

Innovation in the financial industry

Alireza Golriz
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Research Framework

We have structured our framework against **six functions** of financial services and **eleven clusters** of innovation.

Functions of Financial Services

Even in an environment of rapid change to the design, delivery and providers of financial services, the core needs those services fulfill remain the same. We have identified six core functions that comprise financial services :

- *Payments*
- *Market Provisioning*
- *Investment Management*
- *Insurance*
- *Deposits & Lending*
- *Capital Raising*

Clusters of Innovation

We have identified 11 clusters of innovation exerting pressure on traditional business models





Function grouping

Innovation cluster

Key trends driving disruption in financial services business model

Summary of the activity that the cluster of innovation is creating

Major implications for financial institutions as a result of activity within the cluster

Key Findings | Payments

Cashless World	Emerging Payment Rails
<p>Key Disruptive Trends</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div> Mobile Payments</div> <div> Streamlined Payments</div> <div> Integrated Billing</div> <div> Next Generation Security</div> </div> <p>Summary New consumer functionalities are being built on existing payment systems and will result in meaningful changes in customer behaviour</p> <p>Implications for Financial Institutions</p> <ul style="list-style-type: none"> Financial institutions may lose control over their customers' transaction experience as payments become more integrated With reduced visibility, becoming the card of first choice among specific customer segments will become critical Winning issuers will gain visibility into more of customers' spending patterns and build more holistic understanding of customers 	<p>Key Disruptive Trends</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div> Cryptographic Protocols</div> <div> P2P Transfers</div> <div> Mobile Money</div> </div> <p>Summary The greatest potential for cryptocurrencies may be to radically streamline the transfer of value, rather than as store of value</p> <p>Implications for Financial Institutions</p> <ul style="list-style-type: none"> As more efficient alternative rails are adopted, the role of traditional intermediaries as a trusted party may diminish Financial institutions may face a new set of risks (e.g., reputation, security) and regulatory issues as they participate in new rails Applications of these technologies can expand beyond money transfer to modernise other financial infrastructures



Key Findings | Insurance

Insurance Disaggregation

Key Disruptive Trends



*Disaggregated
Distribution*



*Sharing
Economy*



*Self-Driving
Cars*



*3rd Party
Capital*

Implications for Financial Institutions

- In an increasingly commoditised environment, the risks of customers being more fickle will increase and creating loyalty through innovation will become more important
- Insurers' ability to benchmark against competitors will become more important as customers gain ability to comparison-shop
- With increased margin pressure, insurers will need to increase their size by expanding either scope or scale

Connected Insurance

Key Disruptive Trends



*Smarter, cheaper
sensors*



Wearables



Internet-of-Things



*standardised
Platforms*

Implications for Financial Institutions

- As customer relationships evolve from short-term product-based to long-term advisory, capturing customers early on becomes critical
- As insurers become a hub for customer data, their strategic value within full-service financial institutions will grow
- Forming partnerships with data providers, device manufacturers and other ecosystem participants will be critical to enable connected insurance

Key Findings | Deposits & Lending

Alternative Lending

Key Disruptive Trends



P2P



*Lean, Automated
Processes*



*Alternative
Adjudication*

Implications for Financial Institutions

- Intensified competition will narrow spread between deposits and loans, decreasing financial institutions' profitability
- As savers turn to alternative platforms, traditional deposits and investment products will be eroded
- Distribution of customers' credit portfolio over a large number of alternative platforms may make it difficult to measure customer's creditworthiness

Shifting Customer Preferences

Key Disruptive Trends



*Virtual Banking
2.0*



*Banking as Platform
(API)*



*Evolution of Mobile
Banking*

Implications for Financial Institutions

- Financial products will increasingly be offered on a stand-alone basis limiting incumbents' ability to competitively cross-subsidise
- Financial institutions' ability to collaborate with non-traditional players and other institutions will become essential
- Financial institutions will need to choose where they will specialise and where they will leverage external partners (e.g., product manufacturing vs. creation of customer experience)

Key Disruptive Trends



*Empowered Angel
Investors*



*Alternative
Adjudication*

Implications for Financial Institutions

- Access to more diverse funding options allow new companies to grow at a quicker pace and shorten the average time between early funding stages
- Distribution platforms create a venue for investors to tailor their investment portfolio across dimensions beyond financial return
- As the barriers to enter the asset class fall, it becomes ever more important for traditional intermediaries' profitability to find undiscovered "start" investments

Key Findings | Investment Management

Empowered Investors

Key Disruptive Trends



*Social
Trading*



*Automated Advice &
Wealth Management*



*Retail Algorithmic
Trading*

Implications for Financial Institutions

- New entrants will place pressure on margins and intensify competition among traditional players in more specialised segments
- As more advisory functions become automated, distributing wealth products via proprietary advisory channels will become less effective
- As new entrants widen the access for mass customers, they will compete for customers' traditional savings deposits

Process Externalisation

Key Disruptive Trends



*Advanced
Analytics*



*Natural
Language*



*Process-as-a-
Service*



*Capability
Sharing*

Implications for Financial Institutions

- The ability to access sophisticated capabilities without large infrastructure investments flattens the playing field for mid-sized institutions
- Organisational agility will become critical to sustain competitiveness as high-value capabilities are continued to be commoditised
- Externalisation of capabilities may result in workforce skill loss by preventing the development of a holistic view of operations

Key Findings | Market Provisioning

Smarter, Faster Machines

Key Disruptive Trends



*Machine Accessible
Data*



*Artificial Intelligence /
Machine Learning*



*Big
Data*

Implications for Financial Institutions

- The impacts of event-driven algorithmic trading on liquidity, spread and systemic stability are unclear
- With end-to-end trading activities automated, even small errors in data integrity, trade strategy, and execution will lead to large impacts
- Regulators have the potential to significantly alter the course of developments in this area

New Market Platforms

Key Disruptive Trends

ALGOMI

Fixed Income

NOVUS

*Funds / Fund
of Funds*

BISON

*Private Equity /
Venture Capital
Shares*

LIQ.UITY

*Private
Company
Shares*

ClauseMatch

*Commodities &
Derivative
Contracts*

Implications for Financial Institutions

- As traditional differentiators among intermediaries (e.g., ability to discover counterparty) become commoditised, the importance of advisory services will increase
- Information platforms will evolve the standards for best-execution from a best-efforts basis to more quantifiable and comparable metrics

We identified six important themes that cut across functions and touch multiple clusters of innovation

1 Streamlined Infrastructure

- Emerging platforms and decentralised technologies provide new ways to aggregate and analyse information, improving connectivity and reducing the marginal costs of accessing information and participating in financial activities

2 Automation of High-Value Activities

- Many emerging innovations leverage advanced algorithms and computing power to automate activities that were once highly manual, allowing them to offer cheaper, faster, and more scalable alternative products and services

3 Reduced Intermediation

- Emerging innovations are streamlining or eliminating traditional institutions' role as intermediaries, and offering lower prices and / or higher returns to customers

4 The Strategic Role of Data

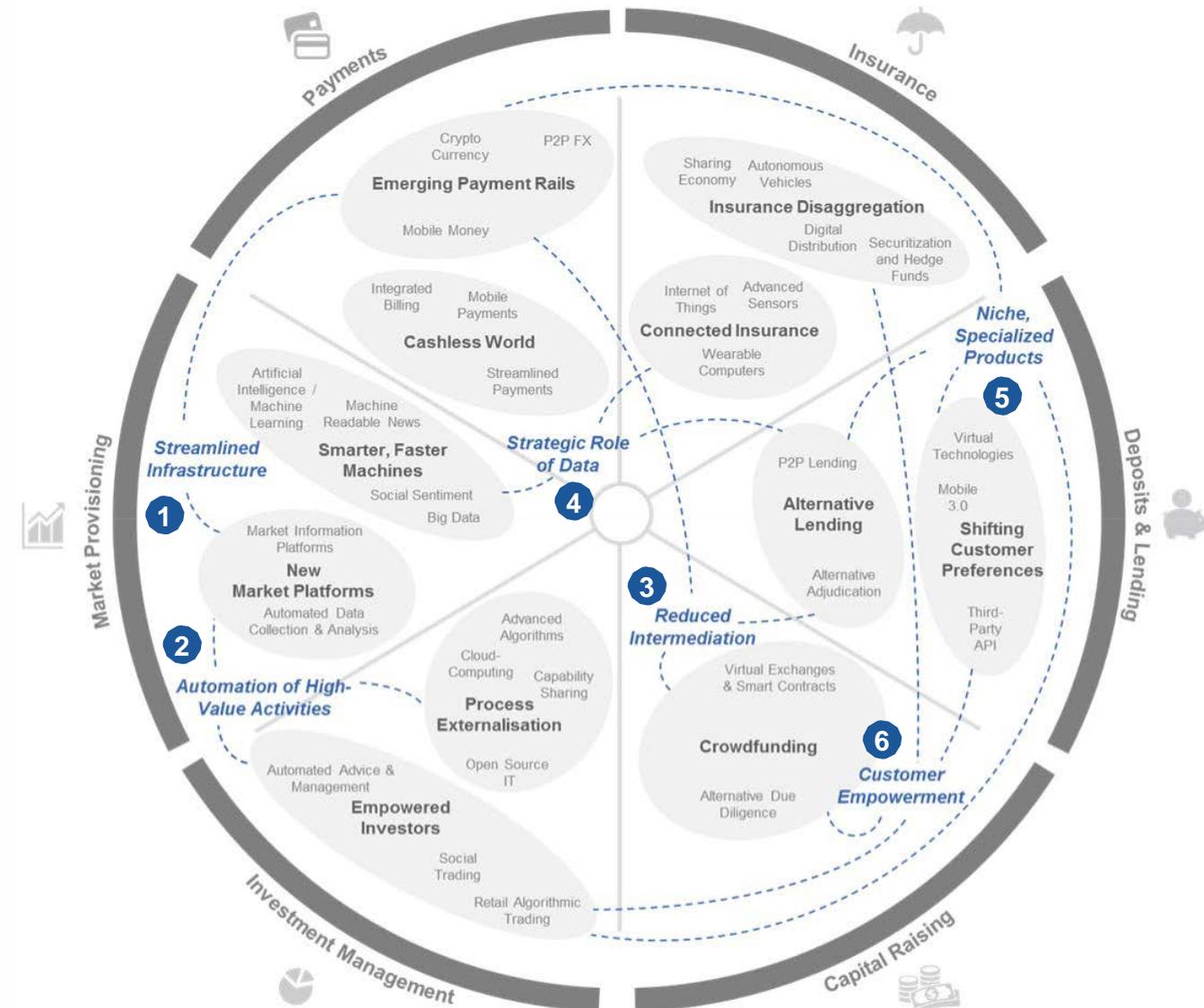
- Emerging innovations allow financial institutions to access new data sets, such as social data, that enable new ways of understanding customers and markets

5 Niche, Specialised Products

- New entrants with deep specialisations are creating highly targeted products and services, increasing competition in these areas and creating pressure for the traditional end-to-end financial services model to unbundle

6 Customer Empowerment

- Emerging innovations give customers access to previously restricted assets and services, more visibility into products, and control over choices, as well as the tools to become "prosumers"



Key innovations for the cashless world



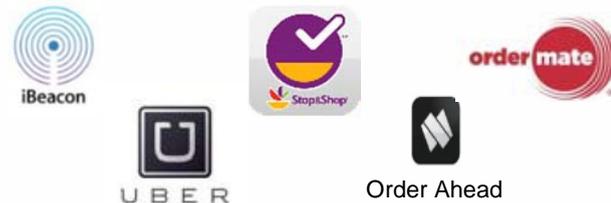
Mobile Payments

- Mobile wallets
- Mobile-based merchant payment solutions



Integrated Billing

- Mobile ordering & payment apps
- Integrated mobile shopping apps



Streamlined Payments

- Location-based payments (geotagging)
- Machine-to-machine payments



Next Generation Security

- Biometrics / location-based identification
- Tokenisation standards



Common characteristics of successful payments innovations



Simplicity

- Payments innovations allow customers to make payments in a single tap or automatically by leveraging connectivity (e.g., wireless network, near-field communications)



Interoperability

- Most innovative payment solutions are not restricted to a single payment method, allowing customers to manage and use a variety of credit cards, debit cards or bank accounts for payment



Value-Add Services

- Many innovative solutions offer value-add functionalities in addition to payments, enabling merchants and financial institutions to interact more closely with customers and deliver additional value (e.g., loyalty, offers)

What trends are supposed to be on the top of the 2018 wishlist for banks?

Innovation in the financial services is certainly a hot topic. It is fueled by ever-growing investments in the fintech sector, outdatedness of the core banking systems and the regulation that requires banks to cater for the new technologies. However, with so many things on a table, it might be challenging to define the top banking trends for 2018. Let us help you with that.

Every year brings something that becomes a hot topic in the banking world and makes the industry crazy about it. When a new feature, service, product or approach is successfully embraced by one or more institutions, the rest wants to follow – and this is exactly how a trend is set.

What trends are supposed to be on the top of the 2018 wishlist for banks? Let's see.



What trends are supposed to be on the top of the 2018 wishlist for banks?

1. An obvious banking trend– More online

Even though banks went online quite some time ago, they are still bound to many offline procedures. Take opening a new account for instance: is it possible to do it entirely online in all banks? No – and, unfortunately, this applies to MOST financial institutions. The main obstacle is the KYC process, which often requires branch based ID verification, hand-written signatures or providing some extra documentation. In order to simplify and streamline this user experience, banks should make more efforts towards leveraging new methods of client verification, so that a new customer can apply online and won't bother with visiting a bank branch. These techniques may be based on APIs for importing data from user's existing accounts in other institutions, or they can rely on solutions provided by third parties, such as biometrics (face/voice/fingerprint recognition), capturing of ID information, digitization of paper documents and so on.

The application process – not only for new accounts but also for products within an open account – must also be truly multichannel. When you start something with a mobile device, you would want to have an option to finish it on your laptop's browser when you are back home, or vice versa. Or just to save the half-filled form for now and resume it later without the need of re-entering the same data from scratch. Surprisingly, in many cases, this is not an obvious feature.



What trends are supposed to be on the top of the 2018 wishlist for banks?

2. A continuing banking trend – More mobile

Speaking of mobile, there should be no features, products or services accessible only to full desktop browser users. With mobile browsing surpassing desktop browsing, it's at least not very smart to discriminate customers because of their device preferences – and not to leverage the fact that a mobile device is in use most of the time during the day. Moreover, thanks to localization services, it can be used to present a user with special offers for a particular place he or she is around. A mobile device can also replace credit/debit cards, which brings us to the next trend.

3. A possible bank trend – More cardless

Mobile banking in 2018 should also become more focused on cardless payments: NFC-capable smartphones with HCE will hit the budget segment this year and wearables are supposed to have this feature as well. And then there's a growing number of peer-to-peer transfers/payments directly from mobile apps – and they're not even banking apps. Banks need to embrace this trend in their apps if they don't want to lose some part of the market to the competition.



What trends are supposed to be on the top of the 2018 wishlist for banks?

4. An emerging trend – Artificially intelligent banking

AI, or machine learning, is already here. It's on your smartphone in the form of Siri, Cortana, and other personal assistants, it drives an autonomous car, helps you shop online or choose a movie for a perfect evening. In banks, it helps detect possible frauds, takes care of risk assessment and crunches big data to find patterns and trends that could better align the business with customers' needs. Machine learning is also being adopted for fast and accurate credit scoring.

But the possibilities of AI in banking aren't limited just to back office. Customer experience can also be improved dramatically thanks to chatbots, which can communicate with users in a natural language, providing assistance and answers just like a real person would do. Virtual branches, now being simply traditional call centers with more communication channels available (chat and video besides a regular voice), will gradually transform into AI-driven virtual assistants in equally virtual environments presented in VR or AR. And voice control is the natural choice for the next generation of mobile banking apps.



What trends are supposed to be on the top of the 2018 wishlist for banks?

5. Top Banking Trends: APIs and FinTechs

In the EU, the year 2018 is the last one when banks can keep all of their clients' data unavailable to other institutions. European banks are preparing for the PSD2, which unleashes banking data to third parties through APIs. What seemed to be a threat to the established traditional banking industry, now looks more like the future of it. All because of FinTechs new players on the market, who came from the outside and disrupted the game.

FinTech companies offer innovative products and services, which either replace existing solutions offered by banks or create whole new quality and experiences for customers. Although FinTechs are miniature compared to banks, they are able to respond faster to people's needs and technological advances. With an access to clients' banking data through APIs, they could compete with their big opponents almost on equal terms – no wonder banks were reluctant to such changes.

“If you can't fight them, join them”, the proverb says, so now banks know that FinTechs are not enemies, but rather allies if handled properly. The trend for this year will be to cooperate with these small challengers: banks will open access to their clients' data, but in return, they will be able to offer their own products and services to new customers or use innovative features otherwise requiring lots of in-house development time, effort and money.

Partnerships between banks and FinTechs will bring mutual benefits and should change the banking industry forever. API-based banking means flexibility: FinTechs can use banking infrastructure and data from different providers to build the perfect mix for particular clients, while banks can reach more customers, as well as embrace new technologies, services and features much faster than in the case of closed, proprietary systems.



What trends are supposed to be on the top of the 2018 wishlist for banks?

6. Banking Regulations are the trend in 2018

The PSD2 is not the only regulation banks should take into consideration for 2018, when planning their strategies. Starting from January 1, 2018, the MiFID II directive will impose serious limitations on making profits from offering third party investment funds by banks. The incomes from selling IFs will be severely reduced, so banks have to adjust their business models accordingly.

The other regulation, which needs to be addressed, is Basel III. It forces banks to increase their capital ratios based on risk-weighted assets. This means less capital to be invested and therefore fewer profits.

This year will surely reveal some new solutions for banking, which should become trends for next year. Nevertheless, it will be fascinating to see how banks implement today's trends and technologies and what the results are



7 New Banking Technologies You'll See in the Next 5 Years

New technology in banking is already transforming the financial world, and the traditional banking landscape is set to rapidly change in the next five years. Safety features, such as advanced cryptography and biometrics, will help protect against bank scams, and remote applications will make it easier than ever to do your banking without ever visiting a branch but if you do, the experience is likely to be much more customer-friendly. Here's a look at the how banking technology will change the way your money is handled.



7 New Banking Technologies You'll See in the Next 5 Years

1. Blockchain Technology

Blockchain technology is set to fundamentally transform banking and financial services. It decentralizes financial management from a central authority to a widespread network of computers. Financial transactions are broken down into encrypted packets, or “blocks,” which are then added to the “chain” of computer code and encrypted for enhanced cybersecurity it’s been compared to “email for money” by blockchain startup CEO Blythe Masters. Because the technology has the potential to improve numerous facets of banking and is the basis for other banking technology trends like Bitcoin it’s no longer a question of if blockchain will change the banking industry, but when, according to the Wharton School of the University of Pennsylvania.

2. Upgraded ATMs

ATMs transformed the banking system when they were first introduced in 1967. The next revolution in ATMs is likely to involve contactless payments. Much like Apple Pay or Google Wallet, soon you’ll be able to conduct contactless ATM transactions using a smartphone.

Some ATM innovations are already available overseas and might reach the U.S. shortly. For example, biometric authentication launched last year in India, and iris recognition is in place at Qatar National Bank ATMs. These technologies can help overall bank security by protecting against ATM hacks.



7 New Banking Technologies You'll See in the Next 5 Years

3. Proliferation of Non-Banks

Banks are hoping that technology will allow them to deliver a faster, more transparent experience to consumers. A large portion of their resources, however, is necessarily dedicated to security, compliance, and other industry-specific requirements, which has allowed non-banks or financial service providers that are not regulated by the banking industry to flourish, according to a 2016 report from market intelligence firm Greenwich Associates. Since these companies can devote a greater percentage of their assets to cutting-edge financial technology, they might be able to innovate more rapidly than traditional banks, attracting tech-savvy customers in the process.

[Read More: 6 Banking Services That Will Be Obsolete in 10 Years](#)

4. Apple Store-Style Experience

The in-bank experience of the future might be more like shopping at an Apple store. Because so many people now can download user-friendly banking apps or easily find an ATM to handle basic banking transactions, the typical in-bank customer today is seeking help involving a personal interaction. Banks hoping to increase sales in the future are considering this transformation as a way for customers to engage more directly with the bank and its products, just like in an Apple store, directing customers to interact with tech kiosks for some transactions and reserving person-to-person interaction for answering questions or addressing needs unique to the individual consumer.



7 New Banking Technologies You'll See in the Next 5 Years

5. Automated Financial Services Employees

The rise of financial technology will likely result in the reduction of in-bank personnel. A 2016 report from Citigroup indicated that a whopping 30 percent of bank jobs might be lost by 2025 due to the automation of retail banking services. Even behind the front line, financial services employees might step aside as robo-advisers that manage your money continue to grow in popularity. Wealthfront and Betterment, two robo-adviser companies, already have \$4.65 billion and \$7.36 billion in assets under management, respectively.

6. Mobile and Digital Banking

The mobile and digital transformation in banking has only just begun and growth is already explosive. Banks are investing heavily in digital banking technology, in which customers use mobile, web or digital platforms to use banking services. In a Forbes survey on banking customer engagement from late 2016, 86 percent of banks indicated that these types of services represent their top technology investments.

Related: [6 Banking Trends That Will Affect Your Wallet in 2017](#)



7 New Banking Technologies You'll See in the Next 5 Years

7. Partnerships

Although banks can pour lots of money into technology, the fastest way to deliver financial innovation in the future is likely going to involve strategic partnerships. Fast-growing companies that already have new-wave fintech or social media platforms in place could make excellent partners for traditional banks seeking to enhance customer experience.

Card-linked marketing company Cardlytics, for example, is partnering with several financial institutions like Bank of America to leverage secure purchase data in order to tailor marketing based on consumers' card use.

Overall, consumer behavior and smart device trends are steering banking technology advances in the direction of convenience. An increasing number of remote technologies will allow you to interact with your bank right from the palm of your hand. And from your email inbox to visiting an actual branch, you can expect to encounter a whole new customer experience, perhaps even sooner than you think.



THANK
YOU