freelancing in America study by the Freelancers Union and Upwork estimated that nearly 57.3 million Americans - or 36 percent of the nation’s workforce - are now freelancing. The global consulting firm McKinsey found [99] that there are roughly 68 million freelancers in the US. CareerBuilder’s 2017 forecast indicated that more than half of employers were seeking contract workers, a 47% increase from last year. Employment in the gig economy is growing far

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[98] https://medium.com/@slavasolodkiy_67243/gig-economy-is-on-the-rise-34bea518bb2f
faster[^100] than traditional payroll employment, according to a study from the Metropolitan Policy Program at the Brookings Institution. Earlier this year, CNN reported that the gig economy was expected to include 43 percent of American workers by 2020. The gig economy workforce will double in four years, according to combined research by Intuit and Emergent Research[^101].

The demographics of gig workers contradict a common narrative that it’s all millennials looking for a sense of freedom or simply taking the work they can get in a tough job market. Although a recent Payoneer survey of 21,000 global freelancers found that more than half of all respondents were under 30, 1 in 3 U.S. respondents was over age 50, proving that professionals of all ages are taking advantage of gig work.

Katz and Krueger found that more than half of the gig economy’s jobs come from four main industries: healthcare, education, construction, and professional and business services. Other notable categories of industry in the gig economy include computer and mathematical, community and social services, personal care, legal services, transportation and warehousing, information and communications, and public administration. Corporations are also looking for[^102] more flexible and low-cost ways to hire, which freelancing platforms make possible. Increasingly Fortune 500 companies and global giants like Samsung are turning to online freelancing platforms like Upwork and PeoplePerHour to find designers, marketing staff, IT specialists and other knowledge workers. Intuit, the owner of TurboTax, is seeing the size of the gig workers first hand in its earnings.

A Pew study last year found that seventy-two percent of American adults had used one of eleven sharing or on-demand services, and that a third of people under forty-five had used four or more. To ‘speak millennial,’ you ought to be talking about the sharing economy, because it is core and central to their economic future.

For gigging companies, that shift means a constant struggle against[^103] a legacy of systemic control, with legal squabbles like the one in New York. Regulation is government’s usual tool for blunting adverse consequences, but most sharing platforms gain their competitive edge by skirting its requirements. Uber and Lyft avoid taxi rules that fix rates and cap the supply on the road. Handy saves on overtime and benefits by categorizing workers as contractors. Some gigging advocates suggest that this less regulated environment is fair, because traditional industry gets advantages elsewhere.

[^100]: https://www.cnbc.com/2016/10/13/gig-economy-is-growing-heres-how-much.html
[^103]: https://www.newyorker.com/magazine/2017/05/15/is-the-gig-economy-working
Coworking forecast: 26,000 spaces and 3.8 million members by 2020

By the end of 2017, nearly 1.2 million people worldwide will have worked in a co-working space. While 60% of all co-working spaces are not profitable, co-working has definitely been a huge trend in the last 10 years. WeWork hasn’t invented co-working, however, with more than 200 locations and 150,000 members in over 50 cities and 21 countries, it’s definitely leading this market. In fact, 14,000 co-working spaces is in operation worldwide by the end of the 2017 year.

According to the Global Coworking Survey there’s around 1.2 million people using coworking spaces worldwide. That number is projected to increase to 3.8 million by 2020. The number of coworking spaces have multiplied over the past decade, as millennials have entered the workforce and sought out a more flexible, individualistic work experience than generations past. Increasingly attracted to entrepreneurship, freelancing, and small startups, these days a laptop and a wifi connection can be all that’s needed to clock in. Coworking facilitates renting a workspace on a month-to-month basis. The commitment is minimal and the cost is lower than a traditional private office. For urban professionals, it’s a way to avoid the drudgery of working in a small, inner city apartment, or mooching coffee shop wifi all day.

Going to the office isn’t what it used to be. As more workers shift to on-demand and “gig” employment, the workplace has changed, and no company has capitalized on this more than WeWork. Founded in New York in 2010, WeWork opened its 200th location in December 2017. WeWork has more than 150,000 members in over 50 cities and 21 countries, according to the company’s website. It is currently valued at $20 billion after a $4.4 billion investment from Softbank announced in August. In November, WeWork bought Meetup, a New York City-based networking website and mobile app where users can organize and participate in offline group meetings based on shared interests. The company announced an investment in women-only coworking startup The Wing. WeWork is quietly recruiting startups to a new project called Area 51 Paradise Ranch - the invite-only program is meant to be an incubator and “launchpad” for startups.

Those who rent desk space or enclosed offices at WeWork are not just clients, they are members of a “community” under the WeWork credo. WeWork’s strength is building a sense of community, allowing its mem-

106 https://www.calcalistech.com/ctech/articles/0,7340,L-3727695,00.html
107 https://www.wired.com/story/weworks-new-startup-incubator-promises-fertile-paradise/
bers to benefit from the network of co-workers from diverse sectors. Started in New York, WeWork has expanded to some two dozen US cities and around the world in Brazil, Argentina, China, Japan, India, Ireland and Israel, among others. A seven-year-old U.S. startup is set to become the biggest private tenant in London\(^{109}\). WeWork’s annual revenues have topped $1 billion.

**Why the GIG economy needs a GIG-friendly bank**

Google it – it’s easy to find the stories about freelancers’ accounts being frozen and closed because traditional banks don’t understand their business and see their transactions as suspicious. The same problem like with crypto-related players. From the point of view of mentality, consumer behavior and tendency to try new, GIG economy representatives have already shown that they are more prone to working with clients from different countries and take payment in different forms and currencies. Including crypto. Not taking into account the problem of freelancers’ accounts and transactions, their bigger problem is loans accessibility. Their businesses are too small and their financial state too unpredictable to be interesting to traditional banks. That’s why they borrow money as individuals, or from their friends.

Imagine a bank that will understand the essence of your business, an online bank that enables to open bank accounts in different countries and accept different forms of payment (including crypto). 57 mln workers of the GIG economy in America (36% of adults, 43% by 2020) and loads of them in different countries are still misunderstood and underserved by traditional banks, and they seem like the most well-prepared (mentally and technologically) target audience for mass usage of fintech and blockchain technologies on the whole in their work and life.

Imagine that any company of 150000 WeWork members in 21 countries will instantly get not only their bank accounts but also an opportunity to freely transfer money to each other, including cryptocurrencies as a payment method. If you are a member of WeWork, you know that you can check anyone’s profile to see how he/she is active and trustful by the community – how long you are already a member, how often you have booked conference rooms for meetings with clients and partners, what feedback you have received… This is already more than enough to be given a loan because we instantly see who you are, what you do and whether other participants trust you. And if you know that it is as easy to pay other participants with cryptocurrency on our accounts as it is with fiat – why not to take a loan in crypto? Especially if the rates are lower.

4.3 What is the crypto blockchain capital of the US?

Crypto-friendly States of America

These us states are racing to become the country’s crypto capital

As cryptocurrency becomes more and more viable, states like Wyoming, California, Delaware, Tennessee and Arizona are racing to pass cryptocurrency-friendly legislation in an effort to become the blockchain capital of the country. The news out of Wyoming, Tennessee and Arizona comes after other states have already taken positive measures in relation to Bitcoin and other cryptocurrencies. Kansas and New Hampshire are two other states that have passed legislation with crypto-related exempts in their money transmitter regulations. Authorities in Nevada have promised to create favorable conditions for startups working with blockchain technologies. Most other states have yet to adopt their regulatory framework.

Is future something that happens to you, or something that you make happen?

- By 2023, blockchain technology will be actively exploited in the field of governmental services by leading world Powers.
- According to OECD’s prognosis, 10% of world’s GDP will be created with direct use of blockchain technology.

1 According to the survey of The World Economic Forum’s participants

A joint appearance of leaders from the Commodity Futures Trading Commission (CFTC) and Securities And Exchange Commission (SEC) before a meeting of the U.S. Senate Banking Committee had just one topic on the docket: cryptocurrencies and the U.S.’s role in the market’s regulation. Rather than calling for a crackdown on crypto trading and ICOs, the tenor of the high-profile meeting was generally pro-innovation while encouraging a measured but deliberate approach to regulating the emerging sector.
of blockchain technology. SEC chairperson Jay Clayton and Christopher Giancarlo of the CFTC spent most of their time discussing the challenges of regulating the burgeoning cryptocurrency market and reiterating the need for oversight, while also pointing to the potential of distributed ledger technology (DLT) to streamline the more traditional side of the financial sector.

Giancarlo’s testimony primarily covered the inter-agency coordination between the CFTC, IRS, SEC, the US Treasury’s Financial Crimes Enforcement Network (FinCEN), and international regulatory partners. Giancarlo asserted in his testimony that distributed ledger technology, such as bitcoin’s blockchain, has real-world utility outside of trading and speculation. In his statements, he cited a report claiming that DLT could save mainstream financial institutions as much as $20 billion in annual infrastructure and operational costs. He cited another report suggesting that “blockchain could cut trading settlement costs by a third, or $16 billion a year, and cut capital requirements by $120 billion.” “Moving from systems-of-record at the level of a firm to an authoritative system-of-record at the level of a market is an enormous opportunity to improve existing market infrastructure,” said Giancarlo in his concluding statements on the promise of blockchain for the financial services sector. In his remarks on policy considerations for the CFTC, Giancarlo referenced a Clinton-era regulatory position toward regulating the Internet: do no harm. Although Giancarlo said he “[believes] that ‘do no harm’ is the right overarching approach for distributed ledger technology,” it doesn’t necessarily imply a laissez faire, totally hands-off strategy.

Clayton’s closing remarks echoed Giancarlo’s. He said “we should embrace the pursuit of technological advancement, as well as new and innovative
techniques for capital raising, but not at the expense of the principles underpinning our well-founded and proven approach to protecting investors and markets.”

Chairing the session, Michigan Republican Rep. Bill Huizenga took a more positive view. He said Congress is not going to sit “idly” by if more investor protection is needed for cryptocurrency purchasers. At the same time, he praised initial coin offerings for giving investors opportunities to diversify their holdings in cryptocurrencies.

U.S. states with positive attitudes have advanced towards bitcoin legalization – a process that a growing number of elected officials consider inevitable, if not desirable. Numerous crypto-friendly bills have been introduced, and some of them have received approval in committees and houses of state legislatures. One wouldn’t necessarily think of states like Arizona, Tennessee, and Wyoming as the backbone of a great nation’s economy. How about… pioneers of its future development?

**Wyoming**

Wyoming is a state of rugged individualists that seems to have a penchant for being “first” on matters of no small importance [112]. Also dubbed the “Equality State,” Wyoming was the first state to grant women the right to vote and the first state to elect a female governor. As to business matters, it was the creator of the concept of a Limited Liability Company (“LLC”) back in 1977, and today, nearly two-thirds of businesses formed in the United States choose the LLC format. What’s next? Blockchain. Yes, the exciting new technology with seemingly unlimited use cases, and the underpinning of cryptocurrencies, is now on Wyoming’s radar screen in a very big way.

February has seen the introduction and passage of some very important bills in Wyoming 64th legislature—legislation that is attracting blockchain and crypto enthusiasts from around the world. Rumor has it that there is a land rush of sorts, manifested in the pursuit of office space. A Wyoming native and former Wall Streeter, Caitlin Long, has been one of the champions of the Wyoming initiative and is a co-founder of the Wyoming Blockchain Coalition. She is amazed by the response of an array of parties interested in Wyoming - not just among start-up U.S. companies but established European and Canadian companies with eyes on Wyoming.

Andrea Tinianow, the former director of the Delaware Blockchain Initiative who is still very active in the sector as an advisor and consultant, described the adoption of blockchain technology by jurisdictions as “a relay race, not a sprint. Delaware was first to address it, now Wyoming has taken the

The Wyoming legislature became the latest state to modify their state laws to challenge the Federal Reserve’s monopoly on money\(^\text{114}\). Titled the Wyoming Legal Tender Act, the new law defines gold and silver specie as “legal tender,” meaning it will be recognized as a medium of exchange for the payment of debts and taxes in the state. Practically speaking, gold and silver specie will be treated as money, putting it on par with Federal Reserve notes in Wyoming.

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The Senate passed HB103 with some technical amendments by a 25-5 vote. The House previously passed HB103 by a 44-14 vote. The bill became law without Gov. Matt Mead’s signature. It will go into effect July 1, 2018.

At the same time, Wyoming became the first state in the nation to explicitly recognize cryptocurrency as a new asset class[115]. As Rachel Wolfson of Forbes reported: The Utility Token bill was designed to exempt specific cryptocurrencies from state money transmission laws and is the first of its kind to legally define the way in which specific types of crypto tokens are treated by regulatory bodies. The bill excludes “developers or sellers” of tokens from securities laws under the caveat that they meet certain conditions. In order to meet these requirements, the token must not be offered as an investment and must be a vehicle for exchange as a utility token. The state of Wyoming is the first elected body in the world to define a utility token as a new type of asset class different from a security or commodity,” Caitlin Long, co-founder of the Wyoming Blockchain Coalition, told. “This has been a hot topic in Washington D.C. recently, as the SEC considers cryptocurrencies to be securities, FinCEN says they’re generally money, and the CFTC views them as commodities. Now, however, you have a state coming out and defining utility tokens as a new form of property, and property is generally the purview of state law. Long and the other members of the Wyoming Blockchain Coalition view the passing of House Bill 70 to be especially groundbreaking as this could be the first step to getting the U.S. congress to clarify how cryptocurrencies should be regulated.

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Unified digital ID

- Registration and confirmation of personal data. Blockchain-based identification management. The solution to citizens’ personal data theft issue.
- Integration with fingerprint scanners, voice and iris recognition and other personal biometric devices.
- Algorithms of user recognition according to personal gadgets connected with the system. This enables to achieve maximum level of integrity and operational compatibility within any infrastructure.
- There is a number of projects worldwide that cover the field of verification of authenticity and reaffirmation of access rights: 2WAY.IO, ShoCard, Guardtime, BlockVerify, HYPR, Onename, BAASIS ID, Civic.

Worldwide experience

- In 2016, UAE hereditary prince has approved state strategy for total conversion of state document management to blockchain protocol by 2020.
- Austrian company Neocapita has announced establishment of decentralized platform based on private fully-permissioned blockchain Stoneblock, aimed at solving the costliest problem of electronic government – creation of registries. Neocapita is negotiating implementation of Stoneblock platform in Afghanistan and Papua New Guinea.
- Swiss startup Proovis in collaboration with electronic government experts from Estonia has announced the launch of blockchain-based “app store” for electronic government by the end of 2017.

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This could be very positive for the cryptocurrency community if Congress can break the tie and clarify everything. It’s very exciting that Wyoming is the first state to define what a utility token is, setting an example of how this could become a standard under federal law. According to Long, “Dozens of small software companies have already formed Wyoming entities and some of these have already leased office space – 20,000 square feet and counting.”

**Delaware**

The founding director of the Delaware Blockchain Initiative has left the project[116]. Andrea Tinianow announced the move in a Jan. 2 post on LinkedIn, and confirmed to CoinDesk that she had left the government-backed initiative on Dec. 31. Tinianow added that she has already started in her new role as the chief innovation officer for Global Kompass, a Delaware-based management consultancy firm. Her departure is notable given Tinianow’s previous involvement in launching the Delaware Blockchain Initiative. That work led to the passage of a new law in Delaware clearing the way for corporations in the state to issue and store shares by way of a distributed ledger. The legislation was signed into law by Delaware lawmakers last July, a move that came more than a year after former Delaware Governor Jack Markell announced an ambitious blockchain roadmap for the state in May 2016. Tinianow said[117] the legislation also enables the state to have a regulatory framework to create its own blockchain-based services. “Of course, this is just the tip of the iceberg,” Tinianow said in her LinkedIn post. “I expect we will see much more from Delaware in the blockchain space.”

Delaware will need continued leadership to advance its blockchain goals. The state’s Department of Justice (DOJ) said it still had major concerns with cryptocurrencies that use blockchain and that more regulation is needed. The Delaware DOJ Investor Protection Unit says its chief worries are the volatility of cryptocurrency market values, the chance for fraud, lack of insurance by the Federal Deposit Insurance Corporation (FDIC) and susceptibility to “hacks.”

**Tennessee**

The cryptocurrency quest for legitimacy is set to be aided significantly by the state of Tennessee, which looks to officially accept electronic cryptocurrency payments for financial transactions[118]. Though it is currently not illegal to conduct business transactions with Bitcoin in The Volunteer State, Democrat Rep. Jason Powell would like to lead the charge in official-
ly recognizing payments with digital currencies as legal. In a presentation on blockchain technology from Jan. 24th, Powell explained: “We are not just competing with other states in the technology and the space, we’re competing with the world. In making sure that Tennessee has meaningful blockchain legislation, it is really important to say that Tennessee is supportive of this technology and we want to be a leader in this innovation.”

From other side, on January 31, 2018, legislators in Tennessee published[^119] a proposal for a bill that would restrict the state government’s public employee retirement funds from engaging in cryptocurrency-related investments. Authored by Tennessee Representative Michael Curcio, a newly proposed bill, HB2093, would modify the state’s code to effectively prohibit trustees from using cryptocurrencies as investment vehicles in state government retirement trusts. The bill’s language may imply a mistrust of volatile cryptocurrency-related investment vehicles, but its inclusion validates cryptocurrencies as a state-recognized “legal investment” – just one that, if the bill is enacted, employee funds will not engage with anytime soon.

Also awaiting legislative approval in Tennessee is HB1507, filed on January 10, 2018, which echoes bills introduced in Florida (HB1357) and Nebraska (LB691): all the filings relate to executable distributed code contracts (ED-CCs), or smart contracts. HB1507 would make it so that signatures secured

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Part 4: The Arrival

through blockchain technology would carry the same weight as an electronic signature. According to the bill, the same can be said of contracts recorded with blockchain technology. In addition, the fact that a contract exists in the form of an EDCC may not be the sole basis to determine its legal enforceability – essentially lending credence to EDCCs and blockchain technology by incorporating them into state code, even though said code would seek other sources of validation to contracts besides the EDCC alone.

Arizona

Lawmakers in Arizona have proposed a new bill allowing residents to pay their taxes in bitcoin [120]. State Rep. Jeff Weninger, a co-sponsor for the bill, which the senate finance committee has already passed, said the measure will send a signal to the U.S. and possibly worldwide that Arizona is a place for blockchain and digital currency. The law would enable the ease of being able to pay taxes in the middle of the night or while at home watching TV, Weninger said. In a few years, he said the issue won’t even be a question.

Not all lawmakers support the measure. Arizona State Senate Minority Leader Steve Farley said if the proposal passes, it could put all taxpayers at risk if bitcoin crashes. The state would have to take responsibility for how to exchange the bitcoin.

Jack Biltis, who owns Tag Employer Services, an Arizona company that allows employees to be paid in bitcoin and invest part of their 401(k) retirement plans in bitcoin, said a new technology is always a bit scary and thrilling at the beginning, as it was with the Internet. He said the world will look very different in 20 years, and the people who will be successful are those that embrace the technology now and are on the leading edge of the curve.

In April 2016, Arizona Governor Doug Ducey signed a bill that Weninger introduced that officially recognizes blockchain signatures and smart contracts. The law requires smart contracts to be upheld and enforced under Arizona law, according to a Digital Currency Executive Brief. The law states that “a record or contract that is secured through blockchain technology is considered to be in an electronic form and to be an electronic record.” The governor also signed a bill into law in April that prohibits the blockchain technology from being used to track firearm information. The law prevents anyone – although law enforcement is exempt under the rule – from using the distributed ledger to track when a firearm has been fired. A bill has also been proposed that would recognize cryptocurrency as currencies and not commodities.

California

California has been the latest addition to the list of states that are now actively looking to incorporate blockchain technology into their daily mode of operation \(^{121}\). California lawmakers have introduced a new Assembly Bill on the 20th of Feb that pushes for the recognition of blockchain contracts, signatures and transactions for all legal purposes. However, the tabled bill still needs to be approved by the state assembly and signed off by Governor Jerry Brown before it can take effect and become operational.

The potential law reform is being championed by Ian Calderon – one of the youngest members of the California state assembly. He has been a big proponent of the blockchain for quite some time now and is hoping to legalize the application of this technology for storing digital signatures, which in turn will allow crypto smart-contracts to be used for legal reasons. In the bill tabled by Mr. Calderon, he clearly defines the meaning of digital signatures and how they can be used to facilitate government transactions: “A signature that is secured through blockchain technology is an ‘electronic signature’ and even updated the term ‘contracts’ to smart contracts or self-executing pieces of code that trigger when certain conditions are met like, reaching a particular block number on blockchain.”

The bill also expresses clear guidelines and recommendations regarding the securitization of personal data within the blockchain. This will be especially useful for those individuals who like to carry out interstate and international crypto exchanges on a regular basis. The biggest challenge that seems to lay ahead for Crypto within the US is that of educating Congress members about the advantages of such technologies, especially within the administrative domain. According to Brian Forde, a politician running for a congressional seat in California, emerging blockchain services are already available for government use, but due to the “close-mindedness” of many top Senate leaders, the adoption of blockchain has been a bit slow. However, with California getting onboard the crypto train, it is now a matter of time before other states follow suit and work towards integrating blockchain solutions to streamline local administration, and thus make the entire legislative process more transparent and inclusive.

Confronted with substantial federal funding reductions, Berkeley, California, is turning to crypto tokens as away to fund services like affordable housing \(^{122}\). Mayor Jesse Arreguin and councilman Ben Bartlett have teamed up with San-Francisco-based investment startup Neighborly to advance an initiative that would divide municipal bonds into micro-bonds and then

\(^{121}\) https://cryptoslate.com/california-introduces-bill-legally-recognize-blockchain-records/
sell them as tokens in what they call an “initial community offering [123].” “Essentially, we would like to explore some new ways of financing because we have terrific needs, and we’re concerned about our ability to fulfill our moral and legal obligations for our residents here,” Bartlett said, adding: “The resistance requires a coin.” Bartlett and Arreguin said that breaking up the bonds would allow people to invest in projects of their choosing in low denominations. Meanwhile, transferring the buying and selling process to a blockchain would mean reduced transaction costs and transparent city finances. Because the tokens would be backed by the underlying bond, Bartlett says the initial community offering would be less risky than a typical ICO. Likewise, Neighborly CEO Jase Wilson said, “Berkeley is an extremely strong and fiscally disciplined borrower.”

**Solution #3**

**Unified social scoring**

- Connection of all personal documents with credit history bureaus, mobile connection operators, social networks etc.
- Tracking behavior in online and offline services, encouragement of positive social behavior.

**Texas**

Texas’ securities board issued its fourth emergency cease-and-desist order in just over a month on a cryptocurrency company [124]. The orders follow a roughly one-month undercover investigation of cryptocurrency investment programs, said Joseph Rotunda, director of the enforcement division at the Texas State Securities Board. Other states have not yet taken as dramatic steps against cryptocurrency fraud.

DavorCoin is violating sections of the Texas Securities Act by offering unregistered securities for sale and misleading the public, Securities Commissioner Travis J. Iles said. The Texas State Securities Board pre-

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124 https://www.cnbc.com/2018/02/05/texas-takes-the-lead-on-states-cryptocurrency-crackdowns.html
viously issued emergency cease-and-desist orders on: Jan. 24 against a Hong Kong-based company selling a r2b coin, “promising investors that the digital currency will soon be one of the world’s most valuable.”; Jan. 4 against BitConnect, which “is soliciting investors for cryptocurrency-based programs that the company claims will deliver annualized returns of 100% or more.”; Dec. 20 against USI-Tech Limited, “an overseas firm that is promising low-risk, triple-digit returns from investments tied to Bitcoin mining.”

The Texas cease-and-desist orders follow a roughly one-month undercover investigation of cryptocurrency investment programs, said Joseph Rotunda, director of the enforcement division at the Texas State Securities Board. “We confirmed our suspicion that they were being marketed toward retirees,” Rotunda said. “They were not disclosing the information that needs to be disclosed to an investor.”

Other states have not yet taken as dramatic steps against cryptocurrency fraud. Florida, North Carolina and Kansas all issued investor alerts on cryptocurrencies and initial coin offerings in January, after a similar warning from Massachusetts in December. North Carolina’s Securities Division also issued a temporary cease-and-desist order on BitConnect five days after Texas’ emergency order on the company.

Texas appeared ahead of the game in this case as well. In early January, the Texas Department of Banking had issued a cease-and-desist order on AriseBank. Rotunda is also vice chair of the enforcement section committee of the North American Securities Administrators Association. “In both
of those roles we’ve been monitoring cryptocurrencies quite a bit,” he said. “I think what we’re doing right now is we’re adapting to a new way of selling securities.”

Puerto Rico

Puerto Rico became part of the United States following the Spanish American War in 1898, with Commonwealth status introduced in 1952. The residents of Puerto Rico are, therefore, citizens of the United States. There is no Central Bank in Puerto Rico, it is the US Federal Reserve Bank which acts as a Central Bank, determining the receivable interest over loans for the banks which are members and regulates Monetary and Credit Policy. Bank deposits in Puerto Rico are guaranteed up to $100,000 USD by the Federal Deposit Insurance Corporation. Banks are insured by the Federal Deposit Insurance Corporation (FDIC). They are subject to all Federal controls applicable to banks in the United States of America. Commonwealth government supervision of banks is done through the Commissioner of Financial Affairs (Comisionado de Instituciones Financieras). Banks in Puerto Rico are part of the U.S. banking system with a few differences in tax laws. The Office of the Commissioner of Financial Institutions of Puerto Rico supervises and regulates the territory’s financial sector to ensure its safety and soundness, as well as to guarantee strict adherence to all applicable laws and regulations.

A report by the Federal Reserve Bank of New York demonstrates\(^1\) that the movement of Puerto Ricans away from the territory is not merely

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a consequence of the depression that began just over a decade ago – and is even less due to the current debt crisis – but, instead, is a long-term phenomenon, although the economic decline and debt crisis have exacerbated the migration. The “large outflow of potentially productive workers and taxpayers is an alarming trend that is likely to have profound consequences for the Island for years to come,” concluded the blog post.

From 2000 through 2015, net migration away from the islands, which now have a population of about 3.4 million, was 600,000. Together, migration and natural causes have resulted in the population declining 10% from its peak of more than 3.8 million between 2004 and 2015. It is now lower than it was 25 years ago, according to the analyses. (Economic activity is now back down to its 1993 level.) The new analysis also clarified that migration away from Puerto Rico is different from the ‘brain drain’ it is often said to be. Those moving tend to have less skills and earnings than those who remain in the islands. They are also younger than the average Puerto Rican. With lower birth rates, this has significantly increased the average age of residents of the territory – and the natural need for social services.

Economic growth in Puerto Rico began to falter in the 1970s. The islands have also been underdeveloped economically compared with the States. In June 2016, Janet Yellen, who heads the Federal Reserve, told[^126] a Sen-

[^126]: http://fortune.com/2016/06/21/fed-wont-bailout-puerto-rico/
ate panel that the U.S. central bank would not rescue Puerto Rico if the territory is unable to pay its bills. She said it was unlikely for the Fed to lend money to the Puerto Rican government, or to give money to banks there if they run into trouble. The government of Puerto Rico is more than $70 billion in debt, and has said it is unlikely to be able to pay back creditors in full. Even if the Fed didn’t want to lend money to Puerto Rico, some have suggested that the Fed could buy up Puerto Rican debt in order to drive down interest rates there and potentially allow the territory to borrow more money. Yellen told the Senate that she thought the Fed’s ability to buy municipal debt was very limited. The Fed has bought up trillions of dollars in mortgage and Treasury debt since the financial crisis and the Great Recession. So in theory it seems like it would be possible for the Fed to buy up municipal bonds in the same way. But to do so the Fed would have to make the case that buying up Puerto Rican debt would somehow boost the U.S. economy in general. Yellen didn’t seem to think so. She also didn’t seem to think that a Puerto Rican default would have much impact on the U.S. economy in general. “It’s not a matter for the Fed,” Yellen said.

In 2017, less than a week into the massive blackout that followed Hurricane Maria and essentially turned Puerto Rico into a cash-only economy, one top local banker became so concerned about the supply of bills that he called the Federal Reserve. William Dudley, the New York Fed president, put the word out within minutes, and ultimately a jet loaded with an
undisclosed amount of cash landed on the stricken island, according to Richard Carrion, the Popular Inc. executive chairman who made the call. He and Chief Executive Officer Ignacio Alvarez reflected on the chaotic early days of the crisis. “We thought the cash was going to be a problem,” said Carrion, 64, whose bank is the biggest in Puerto Rico by deposits. “The magnitude of this is something we haven’t experienced.”

In Puerto Rico, the survivors of Hurricane Maria are desperately scrambling for many of life’s essentials[^128] -- food, fuel, water. And cash. Banks are closed or running low on money. Many ATMs are flush out of bills. One reason why? There aren’t enough drivers to ferry cash around in armored cars to standalone ATMs. “We cannot transport cash to the ATM that’s off premise if we don’t have enough security to do it,” says Alvarez. That’s not all. Because of widespread power outages, bank branches are functioning on generators. Banks can’t get security software back on line. Bank employees don’t have enough gas for their cars to drive to work. There is no public transportation.

The executives described corporate clients’ urgent requests for hundreds of thousands in cash to meet payrolls, and the challenge of finding enough armored cars to satisfy endless demand at ATMs. The blackout also means that this corner of credit-card dependent America is relearning how to function almost entirely in cash. When some generator-powered ATMs finally opened, lines stretched hours long, with people camping out in beach chairs and holding umbrellas against the sun.

Puerto Rico has had an awful decade[^129] – and it’s about to get worse. First came a brutal 10-year recession and financial crisis that drove businesses from this island and left 44 percent of the population impoverished. Then, in September, Hurricane Maria, a powerful Category 4 storm, shredded buildings, wrecked the electrical power grid and possibly led to more than 1,000 deaths.

Now Puerto Rico is bracing for another blow: a housing meltdown that could far surpass the worst of the foreclosure crisis that devastated Phoenix, Las Vegas, Southern California and South Florida in the past decade. If the current numbers hold, Puerto Rico is headed for a foreclosure epidemic that could rival what happened in Detroit, where abandoned homes became almost as plentiful as occupied ones. About one-third of the island’s 425,000 homeowners are behind on their mortgage payments to banks and Wall Street firms that previously bought up distressed mortgages. Tens of thousands have not made payments for months.

How fintech could help Puerto Rico? Puerto Rico was already struggling[^130] before the storm. The island has been in a recession for more than a decade, the poverty rate was 45 per cent and unemployment was around 10 per cent, higher than any U.S. state. Manufacturers of medical equipment and pharmaceuticals, which are the most important segment of the economy, have been shedding jobs for years. Now everything from multinational companies to small businesses and ranches are scrambling to get enough fuel to run generators while their employees struggle to even get to work.

Before the storm, the island’s government was in the midst of bitter negotiations with creditors to restructure a portion of its $73 billion in debt, which the previous governor declared unpayable. Rossello appeared to warn the bondholders that the storm had made things worse. “Puerto Rico practically will have no income for the next month,” he told reporters.

Puerto Rico is struggling to get back[^131] to a sense of normality after Hurricanes Irma and Maria dealt the island a devastating one-two punch. Already grappling with serious economic issues before the hurricanes struck, a debt crisis surpassing $70 billion forced the island to file the largest-ever special U.S. municipal bankruptcy earlier this year under a new Congressional law called PROMESA. Citizens seeking new economic opportunities outside of Puerto Rico has resulted in net negative migration, substantial workforce losses and a shrinking talent pool. What if fintech could be one of the solutions in the island’s path to recovery?

Agile, customer-experience-focused financial technology businesses continue to drive innovation, modernization and access to credit in America’s financial services marketplace when banks and other traditional providers can’t meet consumers’ needs. For example, fintech lenders help consumers and small businesses alike find financial products and services that meet their credit needs, whether it’s a short-term loan for an emergency expense or capital to help grow a small business -- even when these applicants have been denied by their banks. No longer the Wild West of several years ago, the fintech landscape has begun to mature and normalize as the Consumer Financial Protection Bureau (CFPB) and the Office of the Comptroller of the Currency (OCC) offer more regulatory certainty and federal guidance, which, if done intelligently, can help these businesses thrive. Many analysts expect an influx of capital to follow this newfound stability.

The fintech sector is a natural fit for Puerto Rico’s entrepreneurs and for the island’s economic and industrial reawakening. Compared to manufacturing, healthcare or other industries, fintech businesses are relatively easy to start and many can operate anywhere with a stable internet connection and remote server access, making it a promising business venture that will allow remote, geographically isolated entrepreneurs to reach consumers regardless of a lack of physical contact.

From a competitive standpoint, Puerto Rico’s Act 20 and Act 22 make the island an attractive place for fintech investment. This initiative allows investors who establish a residence in Puerto Rico a low-tax alternative for doing business. The island’s intent with Acts 20 and 22 is to entice new business-
es to locate in Puerto Rico. As a result, San Juan already has a significant banking and investment sector and a promising technology and banking workforce, making Puerto Rico an outstanding choice for fintech startups.

The fintech sector is driving innovation in financial services by meeting the changing demands of American consumers and small businesses. Puerto Rico needs a surge of economic development opportunities following Hurricane Maria, and fintech offers the island what it needs now more than ever as the island rebuilds and resurges.

Perhaps, the fintech and crypto-community could help Puerto Rico with recovery and talent acquisition, and this land could become crypto-friendly in exchange?

Dozens of entrepreneurs, made wealthy by blockchain and cryptocurrencies, are heading en masse to Puerto Rico this winter[132]. They are selling their homes and cars in California and establishing residency on the Caribbean island. They want to build a crypto utopia, a new city where the money is virtual and the contracts are all public, to show the rest of the world what a crypto future could look like. Blockchain, a digital ledger that forms the basis of virtual currencies, has the potential to reinvent society — and the Puertopians want to prove it.

Puerto Rico offers an unparalleled tax incentive: no federal personal income taxes, no capital gains tax and favorable business taxes — all without having to renounce your American citizenship. For now, the local government seems receptive toward the crypto utopians. “The U.S. doesn’t want us. It’s trying to choke off this economy,” Mr. Minor said, referring to the difficulties that crypto investors have with American banks. “There needs to be a place where people are free to invent.”

The territory’s go-to blockchain tax lawyer is Giovanni Mendez. He expected the tax expatriates to disappear after Hurricane Maria, but the population has instead boomed. “It’s increased monumentally,” said Mr. Mendez, who has about two dozen crypto clients. “And they all came together.” All across San Juan, many locals are trying to figure out what to do with the crypto arrivals. Some are open to the new wave as a welcome infusion of investment and ideas. “We’re open for crypto business,” said Erika Medina-Veccini, the ex-chief business development officer for the Department of Economic Development and Commerce, in an interview at her office.

**Country-in-the-cloud, state-as-a-service**

Currently, the global cryptocurrency market is largely dominated by four regions: the US, South Korea, Japan, and Hong Kong. The US and Japan

settle more than 60 percent of the global bitcoin and cryptocurrency trades, while South Korea and Hong Kong account for more than 10 percent of the market. In the past, leading cryptocurrency markets like Australia with innovative startups and well-backed early-stage companies struggled to demonstrate success due to the inefficient and impractical policies imposed by the government. Still, the Australian bitcoin market is lagging behind other regions.

The primary motive of the government of Belarus in providing a favorable environment for both cryptocurrency businesses and investors is to better facilitate the growth of its digital economy, beginning with the fastest growing technology and financial network in bitcoin. Similar to Zug in Switzerland, better known as Crypto Valley, the Belarus government plans to address the rapidly growing demand for ICOs and token sales by establishing an ecosystem in which blockchain projects and startups can freely, without being concerned about regulatory conflicts and boundaries, issue crypto-tokens.

The most interesting (and perspective) blockchain-related spheres are strictly outside of the cryptocurrencies’ realm – they include solutions for healthcare and logistics industries, land sale support, governmental and corporate workflow solutions.

Estonia, a global leader in e-government, has recently launched a unified medical record database, accessible to hospitals and insurance com-

133 https://thenextweb.com/guests/blockchain-industry-grew-18-2-whole-fintech-market/
companies, in partnership with the blockchain startup Guardtime. Prescript
works along the same lines in partnership with SNS Bank and Deloitte in
the Netherlands, BitHealth - in the United States. Swedish government
together with ChromaWay and a partner bank is going to test blockchain
smart contracts for a land registry, which are to simplify the life of buy-
ers, sellers, and banks, using land as a collateral on regular basis. BitFury
launches a similar initiative in Georgia, whereas BitLand enters Ghana
and Honduras (and have plans to expand to Nigeria and Kenya). UAE
launches Blockchain strategy to become paperless by 2020. British Ev-
erledger assists banks, insurers and open marketplaces in a reduction of
risk and fraud by digitally certifying diamonds, art objects and high-end
bottles of wine.

You can say as much as you like that there is no material value behind the
crypto and tokens. Ok. But how much the company that aggregates the
greatest number of talents is worth? And there no need to push them to
work together – they have already agreed on it on their own. They do not
need infrastructure because they have built their own technological rails.
They do not need external rules, which have been lowered from the top
down because they have agreed among themselves on the move. They
do not need supervisors because they are a self-organizing community.
Naval Ravikant wrote on Twitter: «For a purely reflexive store-of-value
like Bitcoin, the underlying metric to track isn’t number of transactions, it’s
number of believers».

134 https://twitter.com/naval/status/905641120654254081
As Democrat Rep. Jason Powell explained: “We are not just competing with other states in the technology and the space, we’re competing with the world. In making sure that Tennessee has meaningful blockchain legislation, it is really important to say that Tennessee is supportive of this technology and we want to be a leader in this innovation.”

Japan

In the case of Japan, this country is one of the best examples how crypto-friendly regulation is helping them attract talent for different industries, rather than only wondering if it is a bubble or not.

The Switzerland-based Institute for Management Development assesses the ability of a country to develop, attract and retain talent. Recently Hong Kong topped Singapore in a tight race for the best of Asia’s talent, according to 2017 rankings by the IMD. Singapore scored 75.63 versus 77.9 for its regional rival, while both took a big lead against 10 others in Asia. In comparison, in Japan, there are relatively few startups in a country that often ranks low for entrepreneurship.

About a year ago, Japanese financial firms started to discuss about the risk falling behind on the world stage as efforts to adopt blockchain technology that promises to save billions of dollars in backroom processing and revolutionize the finance industry are hamstrung by a dearth of specialists.

Consequently, blockchain talent is scarce, and finance houses risk being left behind as global peers pass blockchain savings on to clients. A shortage of talent, however, may delay Japanese finance houses in reaching the same level of competitiveness. The paucity of blockchain experts in particular is partly down to the stunted growth of fintech start-ups in Japan. Japan has produced relatively few blockchain ventures, and those that have emerged have attracted less funding than global rivals. And now, one year after, Japan became one country that has shown particular enthusiasm for this new paradigm[^136]. The government in Tokyo passed a law recognizing bitcoin as legal tender back in April; while just last week, regulators in the country endorsed 11 companies to operate cryptocurrency exchanges. The volume of bitcoin being exchanged with Japanese yen has skyrocketed in recent months—presumably as a result of this high-level acceptance. The broader potential of cryptocurrencies and the blockchain tech that underpins them could serve to boost Japan’s economy. One positive result of this would be greater willingness to use blockchain in settings outside of cryptocurrencies, such as banking and public services. The secure-by-design technology could be used to create a nationwide digital identity system for Japan along the lines of India’s Aadhaar.

**Canada**

The Canadian Securities Exchange (CSE) announced[^137], that they will soon launch a securities clearing and settlement platform based on the Ethereum (ETH) Blockchain that lets companies raise capital with security tokens. According to the CSE announcement, companies using the Blockchain-based platform can issue Security Token Offerings (STO) to investors as a means to raise capital. Those issuing tokens via the CSE platform will “be subject to full regulation by applicable securities commissions”. The CSE positions their STOs to companies as an alternative to running an Initial Coin Offering (ICO), which the exchange misleadingly calls unregulated. The press release notes that the platform will benefit both “large, established companies,” as well as, “start-up entrepreneurs seeking to access the public capital markets for the first time.”

**Spain**

The government of Spain is preparing blockchain-friendly legislation including possible tax breaks to attract companies in the emerging blockchain technology sector[^138]. “We hope to get the legislation ready this

year,” said MP Teodoro Garcia Egea, who is preparing a comprehensive cryptocurrency-related bill. “We want to set up Europe’s safest framework to invest in ICOs.”

Too much regulation could stifle innovation and push promising blockchain-based firms to relocate to less restrictive jurisdictions offshore. According to Garcia Egea and the Popular Party, the ruling political party of Spain to which the lawmaker belongs, it’s in Spain’s interest to attract and keep those firms, and, therefore, the country should adopt a blockchain-friendly regulatory approach. Garcia Egea added that the bill in preparation was inspired by existing blockchain-friendly regulatory frameworks such as those that enable the Crypto Valley in Switzerland. It could include ways to attract investment in blockchain technologies, such as a threshold below which a cryptocurrency investment wouldn’t need to be reported to the regulator, and specific regulations to make it attractive for entrepreneurs to use a blockchain to carry out initial coin offerings, or ICOs, as a financing tool. It seems likely that, if Garcia Egea and the Popular Party manage to convert their vision into law, Spain could become one of the few crypto-havens in the Eurozone, which could result in many innovative technology developers and ICO operators relocating to Spain.

Malaysia

Malaysia’s central bank, Bank Negara, is set to release a “concept paper,” calling for the public to decide the fate of cryptocurrencies in the coun-
try[139]. Bank Negara governor Muhammad Ibrahim is said to have assured the bank will neither ban nor recognize cryptocurrency. “Basically, we will let the cryptocurrency promoters including bitcoin, ethereum and ripple to be more transparent, the methods to be more transparent and people behind the scene are to be more transparent too. By doing so, the public can decide on its own if they want to invest in cryptocurrencies.”

Malaysia in recent years has been an economic tiger, its economy growing faster than more powerful regional cousins South Korea, and even out-pacing France and Australia. Its government is unusually paternalistic with regard to the economy, however, though less so as it has developed. Politically it occupies an odd space in Southeast Asia as a federal constitutional elective monarchy. Something akin to the Westminster system, the king is chosen in rotation by hereditary families, and he acts as ceremonial head of state, appointing upper parliament house members and ministers. Mr. Ibrahim’s comments follow Finance Minister II Johari Abdul Ghani who explained the country wouldn’t ban cryptocurrency completely so as to avoid curbing “creativity and innovation in [the] financial sector”.

Back in December of last year, the central bank put together crypto regulatory guidelines for both citizens and businesses in the country. Malaysia’s new Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) policy guidelines specifically addressing cryptocurrencies came into effect[140]. The new regulations compel Malaysian virtual currency exchang-
es to mandate KYC adherence, including the collection of ID documentation. The policy document states that Malaysian cryptocurrency exchanges “are required to conduct customer due diligence on all customers and the persons conducting the transaction when the reporting institution establishes business relationship with customer and when the reporting institutions have any suspicion of money laundering or terrorism financing.” The regulations mandate that Malaysian virtual currency exchanges collect the full name, address, and date of birth of all customers, in addition to ID documentation. As such, the bank stated that “digital currency businesses are not covered by prudential and market conduct standards […] applicable to financial institutions regulated by” Bank Negara Malaysia.

Bahrain

The Government of Bahrain is showing keen interest in cryptocurrencies (digital assets) like many of the other nations in the Middle East[141]. As a part of its latest Fintech Bay initiative, Bahrain is willing to facilitate fintech companies from all around the world and provide them with world-class infrastructure to set shop in the country, that’s now eyeing a move from oil to innovation.

NEW monetary policy

- “Helicopter money” term was offered by Nobel prize laureate in economics Milton Friedman in 1969 in his work “Optimal quantity of money”. Its essence is the following: you can raise inflation and stimulate economic activity by giving money directly to households, who, having more money, will spend them more actively.
  - “Helicopter money” can turn from hypothetical to real instrument to stimulate the economy, according to Citigroup, HSBC and Commerzbank.
  - Earlier, Bridgewater investment fund founder and one of the most successful investors in the USA Ray Dalio commented on the topic. The investor specified, that in this phase of development state banks will start financing state expenditures from digital money and channel money directly to households.

- President of European Central Bank Mario Draghi stated in March, 2016 that although “helicopter money” has never been discussed in the European regulator seriously, “this is a very interesting idea”. A little later, ECB’s executive board member and chief economist Peter Praet similarly said in his interview that in theory, any state bank can issue money and give them to the people.

- In 2002 Chairman of the U.S. Federal Reserve Ben Bernanke said that this method could “most sure” be an effective stimulus to consumption and, respectively, decline in prices.

- “Helicopter money” principle is a basis for experiments in a number of countries to implement “universal basic income”.

The Bay that boasts of being the largest co-working space in the region facilitates the growth of global organizations who want to come to Bahrain by helping them establish themselves in the country. Bahrain’s list of fintech companies will also include cryptocurrency-led firms, who want to establish a proper infrastructure in Bahrain. Along with
The major fight in crypto & ICOs is not over resources or money- it’s over talent. The focus is on developing the culture of entrepreneurship in Bahrain. As of now, we recognize cryptocurrency as a commodity that can be traded in the exchanges. We are not considering it as a legal tender in any form.” It remains to be seen if crypto companies will see the Bahrain region as a lucrative place to gain credibility by registering with the Central Bank of Bahrain.

Khalid Saad, Chief Executive Officer of Bahrain Fintech Bay told [142], “As long as the business qualifies as a fintech (financial technology), we will welcome it. The focus is on developing the culture of entrepreneurship in Bahrain.”

Everyone used to fight over resources: land, water, oil, money... Now the main fight is over talents - not about what is already there, but about access to the minds of those who can come up with something cool in the
future. Acqui-hiring (acquisition of companies not because of their financial results, assets, products or technologies, but because of the people who work there) has become a widespread phenomenon among the most successful (technology) companies. Now let’s take a look at The Bubble Generation Inc., which unites the world of crypto and ICO. Most likely there are 90 scammers and rascals out of every 100 people (how many people really do bring value to your company? 20%?) but if you count together the ten in each hundred, don’t you think that The Bubble Generation Inc. will become the leader in the number of attracted talent within the next 2-3 years?

Estonia is one of the first countries to start implementing blockchain on state level

- Estonia’s statewide project of the unified electronic system is one of the most successful implemented projects in the world.
- The decentralized open system connects different services and databases. Because of this structure, it is easy to implement new services and applications, and their transition to blockchain system is fast and easy.
- “Cloud business” project in form of a e-Residence project was fulfilled.
- In the first half of 2016, the Estonian government agreed with Guardtime to transfer data of more than 1 million state citizens’ medical cards to a blockchain database.
- 94% of citizens have electronic IDs that enable them to use the system, 2% of countries GDP is saved on a no-paperwork governmental system; 4000+ services are provided digitally; Estonia is the №1 country in the world by tax collection and Digital Economy Index.

It’s hard to talk (and it’s hard not to talk) about a crypto/ICO bubble these days without spending some time ranting about the latest trend in acquisition so-called “acqui-hire,” which occurs when a tech giant is perceived to be buying a young business not for its products or its customers, but for its talent. Apple, Google, Facebook, Amazon and Alibaba have made headlines for their recent “acqui-hires”. “In order to build beautiful inspiring products, grow engagement, and ultimately revenue, everything starts with having the best people,” Marissa Mayer said on Yahoo’s earnings conference call. “Talent acquisitions were the best way for us to gain functioning teams in key areas who are accomplished, responsible, accountable, collaborative and visionary and to do so quickly,” she added. In recent years, some investors and observers have taken aim at “acqui-hires”—wherein a big company buys a start-up for the sake of raiding its talent. Major tech players argue that buying smaller firms helps to blunt the dreaded “brain drain” effect that sees employees jump ship to other companies—or even become future competitors.
Increases in acqui-hiring indicate just how competitive the tech hiring market is for promising young talent. Larger tech companies are increasingly willing to buy other companies just to acquire the human capital. When six-figure salaries aren’t enough to attract top talent, just go buy a company with some smart people and add them to your payroll. Established companies acquire other businesses to grow their revenue, lower costs, enter new markets, or add on strategically important features, products or services.

An acqui-hire is an exit strategy that can make many people happy. Investors get money back, the tech giants get to hire people who might not have wanted to work there otherwise, and the founders look like they just had a success. And for many unprofitable companies, an acquisition might be a good alternative to simply going out of business, as may often be the case as companies blow through their funding. As a better alternative to shutdown, acqui-hiring allows investors in businesses to recover some or most of their money and allows entrepreneurs to join a company they admire and create a possibility of earnouts in the future. The ideas – not just the people – are getting acquired. While ideas are hard to separate from the people who create them, it’s easier to reconcile the aforementioned math when you’re talking about the value of ideas. Instead of “acqui-hires,” they’re really “innovation-quisitions.”

For example, Apple purchased WiFiSLAM, a company that focuses indoor Wi-Fi and has just a few employees for $20 million. A case in point is acquisition of Bangalore-based startup Little Eye Labs, offering performance analysis and monitoring tools to app developers in identifying and solving problems.
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performance-related issues in Android apps, by Facebook. In July 2017 Google acqui-hired four-month-old Bangalore-based artificial intelligence startup Halli Labs. In the same month Facebook has acquired an AI virtual assistant startup Ozlo. The social media company will receive the startup’s technology and a team of 30 employees. In September 2017 Google acqui-hired 2,000 HTC employees for $1.1 billion. In October 2017 Apple acqui-hired the team from NY-based messaging assistant Init.ai to work on Siri.

Taavi Kotka, who spent four years as Estonia’s chief information officer, is one of the leading public faces of a project known as e-Estonia\[143\]: a coordinated governmental effort to transform the country from a state into a digital society. “Countries are like enterprises,” Taavi Kotka said. “They want to increase the wealth of their own people.” “If countries are competing not only on physical talent moving to their country but also on how to get the best virtual talent connected to their country, it becomes a disruption like the one we have seen in the music industry,” he said. The program that resulted is called e-residency, and it permits citizens of another country to become residents of Estonia without ever visiting the place. An e-resident has no leg up at the customs desk, but the program allows individuals to tap into Estonia’s digital services from afar. Tim Draper, who became Estonia’s second e-resident, told: “I thought, Wow! Governments are going to have to compete with each other for us”. So far, twenty-eight thousand people have applied for e-residency, mostly from other countries. To be clear, this doesn’t involve actually becoming Estonian, or even physically being in Estonia. Instead, they’re hoping to spread the ideas of their powerful internet-based services and promote their national brand, in order to coax others to use them from afar.

But blockchain is so new that financial institutions are often forced to seek engineers and developers, not from the tech giants with which they have long collaborated, but among startup companies - the traditional incubators of embryonic technology. The technology is complex and relatively unknown, and producing a steady supply of skilled engineers will likely be a slow process.

It doesn’t mean it’s bad if it’s not clear: ‘learning by doing’ approach for regulators with crypto

The Edelman trust barometer 2017 reveals the largest ever global drop in trust across the four key institutions of government, business, media and NGOs. For 17 years the Edelman Trust Barometer has surveyed tens of thousands of people across dozens of countries about their level of trust in business, media, government, and NGOs. This year was the first time

\[143\] https://www.newyorker.com/magazine/2017/12/18/estonia-the-digital-republic
the study found a decline in trust across all four of these institutions. In almost two-thirds of the 28 countries they surveyed, the general population did not trust the four institutions to “do what is right” – the average level of trust in all four institutions combined was below 50%. They also discovered a staggering lack of confidence in leadership: 71% of survey respondents said government officials are not at all or somewhat credible.

Over the past 10 years central banks in developed countries have reduced their interest rates 637 times, the governments have spent $12.3 trillion to acquire assets under quantitative easing programs, but this did not result in significant economic growth or acceleration of inflation. Economists argue that the measures used to stimulate the economy - near zero or negative key interest rates and quantitative easing - have exhausted themselves and new tools are needed.

Apparently, such a tool can be ‘helicopter money’. The term was introduced by Nobel winning economist Milton Friedman in 1969 in the paper “The Optimum Quantity of Money”. The basic principle is that if a central bank wants to raise inflation and output in an economy that is running substantially below potential or targeted levels, one of the most effective tools would be simply to give everyone direct money transfers. In theory, people would see this as a permanent one-off expansion of the amount of money in circulation and would then start to spend more freely. The grounds for assuming that ‘helicopter money’ can turn from hypothetical into a real tool to spark economic growth are provided by Citigroup, HSBC and Commerzbank - all published reports to investors on the topic in the past two years. In 2002, Ben Bernanke, Chairman of US Federal Reserve Bank, said that ‘helicopter money’ would almost certainly be an effective stimulant to consumption and hence to prices. ECB President Mario Draghi said in March 2016 that the bank had “never discussed” issuing so-called helicopter money, but “it’s a very interesting concept”. Similarly, Peter Praet, the ECB’s chief economist and Member of the Executive Board, said in his interview that all central banks can issue currency and you distribute it to people. The question is, if and when is it opportune to make recourse to that sort of instrument which is really an extreme sort of instrument. “We don’t know for certain that ‘helicopter money’ will be the next attempted silver bullet, however the topic is receiving considerably more attention,” said Gabriel Stein, an economist at Oxford Economics Ltd. in London. “The likelihood is reasonably high of some form being implemented somewhere.” American billionaire Ray Dalio, by one measure the most successful hedge fund manager of all time, has argued that central banks’ ability to invigorate economic growth has atrophied, and predicts a new era of radical monetary policy possibly involving “helicopter money”. Mr Dalio
argued in a note to clients that measures like interest rate cuts quantitative easing and even negative interest rates have been exhausted and are increasingly ineffective. “While QE will push asset prices somewhat higher, investors/savers will still want to save, lenders will still be cautious lenders, and cautious borrowers will remain cautious, so we will still have ‘pushing on a string,’” he wrote referring to the situation when monetary policy does not lead to an increase in consumer spending and investment.

A survey by the World Economic Forum says the tipping point for bitcoin and blockchain adoption will happen by the year 2025. Blockchain technology is expected to reach its tipping point in the next few years, and by 2023, it’s predicted that the first government will collect taxes using the technology. According to the report, the total worth of Bitcoin in the blockchain is about 0.025% of global GDP now – but by 2027, about 10% of the global GDP will be stored using blockchain. Transparency and efficiency of managing the new money supply will positively influence and restore confidence in the public institutions. IMF Managing Director Christine Lagarde didn’t rule out that the IMF could at some point develop its own cryptocurrency. She pointed to the IMF’s Special Drawing Right (SDR), a currency the IMF created to serve as an international reserve asset, that could incorporate technology similar to cryptocurrencies. “What we will be looking into is how this currency, the special drawing right, can actually use the technology to be more efficient and less costly,” she said.

Japan – a conservative nation that understands the benefits of cryptocurrency legalization

- During the last couple of years, the Japanese government has consistently approved draft laws that have led to bitcoin’s status as official currency and a legal payment method for goods and services. As a result, opportunities where you can officially pay with bitcoin has grown 5x times from 900 in 2015 to 4200 in 2016, with trade turnover nearing 2 billion dollars.
- By the end of 2017, the number of companies that officially accept payment in bitcoins can exceed 200,000.
- At the same time, Japan preserves control over cryptocurrency turnover. According to the new rules implemented by Tokyo this year, any bitcoin or “alternative coin” fall under the oversight of the Japan Financial Services Agency. It shows that the market is ready to operate in legal framework and follows AML / KYC to full extent, and the government can introduce changes if it has enough will.

A bubble is an indication that a new idea has appeared and infused itself into many minds. This is the society’s feedback to the fact that somewhere there is a great pain\demand \opportunity that is not satisfied. A bubble is the result of a rapid uncontrolled growth. This is normal for any system that is only being formed. No one knows what will happen in the end, no one knows how to do it right. Growth is the main thing that matters. If it is overly controlled, it will stop, and the system that hasn’t got enough time to form will be weak, and gradually wither and die. Just try to control a one-three-five year old child as much as you control twenty-thirty-fourty year olds and he will grow up to be imbecile. A predictable, risk-free imbecile grown up under the full control.

Any bubble should burst. And this is normal as this is the way a system stabilizes: having formed it discards the superfluous, leaving only what’s important and necessary. Ok, bubble, in which term is your brain capable of seeing the horizon and in what prospects are you able to look at the picture? Look at the history of bubbles: there were those people who lost but in a longer term after each bubble companies like Google, Amazon, PayPal and Netflix that were changing the landscape of the economy survived. (Today the tulip continues as a mainstay of the Holland’s economic life, but it plays a much more important role as the cornerstone on which country’s leadership as the largest purveyor of plants and seeds in the world is built. More than 250,000 jobs are the product directly and indirectly of the flower markets. The country continues to be the largest player with a 52% share in global exports of flowers and plants. 77% of all flower bulbs traded worldwide come from the Netherlands, the majority of which are tulips.) And, most importantly, they brought a lot more benefit to customers than old players. The rollback and growth of those players who survive after the bursting bubble multifold compensates for the losses from this burst. Blockchain and crypto are like Internet 20 years ago.

A number of regulators around the world ban crypto and/or ICO. Why? Because this new world has become so large that it can not be ignored anymore. And it began to accumulate real resources. Such steps look like they want to own these resources, control their distribution, but do not want to understand the nature of the new things and take risks. But it’s impossible – you need to take risk if you want to create something new and to create a new value.

In the world where almost everything can be found on the SaaS model we need bank-as-a-service platforms, broker-as-a-service, insurance-as-a-service... AWS business is twice the size of Amazon’s core business and traditional players will either assimilate this experience, or they
will support their licenses and infrastructure (and regulators will support it), or they will die. Infrastructure is no longer a competitive advantage for anyone, if it is not open. By the way, what about government-as-a-service? For example, from Estonia or Singapore. Judging by the reaction of some countries’ regulators to innovation - the world will only benefit from this.

It is only possible to give life to a new economy by giving it a certain degree of freedom (the opportunity to take risks, try, make mistakes and not be punished - the fear of making mistakes destroys any innovations: this is a long-proven axiom). We must admit that the old rules and regulations do not work if we really want to grow something new and useful for society. While the new ones are non-existent, they just have to be created. Therefore, the regulator should regulate with caution: not as a judge, but as a mentor. As the saying goes: you need to have the courage to lose sight of the horizon in order to discover new lands.

Regulators are able to kill anything, but no regulator is able to create something - and this is the destiny of entrepreneurs. Given that rules are only being formed, players should not be punished for what was committed before their introduction. You shouldn’t regulate too harshly what has not yet appeared and formed - you can only kill it this way. We are for the fact that if regulation comes into conflict with logic, progress and benefit for clients - such regulation should be changed. Rules are not the Bible, they were invented looking back into the past (instead of the future). They are created to help achieve some goal, and if the goal is changing, then the rules should change. If something is not clear, it does not mean that it is something bad. This is something that challenges us to study it and to help it grow.
4.4 Make compliance great again

How we created the coolest compliance ever

When we decided to create a bank for crypto-related clients, we were obviously aware that the regulator’s main concerns would revolve around compliance. We wanted to ensure we could answer the questions surrounding how we check our clients, onboard them, why our bank won’t be used for money laundering, and other criminal activities. When you acquire a bank or apply for a license, this very element of compliance is really what keeps the regulators’ blood flowing. In case your clients fall under the ‘higher-risk’ category, we also must go to bed thinking about compliance and wake up to the very same thought.

Our initial pitch for the regulator was the following: we researched how these clients (crypto-exchanges, crypto-wallets, crypto-funds, ICO-backed startups) verify their customers—rating 0, 1 or 2 on a 5-point scale—and then analyzed different bank approaches to this process—4 or 5 for good banks. Our “offer” was to start from a point of 3 (yes, this is not 4 or 5, but better than 0, 1 or 2), making the market more transparent, and then gradually upgrade to a 4 and 5 rating.

The regulator had other plans for us—“No chance we will let a 3 or 4 rating fly, you have to be a 6 on a five-point scale if you want to work with these type of clients. So surprise us.” That’s exactly when we put the matter in our own hands by engaging our partners (one of the most reputable
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compliance firms in the world—Promontory Group, an IBM company and
the famous DLA Piper legal team) followed by inspiration (and the vision/thoughts) of our friend David Birch (the author of a best-selling Identity
Is The New Money, and a renowned compliance, fintech, blockchain and
where-it’s-all-headed expert).

A.ID: follow the money

A.ID—that’s how we named our internal project, aimed at the creation of
the best compliance for banks and their clients: a convenient and simple
solution for customers providing integrity and complete transparency for
the regulator.

When you meet a banker and say ‘compliance’, by his facial expression
you will understand that it is synonymous to an ‘evil you’re forced to toler-
ate’ (like how kids think about school) and another ‘tedious burden.’ In our
case, we have understood that if we want to create the best compliance
ever, not only do we have to aim at a 5 (or 6!) with our ‘homework,’ but
genuinely love our compliance with all of our hearts. So, this is our love
story. Let’s go through it step by step—what we do and how we do it, what
we check and what makes us different from the others.

“Follow the money” is a catchphrase popularized by the 1976 drama-doc-
umentary motion picture All The President’s Men, which suggests a money
trail or corruption scheme within high (often political) office. Origin: For the
film, screenwriter William Goldman attributed the phrase to Deep Throat,
the informant who took part in revealing the Watergate scandal. Howev-
er, the phrase is mentioned neither in the non-fiction book that preceded the film, nor in any documentation of the scandal. The book does contain the phrase “The key was the secret campaign cash, and it should all be traced,” which Woodward says to Senator Sam Ervin. This may have been condensed to the phrase “follow the money” in the screenwriting process. The phrase Follow the money was mentioned by Henry E. Peterson at the 1974 Senate Judiciary Committee hearings as Earl J. Silbert was nominated to U.S. Attorney. A 1975 book by Clive Borrell and Brian Cashinella, Crime in Britain Today, also uses the phrase. Since the 1970s, “follow the money” has been used several times in investigative journalism and political debate. One example is Follow the Money, a series of CBS reports. In the 2002 episode “Game Day” (number 9 of the first season) of The Wire, Detective Lester Freamon uses the phrase when investigating the dealings of a Baltimore criminal gang to explain the political difficulty of investigating organized crime, saying “You follow drugs, you get drug addicts and drug dealers. But you start to follow the money, and you don’t know where the fuck it’s gonna take you”. In September 2016, the Trump campaign used the phrase in criticizing Hillary Clinton and the Clinton Foundation. In February 2017, Carl Bernstein used the phrase to encourage reporters to discover President Trump’s potential conflicts of interest.

**Why we were not satisfied with similar solutions and other startups?**

To make it clear, we started by looking for a perfectly ready solution to partner up with. We didn’t succeed for a number of reasons:

- Some do KYC, very few do KYB (know-your-business);
- Most solutions are focused on onboarding, yet very few do onboarding and ongoing compliance at the same time;
- Few companies are really good at what they do, but each of them focuses on one element: screening blacklists or other databases, transaction fraud-monitoring or the verification/analysis of documents, photos, & videos;
- Some focus on a specific jurisdiction and start lagging behind other international clients, that might have fragmented ownership structure;
- Some boast having Uber and Airbnb among their clients, but not a single bank; while the presence of a bank as a client is the market’s ultimate Sky High, trusted by regulators more than anything else.

Eventually, we came up with a solution in a form of an “automated” client journey. We designed the logic ourselves. On each step within the journey, we decided add in one (or several) custom providers focused on the respective step, process, procedure, or type of data.

Below is the detailed description of several blocks our compliance consisting of—CDD, EDD (KYC & KYB), and Ongoing compliance. (Other
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blocks—Segmentation of clients, Risk profiles, Internal controls, Clients off-boarding, Monitoring&Reporting, Education&Assessment, Audit,—aren’t visible to clients and are of course related to the bank’s internal processes.)

**CDD (customer due diligence)**

**KYC (know your customer)**

- To make it clear—our bank works with businesses. The majority of banks that work with companies check them purely just as companies. As for us, we believe that any company is a group of people, its ultimate beneficiaries, including employees and others managing it. When someone signs up or logs into their bank account—it is never a company who does this, but a specific person, and we always need to know who it is to devise a mutual trust.

- OAuth \ user account registration – creation of login and password for a specific user.

Architecture of a user account is created according to the ‘Personality + set of roles’ logic. What does this mean? Let’s say, you are an owner or an employee at several companies, serviced by Arival Bank. You will have a basic individual account with your name, with your roles ‘CEO of company №1’, ‘Employee of company №2’ or ‘shareholder of company №3’ tied to it. The system constantly checks the entire database for similar accounts in order to avoid double accounts or fraud. All other banks create a new entity for the types of relations, which resembles a schizophrenia (excuse me) and gets in the way of true compliance, which will be more efficient if you possess more data on a client in a singular account and database.

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**KYC: we really understand our business-clients**

- ICO-backed startup
- Verification of the company
- Crypto-exchange
- 1-50 individuals
- 20-100 individuals
- Applicant
- Shareholders
- Management
- Employees
- Documents of incorporation
- KYC of ICO investors
- Investment deck
- White paper
- Legal opinion
- Media/blogs (positive/negative)
- KYC of their customers
- Business presentation
- License
- Media/blogs (positive/negative)
- - what traditional banks are doing
- - we are tracking more than any other bank
• When you sign up and later log into the system each time, your IP-address and MAC-address of your device are scanned automatically to understand the geography of your internet access and the type of device you log in from. A plethora of correlations is being checked here:
  • whether the user uses a single device for log in or suddenly a new device comes up, how often they change devices, etc;
  • whether a user logs in from an unexpected country (including countries under sanctions) compared to his previous behavior;
  • whether the country of internet access matches the place of your citizenship or residence. Time zone is being defined and ‘traditional’ log in hours are filled in automatically. The solution is created the way that if an unusual situation happens, you are not blocked, but asked questions—if you have travelled abroad for a holiday or a work trip, lost your laptop or acquired a new one, woke up in the middle of the night and decided to work, or literally anything else, you will be understood and your behavioral pattern will be remembered. If suspicion arises that somebody answers the questions for you, a video call can be initiated. We transparently show all data about each system login and logout to the user—you can chose the settings yourself: whether you add your IP and MAC-address to the ‘trusted’ list or it was a one-time log in.

• Mobile number and email verification—you receive a code to verify that it belongs to you. Seems pretty traditional—but we have two differences. First—from the start we assume that you might have several phone numbers, emails and even physical addresses. This is absolutely normal
in the modern world. If one of your sim cards was stolen or roaming doesn’t work, but you have provided other trusted numbers in advance, there will be no difficulties. Second—for instance, we not only confirm that your phone number exists, but check what provider and country it belongs to (matches your country of citizenship, residence or internet access). We also aggregate metadata on how frequently this provider is used for fraud (you can choose a mobile service provider in the system and see how many clients use its services).

• Passport and ID verification. First, we provide you with an opportunity to upload more than one document: your passport from country of citizenship (some countries provide two valid passports at the same time), confirmation of your residence in another country (even if you are on a long business trip or touristic journey). This is crucial—the world becomes more and more ‘horizontal,’ people constantly move, and it is simply stupid to tie a person to one single country. Second, we automatically take a note on the expiration date of each document—the system will remind you (and itself) to renew your document (a simple thing, but offered only by few). Third, we check documents for any alterations or other intervention. And finally, we check databases on negative or criminal records about you.

• Confirmation of residence address. The same works here—you can have multiple addresses in different countries. This is usual. You can confirm your addresses traditionally—by providing utility bills or a bank account statement,—as well as asking us to send you a physical letter with a unique code (you can pick it up upon the presentation of a passport only). All addresses are checked with Google Maps and other online maps instantly, and are checked for public information about these places (what else is present there, the type of building etc.).

• Bank card verification. We are hardly the first bank in your life. We work with companies—and we like to meet our clients in person at the moment. So we believe it’s weird if you have no bank card at all. You provide its data (we don’t store it)—we check its type (gift-cards don’t work, classic debit or credit cards are welcome), whether it is active or not (we charge a small sum and return it instantly, remember its expiration date (to ask you to update this information), and attentively examine the card’s issuing bank. The same works for bank account statements. We store them separately and analyze which banks have already verified you before us, their country and reputation.

• We ask you to log in with your social network accounts, Facebook and/or LinkedIn. We are oriented on business clients from the technology sector who run their business online, and we will assume it suspicious if you there is zero information about you on the internet. Knowledge
of your social network account (if you decide to share it with us—you can choose not to trust us and not share the information on each step): comparison of your name and last name, email and profile picture with the ones you provided will be very helpful for us. At the same time, your decision to share your social connections information (friends, colleagues, family) will be taken very positively from our side, as we highly value your trust.

- Fill in type the of employment and average level of income. You can put checks in relevant boxes if you wish to tell us more about you (or not). What you should understand here is that the higher transaction amounts you expect with your account, the more interested we become in who you are and what you do for living (I think you understand why, don’t you?).

- Next step is recording a short video with you—as we don’t see each other face to face, we need to know that your data wasn’t stolen by a malicious user. We compare your video with photos from documents (and social networks, including YouTube).

- Next, you sign (electronically on your device screen or take a picture of your live signature) your approval for A.ID to collect, store and analyze this information (until you change your mind and ask us to delete it), pass it to Arival Bank and other partner services of the bank (only with your separate consent). Then, your application for the bank account opening is created.

### KYC (Each business as a group of people)

<table>
<thead>
<tr>
<th>During onboarding process</th>
<th>During further transactions (each session)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and Surname</td>
<td>Login &amp; password</td>
</tr>
<tr>
<td>Document of citizenship</td>
<td>MAC-address (device)</td>
</tr>
<tr>
<td>Document of residence</td>
<td>MAC-address (country)</td>
</tr>
<tr>
<td>Contacts</td>
<td>IP-address (country)</td>
</tr>
<tr>
<td>e-Signature</td>
<td>Reason of transaction</td>
</tr>
<tr>
<td>Other bank’s card</td>
<td>Database of social connections</td>
</tr>
<tr>
<td>Bank statement</td>
<td>MAC-address (device)</td>
</tr>
<tr>
<td>Utility bill</td>
<td>MAC-address (country)</td>
</tr>
<tr>
<td>Letter with code</td>
<td>Login &amp; password</td>
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<td>SOCIAL profiles</td>
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<td>videos ID</td>
<td>Transactions</td>
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<tr>
<td>LinkedIn</td>
<td>Database of social connections</td>
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<tr>
<td>Facebook</td>
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</tbody>
</table>

**Roles:**
- Applicant
- Shareholder
- Manager
- Employee
- ICO-investor
- CX customer

- what traditional banks are doing
- we are tracking more than any other bank
KYB (know your business)

- In the previous phase, your personal account was created. Now, it’s time to create your first role: your relation to the company, for which you open an account in our bank. You need to specify your position in the company (shareholder, director, employee or outsource accountant) and confirm that you are authorized to open an account for it.
- You fill in the company data: name in the system, DBA name, legal name, country, date and number of registration. You choose what industry you’re in or the several industries you may belong to. Website, LinkedIn, Facebook or Github page—if you have it. Company Address of course. We then check if there has been any negative or criminal information about your company.
- You fill in an approximate number of employees in your company, estimated turnover and countries where you plan to receive/send money most frequently.
- Provide ownership structure information—what percent of shares belongs to whom: you just state the percent, person’s name or holding company name, and contact e-mail (beneficiaries will have to pass verification themselves—we will send them notification and link separately). Also, we will need your CEO’s (and other top managers) contact email.

EDD (enhanced due diligence)

- In special cases, we can ask you to fill in all employees—and ask them to pass verification themselves. For example: one of the most common ICO-related frauds includes 3–5 people making a gorgeous presentation where they put pictures on non-existing or unaware ‘employees,’ raise money and disappear. In this case, we might want to make sure that apart from the owners (and their big plans) there are other employees in the companies, competent and capable of bringing these plans to life. The same works for ICO advisors and mentors—if you use their names in public materials and they ‘guarantee’ your credibility with their names, we would like to know more about them.
- From the point of beneficial ownership compliance rules, the regulator is obliged to disclose information about all shareholders with a 25% and higher stake. Or in the case of work with high-risk clients—from 10% and higher. Our system is designed as following: encountering each new “company as a shareholder” entity, it “loops” and “knocks inward” to disclose every shareholder with any number of shares—until only real people are left. It’s important to understand two things here. First—the user who fills in the registration form doesn’t have to provide all data himself—only contact email of a shareholder for the system to contact and ask them to share more info on themselves. Each new participant
has to tell us about him or herself personally and nobody can do it for him—because it is very important for us to know who exactly sits in from of the screen of the other side, how transparent and sincere he or she is with us, and whether we can trust them. The second important point is that we rely on the inviolable value of ‘presumption of innocence’—the client doesn’t have to convince us he or she is not a fraudster. Yes, they have to be open, but we initially assume he or she is a law-abiding citizen or company. That’s why your account is opened as soon as you fill in the minimal data about yourself and your company—and we have found nothing negative based on the basic information. If the company has a complex ownership structure, or something needs clarification or additional information, the system places limits on account usage (but it is opened and becomes active at once), and raises these limits or eliminates them as new information is provided. In case of intentional concealment of the information or inconsistency of received answers—open account will be blocked.

• If your business needs a special license in your country, we will ask you to provide it as well.

• For better understanding of your business we might request additional materials, if you have them: whitepaper, business plan, product or business presentation, legal opinion, team presentation, investment deck. We don’t ask you to create anything new just for us—we simply ask you to share what you already have. Our team has over six years of experience in investment analysis and due diligence in fintech—and an understanding what we should pay attention to.

• If you intend to operate big amounts of money through your accounts, we might ask you additional questions on your source of funds and source of wealth. For example, you have conducted an ICO—so you hopefully have already checked your investors and token holders. If the previous verification doesn’t comply with our standards, we might ask you to upload existing information in A.ID, and double request (and double check) the missing information. You don’t need to collect or process data manually—the system will automatically fill in the boxes with existing information and send the links to participants for them to add more information about themselves. Or if you are a crypto exchange, which means you handle money of third-party people, it is crucial for us that you verify them. The same process is applicable here—if the level and amount of verification seems insufficient to us, we might suggest that you use A.ID to raise the verification level and information amount.
Ongoing compliance

- According to statistics, real big fraudsters don’t get caught on the stages of registration or onboarding—considering they have learnt to bend the rules. Transactions make it possible to track and catch them. That’s why the ongoing compliance module is crucial for us.

- Based on the information we receive about the company, we will decide whether your business really exists, as well as ‘tag’ your estimated expenses and items of expenditure in the future. In case your company has frequent or abnormal transaction sizes, the system will rely on these tags (or flags) to decide whether this information complies with the information you have stated about yourself during onboarding (countries of consignment and destination, purpose and frequency of payment etc.).

- Back to the accounts, KYC & KYB—we treat our ‘clients’ (and create accounts accordingly) as not only our clients, but everybody, who somehow encounters our bank during transactions. When being hired, our potential employee undergoes the same verification process and uses the same login and password for his/her work computer. If he/she also decides to become our client (we hope so, lol)—a new role will be added to his/her account. When 1) somebody sends money to our client, 2) receives transfers from our client or 3) if he/she is a shareholder or a counterparty related to our client or 4) friends and colleagues from social networks—as soon as the system sees a new entity, it creates a new box and fills it with new data, one piece at a time. Thus, our clients have active accounts, and other parties—passive accounts. If any of these counterparties also decide to become our clients, the verification and onboarding procedure will be easier for both of us, as we already know them, have basic data, and the trust was already existing. When a box is created, the system automatically tracks activities related to him. For example, our 10 separate clients have sent money to an outer company—the trigger works, and the system automatically starts to search for additional (public) information about the counterparty. If information is unavailable or negative, it automatically sends the money recipient a notification to pass an additional verification with us. The same works for money senders.

- Our system is built on the principle of constant data triangulation: 1) what we know about the company in general (original data base), 2) who operates in its name and what he does exactly (country, device, time, type and frequency of actions), 3) social and economic connections around the company and the person behind the screen (friends and colleagues from social media, money senders and recipients from other banks, shareholders, management and employees of the com-
pany). Real professional fraudsters have long learned to bend banks’ verification systems, providing suitable answers, clean shell companies and reasonable transaction goals—thus, it is much more efficient to track them implicitly, on the metadata level: general non-obvious social connections, similar behavioral patterns among non-related clients, etc.

**Magic**

- As you know, Arival Bank isn’t developing and doesn’t plan to develop most of its own products. On the contrary, on every vertical paradigm we find an awesome fintech-startup who has already mastered a specific product or service. It doesn’t make sense for us to reinvent the wheel, so we integrate with these startups (this approach is exactly what we call the ‘first fintech-bank creation’). We have highlighted 12 key verticals for ourselves and future customers. After winning Finovate, we have received an enormous number of applications from other fintech-startups that don’t fit into our primary focus, but can be potentially useful to our clients. To make sure our client doesn’t need to register in each of these fintech services, create an account and provide the same documents, we will need to unite our compliance requirements and user account system with these services.

- This is why we have created A.ID as a separate solution with an open API. It means that you provide data and rights to process and check it to A.ID—our bank and other partner services request the permission to process this data and results of its verification (with your permission—which you can refuse), and use the same username and password “log in with A.ID.” It gives you the opportunity to save your time (and nerves) on registration and each new log in. And these are additional trust reasons for compliance. Only fraudsters lose here—in case of fraud in one of the services, you are going to be blocked in all other partner services.

**Compliance manager’s desktop**

- A.ID treats Arival Bank’s (and its partner services) compliance managers as clients and aims at creating additional value for them. Firstly, before their work with A.ID starts, the compliance manager himself and his company has to pass the same verification process in the system as its future clients.

- Next—you launch the “Constructor” module, where you need to create types of clients (if your clients fall under different categories), fields you want to check, their order, depth of checks in each step, system’s reaction on blank required fields or negative information (yellow or red flags). If you want to create new fields—you are welcome to do this in the same window. Let’s go!
• You have received a code you need to paste on your website or mobile app. Arival Bank has already become the first client of its own solution.
• Now the client sees a “Log in with A.ID” button on your website—if he has already passed the verification elsewhere, he simply logs in as an existing user of A.ID, if not, the registration procedure starts.
• As a compliance manager, you see the key metrics on the dashboard: how many clients have started the registration process, how many of them passed it, the clients you have approved and rejected. You can see the yellow and red flags and ask additional questions.

Why we are different

• All the paragraphs above in italic describe the features that no (or almost no one) existing players from different market implement. Nobody does this in a comprehensive manner. If you know somebody who does all of the mentioned above—let us know! We will close this branch of the bank and become clients of this solution.
• We understand that we aggregate a lot of client data—to work with high-risk clients we need to trust them, and to be able to do this we need to see that the company and its representative are open to dialogue with us. But we understand, that this amount of your personal data is a very sensitive question. That’s why we create a separate interface for users—you can always see what information about yourself you provided to us and when, who else requested it (with your permission or refusal), what details, whether he stores it or not—and make an automatic request to have it deleted. In this sense, we are loyal advocates of our clients. Yes, your trust and openness is fundamentally important for us, but we follow our standards ourselves—we are going to show you what we know about you and how we use this information, and if you lose your trust in us, we will show you that we have deleted it.

What’s next?

What is already done:
• Everything related to compliance is designed as a separate solution and integrated with our bank via open API.
• Personal account where the bank itself and its big clients will be able to set up required verification fields, see and track statuses of the verification process.
• Fields and interfaces for personal and business data collection during on-boarding.
• For now, we are integrated with one provider (a great one, but the only one so far) for blacklist checking.
• Inner policies and regulations: Cores System Task Analysis; BSA/AML Risk Assessment; OFAC Risk Assessment; AML Risk Model; Account
Monitoring, Investigations and SARs; CDD/EDD/KYC module; Vendor Management; PDSA (Plan, Do, Study, Act) Cycle; Cybersecurity; Reputation Risk Management.

What we are working on:

- We want to add more and more third-party verification services to each step of our onboarding process—there are lots of databases in the world, old and new, that check different parameters, new startups and technologies emerge that take a single verification step and take it to the new level;

- At the moment, we are focused on new clients’ onboarding—we need to spend more effort on ongoing compliance, what the clients do after they have already become our clients and started to make transactions;

- We want to make setting of risk-profiles not constant, like they are now, but dynamic—to make it possible to create new scripts for different participants;

- Interfaces for compliance managers require further elaboration—not only to clearly see the triggers during onboarding (like now), but also to be able to react to these flags instantly during transactions, ask clients additional questions and analyze the answers at once;

- When there is more data, we want to integrate a neural network and artificial intelligence. At the moment our system works on our own questions and answers—the good analogy is “What is a cat? It is a small fluffy animal with four paws and a tail.” But this approach excludes bald cats, or cats without a tail or a paw. Machine learning enable neural network to show one or two hundred cats at once, and the machine itself determines what a cat is. More than that, it constantly adapts its answer on the basis of the new data. And then, it learns to ask the questions itself, to group it automatically and to create new risk profiles.

- We would like to help our clients not only technology-wise but also with:
  - Analyzing and upgrading existing compliance policies and specialists, outsourced to manage this process;
  - Doing our own higher-quality audit of their compliance, as well as provide services for regular training and skills development.

Why we believe that we do the right thing: the core-banking system, that our bank functions on, offered to scale our product and rent it to other banks working on the same system, when they saw what we build for internal use. This is super cool—if big international banks think that what we do and how we do it is more convenient for the client, more reliable in terms of verification and cheaper, it is a fantastic opportunity for us to test & perfect our system based on the experience of our bank and other banks as well.
4.5 13 steps to building a digital bank

I learned a lot over the years. We invested in some pretty famous digital banks (Moven, Simple, Fidor, Rocketbank) and even built our own from the ground up (Arival Bank). I think it would only be fair to share some of my findings with you. Here is an authentic, non-academic, and certainly biased guide on how to build a bank:

**Step 1: Keep your team lean for as long as possible.**

We started to develop the bank with only three people. That’s right, 3 hombres. No más. Myself, 35, as the CEO and responsible for the vision, strategy of the bank, and managing key stakeholders. Igor, 33, is the CFO and responsible for finance, business model ideation, partnerships, and investments. Jeremy, 24, is the COO responsible for the US banking license process, business plan development, financial modelling, investor presentations, managing key partners and consultants, and so on and so forth. Job descriptions are overrated because we all wear many hats. We leverage each other and know what needs to be done with little direction. This enables a cathartic experience. With that being said, obviously our team has grown and already exceeds three people - mainly because we are targeting big milestones and want to move fast. In general, it is possible to stay lean in terms of headcount for quite some time. Technically, launching the bank in our jurisdiction (more on this later) only requires five full-time employees.

Don’t kid yourself, you are a startup.

**Step 2: Evaluate different jurisdictions before settling on the US.**

We looked at numerous jurisdictions as potential landing spots for obtaining a banking license. In fact, there are other options rather than traditionally applying for a banking license, that could help achieve your objective. For example, we considered buying a small bank in Switzerland, Latvia, Gibraltar or Malta. Another option was applying for an e-money license or digital bank license in the UK (similar possibilities exist now in Lithuania, Dubai and Hong Kong). Alternatively, we could have partnered with an established bank in Germany, United Kingdom, Singapore or the US - and run our neobank on the basis of their license. However, due to the fact that we want to serve crypto-related businesses and primarily transact in USD, we came to the conclusion (long story for next time) that applying for a banking license within the US makes the most sense.

**Step 3: You think applying for a banking licence is the only way to become a digital bank? Think again.**

All digital banks in the US - whether they are banks for retail customers (Simple, Moven, Chime) or businesses (Seed or Azlo) - do not have their
own banking license. They operate under licenses from other banks (such as Bancorp, CBW Bank, Wirecard). The possibility of leveraging another existing bank’s license doesn’t work for us due to the nature of our business. First, we want to serve customers not only domestically in the US, but also internationally. Secondly, one of our main differentiators is that we can serve and on-board crypto-related businesses such as ICO-backed companies and exchanges. Therefore, partnering with another bank and their license didn’t seem viable because of the compliance and risk.

The second option is to buy a small bank. We connected with 20 small banks from the US - with a selling price in the range of $5 to $30 million before finding out this option doesn’t cut the time-to-market. In the United States, arranging the funds to buy the bank may very well be the easiest part. You need the regulator to approve the sale and purchase. This, combined with foreign capital structure (and management), and clear plans of changing the bank’s business model will most definitely delay time and hurt the chances of getting approved by US regulators. In reality, buying a bank versus starting a new one from scratch (applying for a licence) takes more or less the same time and effort. (We don’t recommend this, but I suppose you can try to deceive the regulator by conveying the purchase was made by 100% American investors and there are not plans of transforming business models. Surely this may speed up the process, but when the truth comes out (and it will), you will lose everything.

The third option is to apply for a new license. You may already be aware, but US regulators (like most in the world) are not interested in issuing new licenses (especially in the last few years). On the contrary, they are more interested in reducing the amount of existing ones. Therefore, you will need to explain in great detail what your new or innovative approach is and how current licensees are not excelling in this space.

There are a lot of banking licenses. My apologies, but I will not enumerate them all. The licenses depend on the type of customers, the geographic locations, and products/services you will provide. There has been a new license that was introduced - the US-based fintech charter for fintech players, but so far none have been issued. The boundaries between licenses issued at the state and national level have become less visible. Most licenses allow you to serve customers online from other states and you are not required to open a branch. Each state is included in one of the 12 districts of the US banking regulator, the Federal Reserve.

We chose the option to apply for an IFE (International Financial Entity) license in Puerto Rico, which is a US territory and falls under the US banking system. The IFE allows us to serve international clients, the option to become FDIC insured, and share all the other benefits of building a bank under the US system.
Step 4: Make sure your partners are experienced and reputable.

If you are going to buy a bank, just know they are almost never sold directly. There are brokers who work exclusively on these acquisitions. Depending on the complexity of the case, the intermediary will take between 1-5% of the sale amount.

If you are going to apply for a new license, there are many companies and third-party consultants who will manage and organize the process on a turn-key basis, which will cost you anywhere from $30k to $150k. From the get-go, our intention was to understand, study, and control the process as much as possible. Taking into account our “startup and agile mentality,” we decided to manage the licensing process ourselves and remain cost-efficient.

You also need lawyers to help prepare, check and submit documents on your behalf. Although technically it is not mandatory, it will make your life much easier. Evidently, there has to be a high level of trust for your license to be issued. The regulator will feel much more comfortable if the application that falls on his desk was submitted by a credible financial services lawyer. We chose one of the top ranked law firms in the world: DLA Piper.

One of the most fundamental aspects of any strong banking application is your compliance policies. I can’t stress this enough, but you need compliance specialists. If your customers and products are typical and relatable to what exists on the market, then perhaps you can write compliance policies and procedures using basic consultants for around $30-50k USD. However, if you are going to attract “unusual” or “non-standard” customers and/or provide them with “non-standard” products, then you need a larger and more prominent consultant. Considering our case is complicated, we decided to pour most of our resources into creating a sophisticated compliance system. We chose to hire and work with Promontory Group, an IBM Company (super expensive, but worth it).

I’ll fill you in on a little secret: none of your partners or consultants will do any of the work for you - regardless of how much you pay them. They are more or less going to act like your psychologist or therapist: asking you the right questions, listening and analyzing your answers, and giving you generic feedback along the lines of “looks reasonable” or “think different.” I doubt they will give you clear responses of “yes, this is the right answer” or “here, let me do this for you.” In general, the presence of partners shows that you are actively engaging with the right people and doing something (if anything) correctly.

Step 5: Define the customers you will serve and what products you will deliver.

You need to decide what type of clients you are going to work with: retail customers, business clients, Americans, foreigners etc. Next, what prod-
ucts will you provide? Current accounts, transfers, deposits, loans, investments? The more clearly you describe your customers and the origin of their funds, the types of businesses, the anticipated turnover and types of transactions - the easier it will be for you to determine the most optimal banking license. Not to mention, it will strongly help formulate your compliance policies. In our case, we want to serve small and medium-sized businesses from both the US & abroad. During our early stages, we will focus on three types of clients: ICO-backed startups, crypto-exchanges, and crypto-funds.

**Step 6: Don’t get overwhelmed by the application itself - focus on the supplemental documents.**

Although not easy enough for a 5th grader to fill out, the application is not complicated and pretty straightforward. You will provide basic information such as name of entity, place of business, stakeholders, directors, sworn statements, tax documents, background checks, etc. Your will also need to identify your list of planned activities as a bank, customer segments, customer forecasts, staff and transaction forecasts (for 3 years), expenses and financial projections.

The actual application may be the easiest part. In parallel, we prepared and submitted: the business case analysis of the problem we are solving (why banks won’t open accounts for crypto-related businesses), competitive analysis of other digital banks (focusing on the US market and banks for SMEs), our review of legislative initiatives and the regulator’s response to crypto-currencies and ICOs in different states (and countries), the draft of our KYC & AML Policy (how we will verify our customers, manage fraud detection, and make sure we stay compliant with regulations), an analysis of our proposed product line and potential partners, and lastly - the business plan. After all said and done, our total submission including these supplemental documents exceeded 350 pages.

During the application period, you may find yourself in a position where you can tell the regulators what they want to hear in an effort to speed up the review process. To an extent, you are not telling a lie, but just not providing the entire truth. Don’t do this. My personal advice: be as honest and transparent as possible. Don’t hide anything. Putting lipstick on a pig will get you nowhere. Be open and share your real strategy.

**Step 7: Do you know the steps to receiving the license?**

The first step is the preparation and submission of the application, supplemental documents (business plan, compliance policy, etc) as well as other legal items such as tax statements and background checks. In our case, the second step is an official interview with the Commissioner and his team.
This is where you present your project. If passed successfully and your application is approved, you achieved the first (of two) key milestones: the Permit to Organize. This brings you much closer to the reality of launching your bank.

Then, comes the second stage. This part consists of: opening up your office and hiring other key employees, showcasing your core banking system with the regulator, testing your compliance system(s), completing the development of your product line, and flushing out your cybersecurity and data protection measures.

If the regulator feels satisfied and it meets his expectations, then you are issued the license. After this, you must apply for membership with the Federal Reserve in addition to finding at least one correspondent bank for making money transfers.

**Step 8: Understand the purpose & importance of a core-banking system.**

Core-banking system is a software that helps open accounts for customers, processes basic transactions, stores the receipt and expenditure of funds using financial records, and provides access to different ledger interfaces and reporting tools. This is the core of the bank. For any regulator, this is an important factor in evaluating your application because this is where the money of your customers will be stored.

Very few banks in the world have their own core-banking systems. They are almost always paid for and it’s never cheap. Core-banking system providers will not work with just anyone. They do their own due diligence to understand who the bank is, why they need it, and how they will use it.

We reviewed a plethora of core-banking systems from different countries - both large and traditional, and new ones more oriented to digital services. As a result, we chose MBanq from San Francisco: the system is new (the older the system, the more you can argue it’s too legacy-like), proven (9+ other banks already use it), focused on new digital services (cloud-based and open API oriented), with a minimum installation price and maximum pay-per-use (depending on the selected capacity), and all-in-one features (no need to pay separately for updates or new products).

**Step 9: You don’t need to create the MVP version of the Bank right away.**

Theoretically, you don’t need to integrate the core-banking system and begin developing products by the time you submitted your application. That would be costly and risky depending on the status of your financial situa-
Part 4: The Arrival

You need to explain what you plan on doing, how you will execute it, and then begin implementing it later (either before the license or after).

However, since our objective is to show and do more than what is expected of us, we started product development from the beginning of preparing our application. It’s too easy to talk the talk if you can’t walk the walk. We were joined by a strong team of nearly 10 developers who collectively worked together previously in a number of well-known fintech startups and banks, an art director who created our brand and identity, and a Chief Compliance Officer.

To date, we have created the main interfaces of the bank, the API layer for integration of products, and successfully integrated with the core-banking system. You can now enter the bank, open an account, and make transfers between bank accounts.

**Step 10: Don’t wait to raise capital.**

As I wrote above, if you want to buy a small bank in the US, then you can find a batch of banks in the range of $5M (maybe even $2-3M) to $30M. The problem here is not the presence of money, but putting the risk of the sale getting denied into the hands of the regulator.

Before we applied for a license, we raised $1M from venture investors for the first stage. $250k and $300k was set aside as capital requirements and first year operating costs - at the time of applying for a license. The remaining $450k is for team salaries, legal costs, compliance consultants, and the initial payment for the core-banking system.

If and when we get a license, we will need another $5M USD to contribute to the bank’s capital and another $5M USD for operating expenses including the development of our product suite and customer support - all before reaching the break-even point. Thus, the next round we are targeting a raise of $10M.

**Step 11: Most bank product lines are opaque and not innovative. Have you heard of fintech banking?**

Those who can open an account and provide online access to it are quick to call themselves digital banks. And those who offer the simplest of products - such as money transfers - often times themselves full-fledged banks. If you want to become a real high-grade bank, not just an additional account or a card for your customers, then you need additional products. There are a number of ways how this can be done. You can code and create all the products (and technology and business logic) by yourself as most traditional banks do. The risk here is that your staff is constantly expanding and none of the products are the best on the market (think of it as invent-
ing the wheel a second time). The second approach is to buy pre-made products (the technology plus a basic designer for business logic) from external suppliers of white label solutions, which are sometimes offered by the suppliers of core-banking systems.

We chose the third scenario - something called fintech banking. In this scenario, we don’t create any products ourself or buy pre-made “templates.” Our strategy is built on the premise that many fintech products have already been created (and will be created) in the world. These fintech companies are led by excellent teams and have generated strong traction with users. The problem with fintech companies is that their individual products and services don’t substitute a bank’s entire product line, but by building an ecosystem of different fintech products - it very well could. Therefore, we are going to work with hand-picked fintechs using a partnership model. We have identified 12 product verticals, that fits the needs of our future clients and their businesses. In each vertical, we find the best fintech product to integrate into Arival Bank’s platform. And when the client comes to us - they access an entire suite of services tailored for his company. Customers no longer need to browse and navigate the market for the best products and services. They don’t need to download or sign up with 20 different financial services and products for their business. Now, they have one unified login and password (via Arival) and can avoid the chaotic registration procedures over and over again. All the data is aggregated in one window (so you don’t need to worry about add-ons for import or export of information from different services). The money between services moves instantly and free of charge (considering all the money is in one bank). Best of all - if you have any issues or problems, you can contact just one customer support team. Lastly, we have the perfect guys to introduce and deliver such an experience. We have invested in many different fintech companies over the years and know the fintech landscape as well as anyone else.

**Step 12: Patience is a virtue. Whatever is your timeline is - expect to double it.**

If you want to buy a bank, you will immediately be told that it will take at least a year. If you decide to apply for a license - it will most likely take between 1 to 2 years (sometimes even 3 years depending on the complexity). Just so you know, my estimations are optimistic, made under circumstances that the process went smoothly with little hiccups.

In our situation, from September 2017 to January 2018, we validated the problem, the potential customer demand and strategic ways of implementation. From January to May 2018, we prepared the application and all the documents for the IFE application. In June of 2018, we officially submitted
our application. Currently, we are waiting to receive our Permit to Organize (which could more or less be viewed as a banking permit).

As for the next steps and time to receiving our license, there is no point in making a guess. Of course we hope we will receive it at the end of this year, but all we can do is continue moving forward and prepare for launch - hoping the paths will cross sooner rather than later.

**Step 13: My last two cents.**

On the way, we met a lot of teams that were trying to do more or less similar things. Despite the fact that we started later, we see that we are moving faster than they are. So what useful conclusions and observations can be made? How could this happen?

Having a good idea and the money to create a bank is not enough. It is important to understand who the regulator is, what their role is, and really what makes up a bank. To be honest, it is not important how innovative your technology will be, or how you will “disrupt” the market. The simple things are more vital: who you are, how well you understand your future customers, how your experience and reputation will help the regulator believe you are not an accidental player, and what money you are using to fund the bank.

Furthermore, compliance is everything. The more unusual your customers and products are, the more time you will spend on this. Compliance, KYC, AML, and risk assessments are something you will fall asleep with and wake up to. I promise you. This “homework” is something that your customers will never see, appreciate or feel, but it will certainly require 80-90% of your time. Without this, your chances of opening a bank are minimal.

“Is it difficult to have a nice lawn? It’s not easy at all. Just cut your grass neatly everyday for 200 years.”

And then, you will succeed.
P.S. 22 business books that blew my mind
“The Good Guys Will Make it Happen” is the slogan of Life.SREDA VC and it means that people are the most important element in the startup and venture world\(^1\). Beyond direct work with startups and our investors, we are trying to build ecosystem and provide social impact through hosting events, workshops, lectures, inviting global fintech stars to Singapore, etc. We also share our 5-year old experience and knowledge in fintech\blockchain\insurtech industry through our analytical articles and materials, own blog FinTechRanking.com and “Money of the future”, famous annual fintech report.

Our mission is to build fintech ecosystem, where all parts are well-connected and support each other’s growth and development in a form of effective partnership: between entrepreneurs, startups, mentors, investors, banks, enterprises, regulators and government bodies. We also believe that financial inclusion is the major mission for all players in fintech industry in Asia, and this is one of the key reasons why we relocated to Asia in 2015. Unbanked markets provide the highest opportunities for fintech players worldwide. Another goal for our company is to establish digital bridges between different parts of the worlds, based on our experience and network in the West and the East. FinTech is a part of a digital world, which should not have any regional boundaries.

From the beginning we tried to maintain in our company very friendly and agile culture and atmosphere. All our team members are quite independent and self-motivated, which provides us the ability to avoid bureaucracy, slowness, closeness and all other attributes of corporate routine. The historical slogan of our company is “The Good Guys Will Make it Happen” which I believe reflects our uniqueness, because in the startup/venture world the most important are people, not processes, operations and other things, which are mainly important in the corporate world.

In our office we have a drawn quote of Master Yoda: “Do or do not, there is no try”. In venture business you have to strongly believe in what you do, should not be afraid of uncertainties and be positive whatever happens around. Like with Life.SREDA example, we came to fintech industry which basically didn’t exist at that time, with almost zero experience in fintech venture space, but with absolute belief in what we want to do, why and for whom. That helped us to overcome many problems and challenges on this unpredictable journey.

I am often asked by them for tips on “good books for good guys” to read. I have posted an article in Russian listing my favorite business books, which got over 70 thousand views. I hope that the English-speaking folks will also find it useful\(^2\).

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1 http://fintechnopreneur.com/the-good-guys-will-make-it-happen-igor-pesin/
01. As far as fintech and future of the banking go, I’d recommend:

- “Reinventing Financial Services – What consumers expect from future banks and insurers” and “Reinventing Customer Engagement: The Winning Business Model for Future Banks and Insurers” by Reggy de Feniks and Roger Peverelli;
- “Augmented” and “Bank 3.0” by Brett King;
- “ValueWeb” and “Digital Bank” by Chris Skinner.

These guys do not just describe how fintech has evolved, they speak from experience, as witnesses and active participants of this industry’s birth and development.

02. Tony Hsieh – Delivering Happiness: A Path to Profits, Passion, and Purpose

To my great embarrassment, I only read this book at the beginning of 2013, although it was published in 2010. Filled with its very special “chemistry” and energy, the book describes a journey of an Entrepreneur from its very beginning. Basically, the book is about corporate culture and values that unite employees. It illustrates that meeting not only functional needs but also intellectual, spiritual and aesthetic needs of customers is more important than the chase for money. The money comes as the result of this approach. There is one point of the story that really grabbed me. During the first several years the company - and, consequently, the fund that invested into it - was bearing losses struggling to build up successful business processes. In order to cut the expenses, Hsieh suggested that they should move to Las Vegas, which was more cost-effective in terms of office space rent, salary rates, and so on. He hoped for about 30 of the 90 employees to agree to that, however 70 volunteered to go.

In June of 2013 my team and I visited Tony Hsieh at his Zappos headquarters.

In 2013, Zappos began transitioning to “Holacracy,” an alternative management system that replaces a pyramidal hierarchy with a network of circles dedicated to specific functions like marketing or HR, and ditches traditional management. Job titles are replaced with “roles” that employees can accumulate. This past March, CEO Tony Hsieh decided the transition was moving too slowly and offered employees a severance package to leave the company if they didn’t agree with its direction. By May, 210 of the roughly 1,500 employees (14%) took the deal, and the Amazon-owned online retailer was all in with “Holacracy”.
03. Blake Mycoskie - Start Something That Matters

In my opinion, Tony Hsieh and Blake Mycoskie have much more in common than simply shoes. I love TOMS shoes - they are nice and comfortable, simple and cheap. But most importantly, they are produced by a company, which is more about making an ethical choice rather than just making profit. TOMS offers shoes for casual wear following its “One for One” business model - you buy one pair for yourself and another pair of shoes goes to those in need in poor African countries. In America you will meet somebody wearing TOMS shoes every three minutes, and I bet you’ll like him and relate to him. „Start something that matters” tells the story of TOMS, as well as around ten other companies which have inspired Blake (like Tony Hsieh’s Zappos). Interestingly, TOMS and other similar companies are now called story-doing companies as opposed to the story-telling ones. By the way, TOMS already has its followers: the fintech-startup CommonBond focusing on student loans, as well as the BOGO company with its one-for-one housing model.


The autobiography of the Virgin empire founder and owner has remained a bestseller for many years, and it is still up-to-date. It’s just as fascinating a read as, say, a British novel about some rebellious teenager growing up. He started his entrepreneurial journey at school issuing a local youth culture magazine, which later became famous on a national scale, with all the rock stars of the time appearing in it. I did not know that he was dyslexic and had trouble remembering facts and information not experienced by him personally. He made lots of mistakes, however his parents never blamed him for it – they were always there to recognize his achievements. Even at his lowest moments his mother told him: “Let’s not discuss what happened - sure you’ve drawn the right conclusions out of it. Let’s just concentrate on how we make it right again.” To me his Virgin Records was always associated only with the Sex Pistols, but it turned out they worked with more than a half of the rock stars of the time. The most stunning about Branson’s book is the honesty of his story, the authentic and genuine way he talks about his mistakes and lessons learned. The vibrant feeling of passion for entrepreneurship just flows into the reader’s mind with every page. I had the chance to meet Branson personally in October of 2012 during our fintech-conference “Money of the Future”. After that he invested in such fintech-startups as Transferwise, Blockchain.info, IndieGoGo, BitPay, Clinkle, Square.
One more fantastic biography is about PayPal’s co-founder and Stipe’s investor: “Elon Musk: How the Billionaire CEO of SpaceX and Tesla is Shaping our Future” by Ashlee Vance.

05. Howard Schultz – Onward: How Starbucks Fought for Its Life without Losing Its Soul

Unlike Richard Branson, whose journey began in his early years, Starbucks’ owner Howard Schultz started off towards his passion somewhat later. His spirit of entrepreneurship evolved when he was in his thirties. A successful manager, he was quite new in the coffee industry. Starbucks was already a well-established company when he joined it. However, it was only well-known in one state, and the business was focused on selling coffee beans. Schultz’s story is a fascinating love story about his love for the business owned by shareholders who founded it; about motivation and inspiration they gave him, which he carried further to give the business new opportunities with respect to marketing, product and distribution development; and how he finally acquired the company to make it one of the most widely-known all over the world. Indeed, love is the right word to describe his story. I’m not easily touched, but the unique way this book was written fascinated me and nearly brought tears to my eyes. (Note that today Starbucks is one of the major fintech players with fantastic results of their pre-order mobile applications and investments into Square).


It’s a great and very dynamic book about business in the Internet Era. Not just some worn-out clichés about the new perspectives, but a rigid and very pragmatic set of rules and implications the Internet brings to any business today. The new “Google style” business model implies that you persist in developing your product not because you evaluated the risks and the profit, but just because you know that you offer an interesting and innovative product of highest quality. Only later you figure out where exactly the money will be coming from (Google almost went bankrupt at the beginning not actually knowing what will bring them the money). I’d also recommend reading Google Speaks: Secrets of the World’s Greatest Billionaire Entrepreneurs, Sergey Brin and Larry Page by Janet Lowe! Totally different from the first one, since it is more a biography than a business & economics book. Lots of interesting facts about the lives of Google founders Sergey Brin and Larry Page, a detailed history behind the company’s evolution and a lot of wonderful sketches of the Google-employees’ working days.

The main idea the book conveys is that if your business is attractive, interesting, innovative, fascinating, and bright - or, to put it short, funky - it is doomed to become nothing but a success. FUNK functionality, it no longer counts! The world is full of surprises, irrational feelings and spontaneous actions. It needs an inspiring, unpredictable, funky business. This book shows how to create a business not with a commodity product, but with a high added value, which will make you not just good, but the best. “Read our lips. You cannot expect the customer to think the unthinkable. You may well think of yourself as a demanding and sophisticated customer. You may well be right. But would you have imagined that there could be a market for a tiny electrical chicken which requires regular feeding, nurturing and entertainment otherwise it dies? Yet, the Tamagotchi - the tiny pet from cyberspace - was one of the great success stories of 1997. Gallery visitors did not tell Picasso to invent cubism. Jazz fanatics did not suggest that Miles Davis should work with hip-hoppers. Moviegoers did not propose to Lars von Trier, the Danish film director, that he make “Breaking the Waves”. And customers sure as hell did not come up with the idea for CDNow or Amazon.com. If you want to do something really interesting and revolutionary, learn to ignore your customers. Most customers function as rear view mirrors. They are extremely conservative and boring, lack imagination, and don’t know their own minds. If customers are constantly beating you to new ideas, hire them or get another job.” This book does not claim to state any ultimate truths; it just exercises your brain, making you take a look at business - and yourself - from a different perspective. “To get some fresh input visit art galleries, go to rave parties, listen to opera, hang out with alcoholics or druggies, read stuff that you are not really interested in - do anything that you have never done before. Try it out - surf the Web, go skydiving, visit a museum. Normality is the route to nowhere. If we are only willing to behave like all the others, we will see the same things, hear the same things, hire similar people, come up with similar ideas, and develop identical products or services. We will drown in the sea of normality. And Normal Inc. is bankrupt.” This book made me join the EMBA program at the Stockholm School of Economics, where these guys teach.

08. Steven D. Levitt and Stephen J. Dubner - SuperFreakonomics: Global Cooling, Patriotic Prostitutes, and Why Suicide Bombers Should Buy Life Insurance

To achieve the desired result, it often takes a lot of power of mind and will just to go beyond the boundaries of the standard way of thinking. Basically, business success, as well as the effectiveness of state governance,
highly depends on the ability to rise above the traditional approaches. This book is in no way meant to teach economics. Much rather is it meant to stimulate new ideas, channeling the standardized thinking into new areas and challenging it with inventive tasks. Both “Freakonomics” and “Super-Freakonomics” present various cases touching upon different spheres of our life with pretty unexpected conclusions and hypotheses offered by the authors. Unfortunately, they do not outline the algorithm allowing them to play with the data so brilliantly, exploring the hidden side of everything and often finding genius solutions. By the way, one of the cases the book presents was later shown in the “Moneyball” movie with Brad Pitt as a baseball team manager. This film also illustrates the beauty of Levitt and Dubner’s sensational approach.

09. **W. Chan Kim and Renée Mauborgne – Blue Ocean Strategy, Expanded Edition: How to Create Uncontested Market Space and Make the Competition Irrelevant**

The book deals with the requirements for strategic business success. It shows that lasting success can hardly come from head-to-head competition of rivals over a share within the same market space (resulting in a “red ocean” of blood). It will much rather come from creating and capturing “blue oceans” – unrevealed or new market spaces with a potential for growth. The book presents the story of Cirque du Soleil, the New York police (also touched upon in “Freakonomics”), as well as many other curious and helpful cases. One of the few books that really challenge the traditional thinking of a “highly-effective manager”, it makes you take a different look at the path to profitable growth.


In this book Gladwell offers an analysis of how trends are sparked and take hold. What and how exactly can you do, which audiences and under what conditions should you target to turn your product or idea into a popular and influential trend, spreading like an epidemic? The answer to this question really matters, considering that feedback and recommendations of friends, acquaintances, etc. constitute one of the major communication channels in the retail sale of financial products. A must-read book, which, by the way, touches upon some cases presented in the “Freakonomics” offering different, though not less brilliant, approaches and conclusions.

Blink: The Power of Thinking Without Thinking – another book by Gladwell, though not quite as bold and aggressive as “The Tipping Point”. It illustrates the force of the first (momentary) impression of events, actions, ideas, questions, aiming to establish a pattern when it is necessary to trust
your (or somebody else’s) intuition, and when it would rather make sense to go for a detailed and accurate analysis, apply polls, tests and so on.

The main idea of his book “Outliers: The Story of Success” is pretty trivial: It is not that much the innate qualities (including high intellect characteristics) that form a leader and account for success. It is much rather the right environment, the ability to choose it and adapt to it. Like I said, not an unfamiliar idea, but it is presented in a very unexpected way. By the way, a brief summary of “Outliers: The Story of Success” can be found in “SuperFreakonomics” – one of its chapters gives an analysis of the book. His latest intellectual puzzle David and Goliath: Underdogs, Misfits, and the Art of Battling Giants was also a pleasure to devour. Gladwell plays with unconventional logical chains, establishes freakonomic interrelations and draws astonishing conclusions – all of it in his smart and smooth manner, which makes the book a marvelous read. It is basically a book on how small companies can successfully compete with large ones through innovative approaches and inventive ideas, taking the risks and using their size-determined flexibility and higher mobility. It is not that much the conclusions that make this book unique. It is the effect it has on your mind – Gladwell provides a massage tool, which will hit all the hard-to-reach points of your brain and thus train its ability to absorb new useful inputs. Gladwell also touches upon one of my favorite discussion lines – how restrictions (sometimes artificial) on the early stages of a person’s development contribute to creativity as well as the ability to survive, adapt and gradually evolve in future.

11. Bo Burlingham - Small Giants: Companies That Choose to Be Great Instead of Big

This book by Bo Burlingham (Editor at large of Inc. Magazine) is somewhat like Gladwell’s „David and Goliath“. It describes some really cool small and middle-sized companies that rejected the pressure of endless growth which would have killed their corporate culture, unique style and high level of provided services. They did not become Big, but considering their goals, their impact and their vision - they are Great. As far as “small giants” go, I am not that excited about the Inc. Magazine anymore. Instead, I go with Monocle, Wired and FastCompany. Speaking of Monocle, it has launched two very useful “best practices” books: The Monocle Guide to Better Living (on urbanistics) and The Monocle Guide to Good Business (on value-based small and middle-sized business).

This easy-to-read and fascinating book deals with the economics and psychology of the contemporary art world. A must for everyone, irrespective of the profession – the book is a pleasure to read, and its intriguing ideas can be applied to any field. I was very much impressed by the story of Saatchi, who first founded one of the largest international advertising companies and has now also become a prominent art dealer. I always knew that advertising and contemporary art go hand in hand. Same actually goes for the venture capital business – just as in the art, the role of marketing and PR is more foregrounded here than that of fundamental economic analysis.

13. As I was reading the “Tipping Point”, I also read some classic books on globalization (now, with the second wave of China’s and India’s influence rise, it is a popular theme again): “The World Is Flat 3.0: A Brief History of the Twenty-first Century” by Thomas L. Friedman and “No Logo” by Naomi Klein (not that easy to read, but a classic of anti-globalism).

14. Julian Birkinshaw and Stuart Crainer – Leadership the Sven-Goran Eriksson Way: How to Turn Your Team Into Winners

It might first seem that this is a book about the manager of the English national football team. In fact, it is not. It is about building, handling and leading a successful team. Placing these skills in the context of business might be helpful in finding new paths for your own advancement and contribute to the successful development of your team.

15. Clayton M. Christensen – The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail (Management of Innovation and Change)

In this book Christensen analyses a large number of cases from different fields and identifies two types of innovations: sustaining and disruptive. He also explains why successful corporations (usually at the prime of their business life) confront the disruptive innovations, which often results in their failure. Sustaining innovations are always based on carefully done studies of market trends and aim to meet the customers’ needs and increase the loyalty of the existing clients’ base. They are meant to improve the performance of already established products and bring a fast (although not long-lasting) revenue increase. Such innovations always find support with the shareholders and the executive boards. Disruptive inno-
vations are always connected with higher risks, they imply a new vision and often rely on rather intuitive ideas offering the customers something totally new, pursuing a breakthrough change resulting in a long-term revenue increase. Such innovations are harder to embrace, since they result in worse product performance in the short-term. With the focus on new products and technologies it takes time to find new customers and markets, however in the long-term it brings much more revenue and value than one could even imagine.

A classic example is the Amazon Kindle case. Amazon shareholders were always opposed to the Kindle project. However, now it generates a large part of Amazon’s revenue, with Amazon share prices rising rapidly since 2008 when Kindle was launched. Christensen shows that large and successful companies fail to apply disruptive technologies – they always pursue the short-term objectives at the expense of more strategic thinking and future value increase. The only way is for the corporation to single out a separate company/team responsible for the disruptive technologies implementation. This team gets a separate building, unusual job titles, they are not required to follow the dress code or the set working hours. These guys need to have the spirit of entrepreneurs, even if they are hired managers. The corporation creates sort of a startup for them in order to give them the feeling that it is their business, their company and only their effort counts.

16. **Brad Stone – The Everything Store: Jeff Bezos and the Age of Amazon**

A very personal (and honest!) story of one of the most “intolerable” and outstanding entrepreneurs of the last 20 years. Since it opened its website in July 1995, Amazon.com Inc. has grown from a seller of books into one of the world’s biggest retailers. Its growth has been fueled by a consumer shift to online shopping and Amazon’s willingness to sacrifice profits to expand. Here’s a look at 20 years of sales for Amazon and three close competitors—Target Corp., Best Buy Co. and Barnes & Noble Inc.—and a look how Wall Street has valued those companies.


I had already read two books about Jobs before this one – both of them pretty crappy. This one is an action-stimulating thrill of a book! It makes you wonder, it raises questions, it triggers self-reflection, it makes you think-think-think! As far as Jobs goes, I have always admired his talent to evolve and change – from a hard-to-predict and reckless egocentric to the visionary leader. His marriage greatly contributed to it (his very interesting relationship story), as well as his mentors.
18. **Leander Kahney - Jony Ive: The Genius Behind Apple’s Greatest Products**

One more story behind Apple’s success - a biography of one of the most outstanding designers of our time, and one of the most prominent characters at Apple after Steve Job’s death. Too fairytale-like, in my opinion, but still one of the few opportunities to take a look at this exceptional designer’s life.

19. **Ed Catmull and Amy Wallace - Creativity, Inc.: Overcoming the Unseen Forces That Stand in the Way of True Inspiration**

Describing the nuances of building a successful creative team Ed Catmull, one of the most skilled professionals in this field, does not try to speak vaguely. Quite on the contrary, in his book “Creativity, Inc.” he turns the sophisticated psychological theories into simple techniques which have made Pixar so widely admired, and so profitable. The studio, initially owned by Steve Jobs, has turned into one of the Hollywood legends and has for many years dominated the world of animation. What is the key to its success? The company has found the right approach to its, without doubt, greatest asset - the people.

20. **Lee Kuan Yew - From Third World to First: The Singapore Story - 1965-2000**

Lee Kuan Yew is the man who “created” Singapore the way we know it. A man of unbelievable will power and great vision. Singapore is just one big startup. Recently, taking a walk in St.Petersburg, I thought of how much in common Peter the Great and Lee Kuan Yew had:

- They both had an awesome long-term Vision
- …and had the balls to realize it!
- They both built grand cities from scratch
- …and managed to do it during their lifetime!
- They both travelled a lot in order to gather the best practices from all over the world and then implement them at home. To gather more experience, they both invited a lot of foreigners.
  They both saw education as a priority and invested a lot into it.

21. **Chris Anderson - The Long Tail: Why the Future of Business is Selling Less of More**

In “The Long Tail” Chris Anderson (editor-in-chief of Wired Magazine) describes how modern technologies change the distribution infrastructure of goods and contents. Now that there are no more constraints of physical shelf place and consumers are offered infinite choice online, the economy
and the society are shifting away from the focus on the mainstream products and markets. More customized niches evolve, that can better satisfy narrow interests of the consumers, which leads to “democratization” of the distribution. Online retailers, such as Amazon, eBay, Netflix make more cumulative revenue selling niche-targeted goods from small “no name” producers, writers, musicians, etc., than they cash in from the widely-known brands and mainstream products. At the same time, the small producers, unknown designers and artists, who do not have the huge budgets for advertising or means to access the traditional distributional network, have the opportunity to appeal to the consumers, find their audience and be successful. Google Advertising has provided the tools allowing the small and middle-sized companies to reach their target audiences and be even more successful than the global market players with huge TV ratings.


One of the most controversial books I’ve read recently. I’m used to the pragmatic approach: either something or somebody can be useful for what I do and might give me some new input or perspective, or not. With the “Blockbusters” I found myself in a mental trap: it gives more questions than answers and makes you feel rather doubtful than happy about the right path that you’ve chosen. Anita Elberse (Professor of business administration at Harvard Business School) confronts the “long tail” economic model with her “blockbuster” business approach.

Elberse uses case studies from different industries (including companies from the “long tail” list) to argue for the blockbuster strategy. She contrasts the approach of Alan Horn when he was president and CEO of Warner Brothers (now he’s the head of Disney) to that of Jeff Zucker as CEO of NBC Universal. Horn followed the blockbuster strategy making a handful of big bets on “event movies” with largest budgets, most expensive actors, most gripping special effects and advertising on the broadest scale. This resulted in Warner becoming the first movie studio to surpass 1 billion dollars in domestic box-office receipts for 11 consecutive years and Horn himself being lured away by Disney. Zucker, in his turn, put quite a contrasting plan into place. He focused on cutting back on expensive dramatic content, instead acquiring rights to more reasonably priced properties; avoiding star actors and prominent TV producers, who demanded hefty fees; authorizing fewer costly pilots for new original series and launching more “copycat” series instead. The result was that NBC was no longer the top-rated TV network, but fell to fourth place, and Zucker was asked to leave his job.
Elberse points out the infinite variety of choices provided by the “long tail”. In her opinion, it’s just too much for the consumers, who get lost in this wide range of possible choices, seek guidance in the form of trusted brand names and in the end are grateful if someone makes the choice for them. Blockbusters solve this problem, making the choices for the consumers.

According to Elberse, more and more money will be flowing into blockbuster projects. 10% of Warner Brothers’ most expensive films required 30% costs and brought 40% revenue. Investments diversification no longer implies risk hedging – you can still become an outsider compared to those who placed their bets on a handful of blockbusters.

If your business is not entertaining, it’s not a blockbuster. You might offer a good product, which will fully suit the customers’ functional. However, if you are no fun and no cool, you won’t come in first. FC Real Madrid is not just about winning the matches, it’s also about the people watching the matches. These people want more show than football. The need the star players, the fascinating action, the loud happening, the colorful advertising. So, Real Madrid buys most expensive players and spends loads of money on PR and broad-scale advertising campaigns. They engage Cristiano Ronaldo like Hollywood movie studios engage Brad Pitt – show-business is just as well his territory as football. And thus, they win. (Although, I also have to give credit to FC Barcelona. They nurture their own star players, perfect the technique, and they win just as well.) You might write good songs and sing them brilliantly – that alone won’t do it. You need to be like Lady Gaga who is dazzling her audience with the spectacular visual presentations, including colored wigs, extraordinary makeup, most extravagant clothes and remarkable choreography.

Companies from the “long tail” list are going with the blockbuster strategy. Amazon is not just distributing the content, but also investing into its production (e.g. Bezos buying Washington Post). Netflix is not only streaming films and series, it has also invested into a very expensive Kevin Spacey series “House of Cards” (one of my favorite, by the way).

“Consumers are more interested in culture than” Producers in many branches think that their task is to provide products and services of high quality to the people. The people, however, spend most of their time on communication and entertainment. So, if in addition you can entertain/thrill/inspire them – they will surely choose you.

Winners attract people on the psychological level. “If, say, a book is very popular and widely discussed in the mass media, it is more likely to be well-sold.” Being a blockbuster means showing everywhere and to every-
one that you are the first, the greatest, the most important. It’s irrational, but it works. Being just good is not good enough. Be the best.

You should back blockbusters with mighty advertising and marketing campaigns. As Alan Horn says, “Only a big event will get the people to leave their houses”. Blockbusters are so prominent only because they cost so much. “Only a few in this world can afford to spend 200 million dollars on a film - and this is our advantage in this battle. If you have already spent 200 million dollars to produce a film, it’s easier to say, ‘Let’s spend another $100M to advertise it.’”. The blockbuster strategy should take away any uncertainty, both for the consumers and the partners.

Creative products are very expensive to produce, but very cheap to reproduce. That is why it’s important to spend a lot on distribution and marketing to make a hit, “Advertise a lot to make sure that everyone is aware of it, and leverage your distribution power to make it easy for the public to obtain”. According to Elberse, the same goes for pharmaceuticals and IT. If you are creating a new Facebook, it’s not enough just to offer a good product, you need to invest a lot to make it a blockbuster. A movie ticket always costs 10 dollars, no matter the film quality. “Even the most passionate moviegoers won’t see more than one film a week. If the customer can only see one film this week, it must be my film”. Crowdfunding fintech-service KickStarter not only lets you buy the products and invest into projects, but also makes it an entertainment. Your investment is public, it becomes a social contribution, and you feel the satisfaction of contributing to a new start, of being a part of something great.

Elberse herself is quite inspiring – Observer chose to attend her book presentation party, because of the hundreds of invitations to book launches they received none mentioned a party at a nightclub. At her book launch Elberse did not read some passages from her book, as it is normally done at such parties. She rocked the audience from the DJ booth. Her students pointed out that this is pretty much what her lectures at Harvard look like. She is one of the most popular professors with the most in-demand classes. “She is a rock star!”

What raised some questions? The responsibility that goes with the choice-making. “With pop-culture there is always the fear that the one taking decisions for you will lead you in the wrong direction”. The great risk with the blockbusters is that the one making decisions on the financing may have no taste. “Buying is entertainment” kills “buying is voting”. In order to promote themselves, their values, their lifestyle, many companies have to a certain extent deprived the political elections of their function to shape the future. A lot of consumers began to pay more for the products and services of those companies, which spend a part of the revenue on certain social initiatives,
which should contribute to a better future much more, than another election of another politician. Entertainment, however, kills this social function of buying. (Although the Obama case shows that you can be smart and funky at the same time.)

I think this book is more useful to „blockbuster people” than blockbuster companies. It points out that there are more companies ready to invest into superstars, than there are actual superstars, which is why the latter are highly overpriced.

The blockbuster strategy kills innovations. Not always, but very often. Any culturological study - be it on classical antiquity or contemporary hipsters - shows that every culture (including consumer culture) needs excessive elements in order to develop. Blockbusters need the “long tail” in order to exist. In my opinion, mediocre comedies are necessary, because they ensure working places in the movie industry, create a larger choice in the cinemas, let cameramen and film editors work on their skills and the actors - perfect their technique.
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