



WORLD
FINTECH
REPORT
2018

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Preface

Once rather homogenous and somewhat staid, the financial services marketplace has transformed into a dynamic milieu of bar-raising specialists. These new-age professionals are devoted to meeting and exceeding the expectations of consumers who have become accustomed to personalized services from industries such as retail, travel, and electronics. Financial services customers no longer rely on one or two firms. Instead—in pursuit of an efficient, portable, and delightful customer journey—they pick and choose from among traditional and not-so-traditional institutions to best meet their dynamic needs.

The “new normal” of 2018 did not happen overnight. This financial industry evolution was sparked by the 2008 financial crisis. However, when FinTech firms started making post-crash waves, they were met by uncertainty from stakeholders who assumed the new-age players would never overcome significant barriers to entry—regulatory compliance, ability to scale, trust, etc. An unsettling second phase quickly followed during which stakeholders, as well as analysts, speculated that FinTechs might take over the entire industry. A plethora of screenshots mapping hundreds of FinTech firm logos against global banks’ websites showcasing how they are fulfilling customer demand for new products and services, inferring the death of traditional institutions.

Our inaugural [World FinTech Report](#) in 2017 highlighted the transition to the third phase, where we reside today. FinTechs are relevant and traditional financial services firms are not going away anytime soon. Even as incumbents struggle with sluggish innovation—often the result of legacy technology and an internally-facing culture—the customer journey is being redefined by creative and agile FinTech solutions. At the same time, FinTech firms are coming to realize that their ability to expand their base, gain full consumer trust, scale operations, and navigate a complex regulatory environment is reliant upon the support, engagement, and valuable insight of industry veterans.

While traditional financial institutions and FinTech firms understand the value each can provide, the market has seen few success stories in which an Incumbent/FinTech partnership has generated significant growth. FinTech firms perceive incumbents as lacking agility and unwilling to partner with them. Traditional institutions — with their legacy systems and slow-to-change cultures — struggle to cut through the clutter generated by several thousand recently-funded FinTech firms. Therefore, collaborative engagements between traditional financial services and FinTech firms often end during the NDA or procurement stage. The unfortunate result is that collaboration is snuffed out before product commercialization and any real-world benefit.

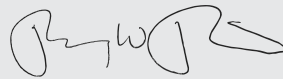
Fruitful collaborations will heavily rely on traditional institutions’ ability to identify and assess whether candidates for partnership have the characteristics necessary for sustained success across four pillars: People, Finance, Business, and Technology. Capgemini’s recently launched ScaleUp Certification process is a tool that creates an industrialized model for collaboration and mutual verification that encourages smoother sailing between traditional financial institutions and FinTechs. The method has been developed primarily for scale-ups, those organizations that are relatively new ventures but have surpassed certain milestones, such as rounds of funding and referenceable clients. These Scale-ups are the most likely to integrate with bank solutions and help banking and insurance customers maneuver through the evolving customer journey.

So, what is the fate of this increasingly symbiotic industry? The future rests in the capable hands of those industry stakeholders prepared to commit to incumbent and FinTech collaboration through which participants leverage each other's numerous strengths to meet customer needs and redefine the journey—the wild card lies with BigTechs who are large, multinational technology firms such as Google, Amazon, Facebook, Apple, and Alibaba. Is it possible they could use their power positions to up the ante when it comes to innovation and industry disruption. A handful of these super firms, most of which are not financial services players, upended the Southeast Asia market within in a short period. What's more, Western hemisphere BigTechs armed with resources, agility, and technology could have a leg up over both incumbents and FinTech firms should they elect to enter this space.

We hope you find our *World FinTech Report 2018* insightful and helpful in answering any questions you may have regarding the shifting financial services landscape.



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World FinTech Report Executive Steering Committee (ESC)

We would like to thank our Executive Steering Committee for their guidance and insights provided over the past six months. Throughout the report, we have included quotes and insights from our ESC, as well as those industry luminaries participating in our Agents of Change series.



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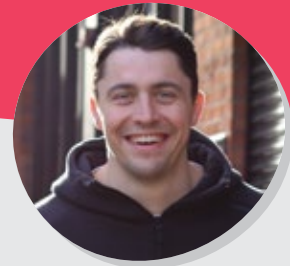
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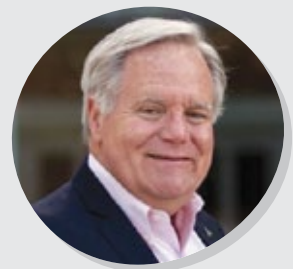
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Executive Summary



FinTechs Are Redefining the Financial Services Customer Journey

Competition and Rising Customer Expectations Spur Customer-Centricity Focus

- The financial services industry is being reshaped by expanding customer expectations for convenience and personalization—driven by the bar set by BigTech firms such as GAFA¹—combined with FinTechs meeting these expectations with agility and an improved customer journey.
- FinTech firms are earning a reputation for customer-centricity by bridging the gap between what financial services firms currently offer versus what today's customers want.
- Four key principles can be used as the foundation to build differentiated customer experiences: personalization, quick response (speed), relevance, and seamless delivery.

Emerging Technologies Enable Journey Transformation

- Emerging technologies, heavily leveraged by FinTech and BigTech firms have created a paradigm shift in customer experience that eliminates multiple pain points across the customer lifecycle.
- Infrastructure-based technology, through platformification and open Application Programming Interfaces (APIs), is reshaping the future of the financial services industry, while the operational advancements offered by robotic process automation (RPA), chatbots, and Distributed Ledger Technology (DLT) are enabling greater agility, efficiency, and accuracy.²
- Design-based thinking and simple-to-follow user-interfaces are making the customer journey quick, convenient, and seamless, while insights driven through data-focused technologies are ensuring relevant, personalized offerings.

Alignment with Customer Goals, Creation of Trust, and Delivery of Digital, Agile, and Efficient Processes Are Catalysts for Success

- Innovation with a central focus on the customer is vital for survival and growth.
- Customer focus means empathy with the customer, earning trust, simplifying the customer experience, and aligning with customer goals and expectations.
- Bringing in the top talent with the relevant skills and creating the right culture, while also making strategic investments in agility, digital, and operational excellence, will maximize firms' ability to achieve customer focus.

¹ GAFA is an acronym or shorthand for Google, Apple, Facebook, and Amazon.

² Platformification is a planned move toward a business model, or a platform, that enables a variety of industry participants to connect to it, to help create business offerings for one another or for the end customer.

A Symbiosis Between FinTechs and Traditional Financial Institutions

FinTech and Incumbent Firms' Respective Competitive Advantages and Shortcomings Make Collaboration a Logical Fit

- FinTech firms' primary competitive advantages are their agility to launch and pivot, their laser focus on customer experience, and their freedom from the burden of legacy systems. However, they also face challenges in scaling their business due to a lack of trust, absence of a known brand, an established distribution infrastructure, capital, and regulatory compliance expertise that, historically, are the strengths of incumbent firms.
- Most successful FinTech firms have focused on narrow functions or segments with high friction levels or those underserved by traditional financial institutions, but have struggled to profitably scale on their own. Traditional financial institutions have a vast customer base and deep pockets, but with legacy systems holding them back, many are increasingly open to innovation through collaboration and APIs rather than building on their own.
- The relationship between FinTechs and traditional financial institutions has morphed from competition to collaboration, but this potential of collaboration is just the start. Both traditional financial institutions and FinTechs have struggled with finding the right partners, efficiently working together, and effectively scaling innovation.
- Bringing in the top talent with the relevant skills and creating the right culture, while also making strategic investments in agility, digital, and operational excellence, will maximize firms' ability to achieve customer focus. Creating an effective partner ecosystem will also be critical for success.

Finding the Right Partner for Collaboration Is Essential

- Across the globe, more than 7,500 FinTech firms, combined, have raised over USD 109.8 billion.³ Yet most will likely fail because: they could not find the right product-market fit, the high cost of scaling up, the inability to find the right partner, and the struggle to create, launch, and quickly gain market share for a differentiated product that cannot be replicated.
- Future partner potential should be assessed according to four parameters: People, Finance, Business, and Technology. Capgemini has launched the "Capgemini Scale-Up Certificate", program in collaboration with Startupbootcamp's FinTech & CyberSecurity growth accelerator program to evaluate and qualify the most prepared scaleups for Startup efficient and effective collaboration with financial institutions.⁴
- FinTech leaders have struggled with traditional institutions' lack of agility, willingness to partner, and culture fit. However, FinTechs also need to be mindful of incumbents' constraints and clearly articulate the value proposition they can achieve together to be a collaborative partner.


³ "FT Partners Quarterly FinTech Insights and Annual Almanac: Q3 2017 FinTech Insights," FinTech Technology Partners, accessed December 2017 at <https://www.ftpartners.com/fintech-research/almanac>

⁴ <https://www.startupbootcamp.org>, Founded in 2010, Startupbootcamp is a global network of industry-focused startup accelerators with 21 accelerator programs across the world.

Successful Collaboration Requires Commitment and Agility from FinTechs and Incumbents

- The build-versus-buy question has quickly shifted to what is the best model for collaboration to leverage technology that sets us up to quickly release products and services that meet customers' rising expectations.
- Some firms still attempt to drive innovation from inside their organization, but most are looking externally through incubators, accelerators, hackathons, and venture funds.
- Most FinTechs cite the importance of CxO-level leadership buy-in, as well as common objectives and vision as criteria for successful collaboration.

The Path Forward: An Impending Role for BigTechs?

- BigTechs have redefined customer experience across all sectors, including financial services, as they leverage emerging technologies, volumes of customer data, and actionable insights to both understand and predict behaviors and needs.
 - Unlike FinTech firms, BigTechs have both massive customer bases and vast cash reserves which provide a more logical and accessible path to scaling operations.
 - The BigTech phenomenon is regionally agnostic, but its impact is currently most strongly felt in Asian markets, with examples such as Alibaba's Ant Financial. However, Western-hemisphere firms such as Amazon could make waves through their strength in customer experience, innovation, diversification, infrastructure, agility, culture, vision, and leadership.
- 



FinTechs Are Redefining the Financial Services Customer Journey

- **Competition and Rising Expectations Spur Customer-Centricity Push**
- **Emerging Technologies Enable Customer Journey Transformation**
- **Alignment with Customer Goals, Creation of Trust, and Delivery of Digital, Agile, and Efficient Processes Are Catalysts for Success**

Competition and Rising Expectations Spur Customer-Centricity Push

- **The financial services industry is being reshaped by expanding customer expectations for convenience and personalization—driven by the bar set by BigTech firms such as GAFA —combined with FinTechs meeting these expectations with agility and an improved customer journey.** Through innovative use of technologies, FinTech firms are delivering low-cost personalized products and are having a significant impact on raising customer expectations while also increasing pressure on traditional firms.
- **FinTech firms are earning a reputation for customer-centricity by bridging the gap between what financial services firms currently offer versus what today's customers want.** They are improving customer journeys by merging financial services seamlessly with daily activities to make banking and other financial services invisible and frictionless through a more customer experience-based approach (such as real-time updates), innovative business models (such as P2P lending), customized solutions, and optimal and transparent pricing.
- **Differentiated and rewarding customer experiences can be built around the key principles of personalization, quick response (speed), relevance, transparency, and seamless delivery.** Meanwhile, FinTechs are accelerating the pace of innovation and driving change through their own products and services, as well as pushing traditional institutions to deliver greater customer convenience and personalized services.

FinTechs and BigTechs Raise the Bar for Financial Institutions

Now more than ever, it is no longer enough for traditional financial institutions to focus on what has worked for them in the past. Since the 2008 financial crisis, banks have struggled with low-interest rates, declining revenues, customer distrust, lack of loyalty, and rising expenses. Compliance with new regulations initiated since the financial crisis has stretched bank capital and dominated leadership mindshare. Legacy system issues have compounded these challenges, and most infrastructure investments were stop-gap solutions not designed for compatibility with the latest technologies. Rigid legacy systems lacked scalability and could not process in real time.

These difficulties do not exist for new-age firms. While consumers across the globe were expressing delight at the tailored services offered by firms such as Amazon, Facebook, Uber, and others, traditional financial institutions found it challenging to quickly take advantage of the benefits of mobility, artificial intelligence (AI), Big Data, the cloud, and so on.



Customers don't care about financial products. They care about what products do for them. When you think about customer-centricity, it's about building an experience that puts customers' needs first. Then, you build a product to deliver the experience".



Ed Maslaveckas

CEO and Co-Founder of Bud (a UK-based universal banking platform provider)

Today, customers expect financial institutions to engage seamlessly across touchpoints, whether it be the branch, call center, internet, or mobile. Seamless engagement has become table stakes now, vital to attract prospects and increase customer loyalty.

"Firms say they are becoming customer-centric and using a traditional funnel. However, the interactions that customers have, particularly in a new omnichannel environment, are truly non-linear. We must contend with that to become more customer-centric. A lot of times, we look at the customer experience based on our interactions with customers. But truthfully, we must look beyond

our own interactions to be truly customer-centric," said Michael Roberts, Chief Marketing and Digital Strategy Officer, Bank of America Merchant Services.

Incumbents are being forced to re-evaluate how they deliver both products and services to different segments. Through innovative use of technologies, FinTech firms filling those gaps by delivering no-friction, optimized-cost, personalized products to customers, and making a significant impact on raising customer expectations and increasing pressure on traditional financial services firms. However, a much smaller number have managed to scale their operations and directly compete with incumbents.

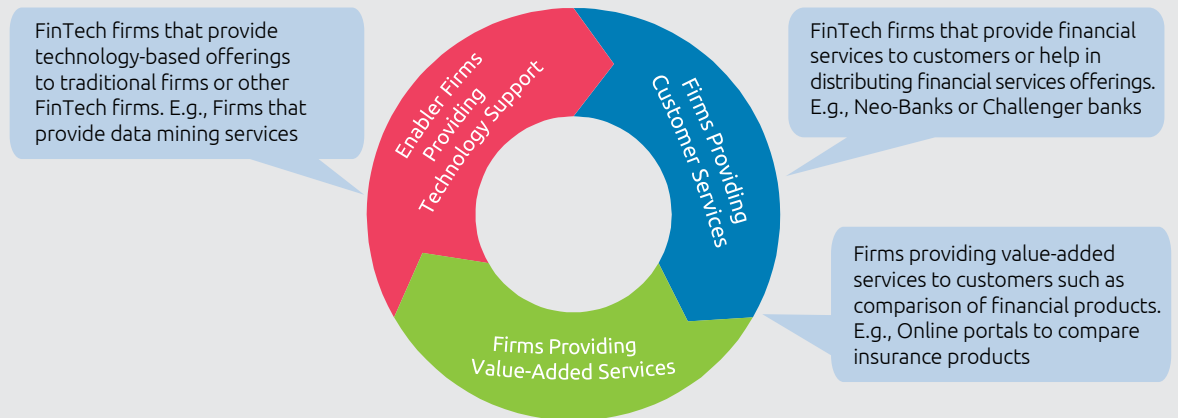
Gaps Left by Traditional Financial Institutions Enabled the Rise of FinTech Firms

FinTech firms are earning a reputation for customer-centricity by bridging the gap between what financial services firms currently offer versus what today's customers want. FinTechs have been targeting industry niche areas with superior products and services to fill gaps left by incumbents throughout the customer journey. FinTech firms are now penetrating nearly every financial services segment, driving both innovation and disruption. Subsegment focus areas of FinTech include digital payments (PayTech), fully-digital insurance (InsurTech), banking (BankTech), wealth management services (WealthTech), and the creation of marketplaces for selling financial products.

- BankTechs refer to retail banking technology startups focused on lending, cross-border transfers, and money management. Firms in this space include Mint, TransferWise, YounitedCredit, and Funding Circle.
- PayTechs focus on the payment space and include firms such as Venmo, India-based and Alibaba promoted Paytm, FINO PayTech, Earthport, and Inpay.
- WealthTech firms refer to online/mobile wealth or investment management firms such as Motif, eTorro, Robinhood, Wealthfront, and Betterment.
- InsurTech firms include Metromile, Lemonade, PolicyGenius, Friendsurance, and Sureify.
- RegTechs such as Trulioo, Tradle, Elliptic, FundApps, and Alyne, focus on the financial services regulatory environment.
- BigTechs, big technology players such as Google, Apple, Facebook, Amazon, Alibaba, are making a financial services' play.

Not all FinTech firms are created equal. New-age players are delivering a range of value propositions to both end customers and financial institutions (Figure 1). For instance, **Enablers** are FinTech firms that help incumbents offer customers innovative technology-based products and services. **Customer-**

Figure 1. Types of FinTech firms



Source: Capgemini Financial Services Analysis, 2018

Servicing firms are FinTechs that directly sell to or serve customers, or help customers manage products and services they purchased from incumbents. FinTech firms known for **Adding Customer Value** link customers and incumbents to make helpful customer activities possible (such as product selection via easy-to-understand, side-by-side comparison options).

FinTech firms are also concentrating on disruptive business models such as on-demand insurance, peer-to-peer lending, and robo-advisory services. There are FinTech firms with expertise in building financial offerings using blockchain that offer advanced analytics solutions and provide cybersecurity services. All the traditional segments of financial services are feeling this impact.

Traditional financial institutions are feeling the impact on a variety of fronts, including:

- **New business models:** The emergence of FinTechs has driven the introduction of new business models such as peer-to-peer (P2P) lending, which may have a significant impact on the lending sector.
- **Faster and more efficient service:** FinTechs use a variety of technologies to increase the accessibility and speed of their services (real-time updates, mobile connectivity) that appreciably enhance customer experience.
- **Transparency and free services:** FinTechs often offer their services for free or with long promotional periods. They also proactively display any fee they would charge upfront.
- **Personalization:** FinTechs pioneered personalized customer service and products, which has prompted traditional banks to rethink how customer data can be used to offer personalized products. WealthTech firms offer customers personalized advice based on their risk appetite, lifestyle and life-stage needs, and social affiliations/preferences. InsurTech firms leverage innovation to offer better insurance industry personalization and advanced underwriting capabilities. Technologies such as telematics (auto insurance) and wearables (life insurance) enable a deeper understanding of insurance customers.
- **Pressure on margins and fees:** FinTech firms have no legacy infrastructure, so they can keep costs down and provide comparatively lower-priced services. In the wealth segment, by providing discount services that achieve customer objectives, robo-advisory services have directly impacted transactional fee revenues for large firms.



"Banks used to have truly well rounded financial relationships with their customers - but banks have now allowed the disintegration of customer-centric products and services and that's where FinTech solutions come in. Banks need to learn from and collaborate with the best FinTech firms to ensure customer relevancy into the future."



Bradley Leimer
 Managing Director
 Head of FinTech Strategy at
 Explorer Advisory & Capital

- **Predictive modeling:** FinTechs are using predictive and analytical tools that allow them to find “people like you” or with similar profile for customers and prospects, allowing them to target and tailor offerings based on customer profile and behavior.
- **Innovative distribution:** The rise of FinTech firms has forced incumbents to re-evaluate product distribution. For example, Silicon Valley-based Motif offers sophisticated investment strategies and financial products to retail investors, financial institutions, and investment advisors.⁵
- **Access to unserved/underserved segments:** With improved distribution and innovative low-cost solutions such as robo-advisors, firms can now tap into these segments as well with convenient and affordable services.
- **Operational efficiency:** Innovative technology is lowering entry barriers and spurring competition, which is forcing large traditional financial services firms to increase efficiency through process automation and business-model transformation.
- **Advanced data analytics:** Advanced analytics, combined with broader pool of data sources give InsurTech firms better risk management and underwriting capability, which is leading to lower costs and higher efficiency. Incumbents see the value and are investing in InsurTech capabilities. In fact, Aviva, AXA, Allianz, AIG, MetLife, and XL Catlin have all established in-house venture capital funds as they seek innovative methods to meet intensifying competition.⁶

Plaid CEO and Co-Founder Zach Perret added, *“The first area of focus for FinTech entrepreneurs should be on providing superior customer experience. Whether your customer is a consumer, a small business, or a large business, make sure you get that customer experience right.”*

Souheil Badran, President of Alipay Americas said, *“Over the years, we’ve gradually combined services to give customers one lifestyle wallet and one single sign-on. Our goal is to offer a service that consumers could easily use in everyday life. Everything from buying a cup of coffee to a subway ride. Seamless.”*

Traditional financial services firms are feeling the FinTech effect, and many are folding FinTech capabilities into their new operational and business strategies.

Creating a Foundation to Deliver Differentiated Customer Experiences

While customers are the primary beneficiaries of enriched customer journeys, a win-win scenario may be created for everyone including incumbent firms. Revamped and enriched customer journeys benefit customers through seamless journeys, enhanced customer experience, and instant services.

DBS Bank’s Sonia Wedrychowicz, Managing Director, Head of Consumer Bank Technology Singapore, advocates for traditional firms to assume an outside-in perspective. *“We keep customer journeys in mind throughout everything we do. That way, the customer designs the customer experience. One of our guiding principles is to look at the journey from the customer’s point of view or from outside rather than from the bank’s perspective,”* she said.

When these customer journeys are effectively redesigned, they will encourage customers to think of financial institutions not only as service providers but as experts to be relied upon for advice and a broader range of services.

Moneytree CEO and Founder, Paul Chapman said, *“Banks have a lot of data, and many don’t do very much with it. If you’re a FinTech company that has expertise in data, banks need that (expertise). But if all you have is expertise and no data, it’s like a sports car without any gas in the tank. It doesn’t go anywhere.”*

A range of factors can impact positive customer experience. However, if firms keep a few critical elements in focus, they can maximize their efforts in redesigning their customer journeys (Figure 2).

Figure 2. Enriched journeys enhance customer experience



Source: Capgemini Financial Services Analysis, 2018

⁵ Motif website, accessed December 2017 at <https://www.motifinvesting.com/products/impact-portfolio>

⁶ “Insurance tech start-up investment surges,” Oliver Ralph, Financial Times, April 25, 2016, accessed December 2017 at <https://www.ft.com/content/53266de8-07e1-11e6-b6d3-746f8e9cdd33>



“If you want to deliver on a differentiated experience, it must adhere to the four principles of personal, instant, relevant, and seamless.”



Ralph Hamers
CEO
ING Group

- **Higher personalization:** Effective use of available customer data (historical and from external sources) can provide personalized offerings and services without being too intrusive.
- **Increased speed of service:** Customers, especially digital natives, are accustomed to getting things done quickly and digitally. Any excess delay may result in customer turn-off. Superior customer journeys are expected to minimize these moments.
- **Improved convenience:** Anytime/anywhere services through any device or channel offer 24/7 convenience and access.
- **Intuitive interaction:** Through design-based user-interface principles, customers can be guided smoothly through their journeys. Firms can also leverage AR/VR technologies and gamification principles for superior customer engagement.
- **Better functionality:** Often, redefining the customer journey results in innovative solutions as firms look to solve the pain points of customers.
- **Proactive insights:** Firms could also leverage predictive analytics to understand customers’ needs in advance and then offer relevant services. Firms could prompt customers for fraud prevention or money-saving opportunities. If done right, these unexpected services may add appreciation and delight to the customer experience.



“The most important customer experience principles are ease of use, simplicity, and transparency. And then, the design of the app.”



Valentin Stalf
N26, CEO and Co-Founder

Even amid possible stakeholder rivalry, increased competition among firms is likely to boost innovation, improve services, and bring benefits to customers. When there is a race to please customers, innovation is bound to follow. Penetration of FinTech firms and proliferation of advanced technologies are expected to fuel even greater change. With increased connectivity, firms have been collaborating cross-industry as well providing value-added and convenient services to their customers. Improved connectivity will help the industry to adopt the learnings and principles from other sectors as well. One of the less-explored benefits of connected customer journeys is better compliance and AML enforcement as regulators and auditors have better visibility of money movement.

At the same time, customer journey modification must always positively impact a firm’s brand and the customer trust it has earned. Despite the importance of innovation and future-proofing advancements, significant changes may leave individual financial services firms vulnerable to reputational setbacks. Trust is intrinsic to the overall nature of the financial services industry, and an ill-planned change can rattle customer trust. Work with new technologies, partners, and other stakeholders may leave firms vulnerable to cyberattack. Breaches not only result in financial losses but can also seriously erode customer trust. Thus, opportunity cost could be much higher.

Each step of the customer journey must be weighed for associated risks as compared with expected gains while understanding and implementing the latest trends and emerging technologies.



“Startups will help us look forward not backward when it comes to customer experience and customer journey.”



Gonzalo Rodriguez Rodriguez
Head of Digital Banking,
BBVA Spain

Emerging Technologies Enable Customer Journey Transformation

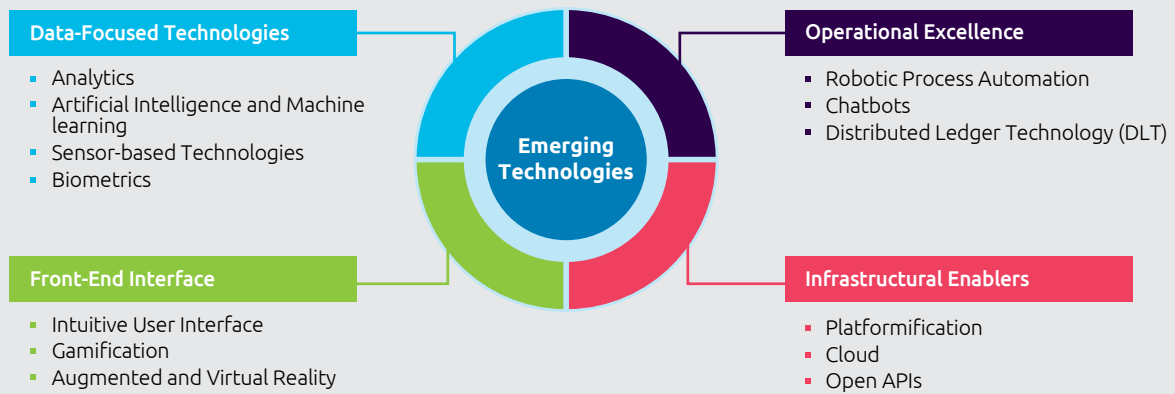
- **Emerging technologies across data and analytics, front-end interfaces, infrastructure, and operations will be critical to boosting customer experience elements such as personalization, agility, and simplicity to retain the customers of the future.** Exceptional customer experience is not just understanding the customer and providing products and services anymore; it is using advanced analytics, predictive modeling, and innovative technology to create a differentiating offering that makes each customer want to come back for more.
- **Infrastructure-based technology, through platformification and open APIs, is reshaping the future of the financial services industry, while operational excellence aspects of RPA, chatbots, and DLT are enabling greater agility, efficiency, and accuracy.** Firms can provide customers with best-in-class offerings through an aggregation of services from different players, and at the same time, offer more services in a faster, more precise, and often, cheaper way.
- **Design-based thinking and simple-to-follow user-interfaces are making the customer journey quick, convenient, and seamless, while insights, driven by data-focused technologies, are making it relevant through personalized offerings.** Augmented and virtual reality and gamification are helping customers interact with their firms in innovative ways; on the other hand, biometrics, analytics, and machine learning are helping firms to better understand who their customers are and what they want.

Financial services firms seek to improve customer experience by streamlining the customer journey through technological innovation, and FinTechs are playing a pivotal role. With a focus on delighting consumers through original and personal customer experiences, FinTechs will continue to bring a paradigm shift in customer journeys and accelerate change within traditional institutions. Customer journeys vary from channel to channel, but both traditional and FinTech firms must maintain service and experience-level consistency. Once exposed to the likes of Google, Apple, Facebook, and Amazon, customers anticipate intuitive design more than ever. The expectation is that everyone from toddlers to grandparents should be able to understand and use the interface.

“We explain our processes to customers and guide them quickly through. If you offer clear instructions along the way, you can get customers through the journey much faster. And that creates trust,” said Joanne Bradford, Chief Marketing Officer, Social Finance, Inc. (SoFi).

Emerging technologies are gaining popularity, particularly among FinTech firms, and are soon expected to have a significant impact on the customer journey. There is little doubt that emerging technologies are set to play a critical role in redefining customer experience across the customer lifecycle (Figure 3).

Figure 3. Emerging technologies have impact on customer journeys



Source: Capgemini Financial Services Analysis, 2018

“The future of finance is not technology; it is the extreme obsession to be on the side of the consumer. Technology is the enabler to make it happen.”




Harit Talwar
Head of Marcus by Goldman Sachs

“New technologies will affect the customer journey on multiple fronts. Face-recognition technology can lead to increased convenience and security, while artificial intelligence based on behavior can help predict customers’ future needs and select financial advice that empowers them to make sound decisions,” said Ralph Hamers, CEO ING Group.

Driving Insights through Data Is Key for Personalized Experience

Data can help firms better understand their customers, and in turn, improve their journeys. Following are some ways insights can be used to improve customer centricity:

Analytics: Analytics-based personalized offerings, immediate information, and instant processing will increase customer stickiness within their journeys. The availability of vast, yet exponentially growing amounts of structured data (such as financial transactions) and unstructured data (such as social media) present significant potential for firms to personalize offerings. Real-time, analytics-based input at customer decision points will help them complete their journey. Analytics can support retention by promoting loyalty-based programs that reward customers for identifying their personal preferences. Fraud-detection is another area in which firms are leveraging analytics by prompting customers for additional authentication when analytics-based algorithms raise a flag.

Bradley Leimer, Managing Director, Head of FinTech Strategy at Explorer Advisory & Capital offered insight on the role of analytics and artificial intelligence on customer-centricity. *“Customer centricity is much more than just data analysis and segmented marketing. With new AI tools, we can now demonstrate a real understanding of individual customer needs — starting with on-boarding then through day to day financial advice,”* he said.

With the rise of peer-to-peer lending and small- and medium-sized enterprise financing segments, firms such as Prosper, LendingClub, and OnDeck are using innovative credit-scoring models that go beyond financial data coverage to include parameters such as behavior, and willingness and ability to repay.⁷ Oscar Health relies on data-driven analytics and algorithms to provide upfront, predictive claim information and to help customers with preventive care or to evaluate best doctors for treatment.⁸

Harit Talwar, Head of Marcus by Goldman Sachs, said *“At the core, you must provide value to the customer. You have to be transparent; you have to be simple, you have to personalize the solution to the consumer and use data and analytics to make all that happen.”*

Artificial Intelligence and Machine learning: Higher efficiency and higher productivity at lower costs are among the benefits of machine learning, which uses statistical and mathematical models to draw inferences and patterns based on large sets of raw information. Machine learning applications cut across various

functions including fraud prevention, risk management, customer service, and marketing. Machine learning provides competitive advantages such as lower costs, higher efficiency and revenue, higher productivity, and better compliance. The adoption of machine learning in financial services is on the rise, as it enables constant innovation and development of an enterprise or personalized solutions. From intelligent chatbots to personal financial advice or intelligent back-office processing, all can add directly or indirectly to positive customer experience. Thanks to firms’ capability for quickly processing vast amounts of data, AI and machine learning can be used for decision making, too.

Robo-advisors use machine learning techniques to help investors make decisions. Firms such as Schwab and Betterment, with platforms based on machine learning, successfully provide low-cost wealth management services. Wealthfront, an investment management tool, also uses machine learning to suggest investments to clients. Algorithms reduce the need for retail locations and personalized advisor-to-client advice.¹⁰

Sensor-based technologies: Firms can monitor customer activities linked to their financial services and can limit risks to some extent. Use cases for banking can include voice-based support at ATMs or beacons that detect customers as they walk into a branch and then pull up relevant, personalized offers. In the insurance industry, the Internet of Things (IoT) has enormous potential to help firms closely monitor the health condition of customers, keep track of a motorist’s driving style, or make homes more accident-proof.

Based on identified trends, insurance firms can determine risk levels, ascertain appropriate premium charges, and inculcate safe habits to foster a reduction in claims. Even investment management firms can quickly modify their strategies based on real-time input from various sources by receiving a real-time update on the various business conditions or events such as manufacturing plant output, weather conditions, customer behaviors; analysts can adjust their financial holdings.¹¹

How are firms leveraging IoT today? InsurTech firm Nauto offers an autonomous vehicle technology system with an artificial intelligence-powered connected camera network and smart cloud system. It identifies dangers, alerts drivers, and provides coaching and feedback at the end of trips. Nauto’s real-time sensors and visual data



“We have heard the buzz around artificial intelligence and machine learning. It is apt as we can use these technologies to help customers have a better financial life and use their data to make recommendations that will help them in the short- and long-term.”



Ben Chisell
Product Director
Starling Bank

⁷ “How Big Data Analytics, AI and Machine Learning is Being Leveraged Across FinTech,” Let’s Talk Payments, February 22, 2016, accessed November 2017 at <https://letstalkpayments.com/how-is-big-data-analytics-being-leveraged-across-fintech/>

⁸ “Oscar Health—Revolutionizing health insurance through data analytics,” Onizah P, Hbs.org, April 6, 2017, accessed November 2017 at <https://digit.hbs.org/submission/oscar-health-revolutionizing-health-insurance-through-data-analytics/>

⁹ “How Charles Schwab Fought Back Against the Robo-Adviser Startup Invasion,” Harry Mccracken, Fast Company, November 5, 2016, accessed November 2017 at <https://www.fastcompany.com/3059565/how-charles-schwab-fought-back-against-the-robo-adviser-startups>

¹⁰ Wealthfront, Form Adv, October 2017, accessed November 2017 at https://www.wealthfront.com/static/documents/form_adv_part_1.pdf

¹¹ “IoT and the Financial Industry,” Richard Meyers, Unified Inbox, July 23, 2017, accessed November 2017 at <https://unifiedinbox.com/iot-financial-industry/>

help fleet managers detect and understand the cause of accidents and reduces false liability claims.¹² In another example, Westpac New Zealand is looking to experiment with beacons in their branches to identify previously enrolled customers to save time and give bank staff a chance to offer a more personalized experience.¹³

Biometrics: Complicated passwords may be a thing of the past for customers thanks to biometrics and quick, convenient, and secure identity authentication. Biometrics leverage unique identifiers such as the retina, fingerprints, voice, and facial expressions to authenticate and authorize individuals to perform transactions. More and more, biometrics are accepted among institutions as they enable quick and convenient access to routine functions such as balance checks, bill payments, small-amount transfers, and stock trading. However, for more sensitive transactions, such as large-amount transfers or unusual transaction activity (based on the user's history or geo-location), multiple-factor authentication should be in place.

A number of incumbents and FinTechs have taken the biometrics plunge. Incumbents such as American Express, ING Bank, OutBank DE, and Deutsche Bank have integrated Apple's biometric system, TouchID, in their mobile banking applications to verify user identity in a quick, convenient, and secure way.¹⁴ When it comes to FinTechs, M2SYS CertisID is a biometric authentication solution built explicitly for financial institutions. It supports fingerprint, finger vein, palm vein, iris, facial, and voice recognition. It provides high-level security and tracking for account holders as well as employees.¹⁵ AimBrain is a London-based startup that offers "biometric identity" as a service to other financial services firms. It performs verification services based on a user's voice, looks, and interaction with the device (typing speed, etc.)¹⁶

Better User Interface and Innovative Interaction (Gamification and Augmented Reality) Drive Convenience and Speed

Front-end technologies are key to a firm's strategy because they shape the customer's moment of truth during engagement. Front-end innovation was an initial

transformation priority and in addition to simpler and voice-based interfaces, gamification and augmented reality are expected to soon lead the innovation agenda.

Intuitive user interface: Firms must focus on simple, easy to understand, yet functionally-rich interfaces. Users prefer simplicity over complexity, but simplicity should not come at the cost of functionality. Most FinTechs understand this and offer interfaces that are easy to use (e.g., voice-based instructions for simple transactions) and perform intended functions with minimal steps. However, designing such interfaces is not easy.

While FinTech firms offer niche products, incumbents provide a more broad range of services. Hence, the simplification approach for each organization type will vary. With the increased adoption of mobile-based apps, firms have less screen space to represent their information. Myriad end-user devices make UI compatibility significantly challenging for developers.

Despite these challenges, firms need to meet customers' expectations of visually appealing and easy-to-understand dashboards, customization options, and shortcuts to regularly used features; helpful financial advice would be an added advantage.

Europe-based digital-only bank N26 designs intuitive, yet simple user interfaces that enable users to sign up for a new account in just a few minutes—including know-your-customer (KYC) documentation. Feature-rich user experiences include the ability to block or unblock cards from the app and to see irregular expenses highlighted in account statements.¹⁷

Gamification: Gamification is an excellent strategy to enhance customer experience by helping customers meet their goals. Through gamification, firms can help customers achieve financial goals in a fun, interactive, and engaging way. Gamification is not entirely a new idea within financial services; it has been around in the form of loyalty and bonus programs. Gamification can help with crowdsourcing ideas, market research, customer education, lead generation, cross-selling, self-help applications, and interactive and responsive customer service. The proliferation of smartphones, changing demographics (more millennials and urban

¹² *Insurance Disruption Trends*, TALLT Ventures, 2017, page 37.

¹³ "Why the Internet of Things Should Be a Bank Thing," Penny Crosman, *American Banker*, November 19, 2015, accessed November 2017 at <https://www.americanbanker.com/news/why-the-internet-of-things-should-be-a-bank-thing>

¹⁴ "7 Trends in Biometric Technology as It Applies to FinTech," Let's Talk Payments, November 10, 2015, accessed November 2017 at <https://letstalkpayments.com/7-trends-in-biometric-technology-as-it-applies-to-fintech/>

¹⁵ "M2SYS CertisID™ Financial Services Biometric Identification Solution," M2SYS, accessed October 2017 at <http://www.m2sys.com/financial-services-biometric-identification-solution-certisid/>

¹⁶ "AimBrain, a startup that uses biometric authentication to fight fintech fraud, raises £4M Series A," Steve O'Hear, *TechCrunch*, July 19, 2017, accessed October 2017 at <https://techcrunch.com/2017/06/19/aimbrain/>

¹⁷ "NUMBER 26: how to launch a digital-only bank," Liat Clark, *Wired.com*, July 2015, accessed November 2017 at <http://www.wired.co.uk/article/number26-valentin-stalf-wired-money-2015>

population), and popularity of online games are expected to act as a catalyst for gamification trend in the financial services industry as well.¹⁸

Mobile savings and investment service company Acorns help young investors by gamifying savings. Customers “round up” leftover “change” from their debit account purchases and place it into a brokerage account that invests in a group of exchange-traded funds.¹⁹ Sureify is a United States-based life insurance firm that encourages customers to lead a healthier life via gamification-based goals. It enables users to link fitness wearables with the app, and by meeting health goals and keeping up a healthy lifestyle, users earn discounts on their policy premium.²⁰

Augmented and virtual reality (AR/VR): Firms can integrate financial and customer services within augmented and virtual reality for a delightful experience. AR/VR provides an immersive experience (in an artificial environment) such that users feel like they are “living” in that virtual reality.

Commonwealth Bank in Australia and PrivatBank in Ukraine already leverage augmented reality applications to help customers find homes or nearby ATM/branches.²¹ However, AR/VR can also help improve productivity through better data visualization, especially when the data set is large and complex, and speed is of the essence for decision-making, e.g., trading. “Virtual branches” allow customers to resolve queries or issues through a virtual agent or by communicating through a video call with a real executive. Integrating AR/VR systems with biometric security will further enhance the experience by adding security and personalization. AR/VR technology also has potential in providing financial education.

The financial arm of Alibaba, Ant Financial Group, has unveiled a VR-based payment service. It integrates with VR shopping product Buy+ that allows users to browse products in VR mode and add them to the cart. With this integration, users can now pay in VR mode, making shopping a complete VR experience (no need to switch channels).²²

Robust Infrastructure Key to Future of Finance and a Simplified Customer Experience

Infrastructure-based technology, including platformification, cloud-based services, and open APIs, have enabled firms even with small budgets to offer innovative solutions to a relatively broader audience (than in the past) allowing them to reshape the future of the financial services industry.

Platformification: More and more financial institutions, especially banks, are adopting platformification to collaboratively attract both customers and third-party service providers that fulfill customer demands. Ben Chisell, Product Director at Starling Bank, said, *“We have built our platform to make it easy for a partner to plug in and it is very easy for us to scale. We don’t want to have bespoke integration for each partner.”*

While it might be difficult for incumbent firms to build platform capabilities on their own, FinTechs can serve as a service provider (if they have the required skills). Harit Talwar, Head of Marcus by Goldman Sachs, said, *“It is the integration and orchestration of different components of the technology stack that affect the customer journey. The key is to ensure the platform constantly remains modern and has an open architecture to interact with other partners, to bring the customer an experience, and an offer that is personalized and contextually relevant.”*



“When I think about the future of financial services, I think about how platforms will start leveraging traditional financial data and commerce activity that offers advice that is truly holistic.”



Bradley Leimer

Managing Director, Head of FinTech Strategy at Explorer Advisory & Capital

¹⁸ Gamification of Financial Services: Current Trends and Future Possibilities, APIs Partners, accessed December 2017 at https://apis.pe/downloads/apis_gamification_report_v5.pdf

¹⁹ “The Gamification of Savings,” PYMNTS.com, May 11, 2016, accessed November 2017 at <https://www.pymnts.com/news/fintech-investments/2016/millennials-fintech-apps/>

²⁰ Sureify company snippet, The Digital Insurer, accessed January 2018 at <https://www.the-digital-insurer.com/dia/sureify-personalised-premium-life-insurance/>

²¹ “Augmented reality in financial services,” Alex Bray, ITProPortal, April 11, 2017, accessed December 2017 at <https://www.itproportal.com/features/augmented-reality-in-financial-services>

²² “Alibaba’s Ant Financial Announces VR-Based Payments Service,” Fintech Singapore, August 2016, accessed December 2017 at <http://fintechnews.sg/4651/fintech/alibabas-ant-financial-announces-vr-based-payments-service/>

When it comes to adopting an innovative approach, BBVA has demonstrated leadership. Its API portals in Spain and the United States provide FinTechs a chance to come up with solutions that can be used as plug and play in bank's platform. This new business model creates a win-win-win situation for the bank (offering a range of products and services), customers (need fulfillment), and FinTechs (new business and new incumbent relationships).²³ Moreover, SWIFT is transforming its cross-border payments services with the launch of the "SWIFT global payments innovation (GPI) platform." SWIFT has invited FinTechs to develop services on top of the platforms and is encouraging FinTech firms with prize money and the possibility of working on other industry issues.²⁴

Fidor's Finance Bay is another excellent example of how firms are leveraging this trend to build marketplaces that are beneficial for all stakeholders.²⁵ As there are lots of apps available out there, finding the best-suited and most trusted one is a difficult task for customers. Fidor hosts various trusted FinTech, InsurTech, and TradeTech apps on its marketplace. All apps offered on Fidor Finance Bay go through a thorough review for quality, compliance, and needs, which creates a trusted, curated marketplace environment. With these apps available within Fidor's network, customers can do much more than regular banking (e.g., trading bitcoins or buying an insurance policy).

Case Study: DBS Car Marketplace

DBS bank launched Singapore's first online consumer marketplace with its Car Marketplace, a one-stop solution for car buyers and sellers. Banks have relied on intermediaries to connect and acquire car loan customers and paid hefty fees which were passed on to the consumer in the form of higher loan interest rates. The marketplace enables DBS to leverage API exchange to reach consumers directly instead of relying on intermediaries. Cost savings are passed on in the form of cheaper car loans. Car Marketplace allows DBS to reach consumers directly instead of relying on intermediaries. It encourages more consumers to buy and sell cars themselves and go straight to the bank for car loans. The DBS car marketplace proof-of-concept received a positive consumer response, attracting 78,000 visitors and assisting more than 150 potential car buyers and sellers. Around 45% of car buyers initiated a car loan with DBS.

Cloud: The cloud is empowering firms to become more agile and flexible. It has proven to be one of the most significant enablers for FinTechs as it offers flexibility in pricing models, agility, scalability, and rapid provisioning. More and more, FinTechs benefiting from competition among cloud service providers and enhanced security provisions. Unlike incumbent firms that struggle with legacy systems, FinTechs can nimbly ideate, develop, and test new solutions with cloud support, which makes iterative development and on-the-go customer feedback manageable. Lower cost is another advantage that FinTechs can leverage to pass on some savings to customers, further adding to the positive experience.

Starling Bank Product Director Ben Chisell said, "*Cloud services have been around in other applications and services for a while, but having secure data stored in the cloud is something that's a new concept in banking. It means that we can innovate much faster.*"

For instance, leading PayTech firm Stripe hosts its PCI-compliant payment platform on Amazon Web Services (AWS). Stripe chose cloud-based solutions to make it easier for developers to process payments on their web and mobile applications. Enhanced security, auditability of platform, and scalability ensures that customers' data is safe, and operations can be rapidly scaled up.²⁶

Open APIs: It is imperative that financial institutions go beyond regulatory requirements and leverage open APIs to create a robust ecosystem. APIs are enabling FinTech firms in multiple ways including access to cloud-service providers, connecting to platforms provided by financial services firms or connecting with other ecosystem players.

APIs have been beneficial for FinTechs taking their offering to customers through other firms as a distribution channel as Wells Fargo's Head of the Innovation Group Steve Ellis can attest. "*Analytics is helping with the ability to use data to customize the experience for customers. Additionally, APIs and microservices are creating ease of integration, ease of connectivity, and ease of distribution,*" he said.

APIs also enable access to data from third parties and non-traditional sources such as social media that can help firms come up with more personalized and relevant offerings. Enhanced, improved, and single-source offerings boost customer experience and make journeys smoother. With the increased adoption of mobile and IoT devices, APIs are set to play an even

²³ "The Platformification of Banking," July 2016, The Financial Brand, accessed November 2017 at <https://thefinancialbrand.com/60019/the-platformification-of-banking/>

²⁴ "SWIFT offers 200,000 EUR for FinTech community to leverage gpi platform," SWIFT website, June 21, 2017, accessed November 2017 at https://www.swift.com/news-events/press-releases/swift-offers-200_000-eur-for-fintech-community-to-leverage-gpi-platform

²⁵ Fidor solutions website, accessed December 2017 at <https://www.fidor.com/solutions/bank-as-a-marketplace>

²⁶ "AWS Case Study: Stripe," AWS, accessed October 2017 at <https://aws.amazon.com/solutions/case-studies/stripe/>

more critical role. Regulatory momentum (such as that from Europe's PSD2) is expected to drive more openness within financial services markets thus increasing the use of APIs.

More than 78% of banks and almost an equal number of FinTechs look to leverage APIs to improve the customer experience they offer, according to the *World Retail Banking Report 2017*, and most said they believed APIs could significantly help generate new revenue streams.

Oanda, a provider of currency data and forex trading services, lets entities and developers access its proprietary fxTrade platform code via its REST (API) that allows them to develop customized and innovative applications. It has also used APIs in hackathon events to build apps for data visualization, and impact and statistical analysis.²⁷ Global ID verification company Trulioo helps firms comply with anti-money laundering, know your customer (KYC) and ID verification of existing and new customers.²⁸

Automation, Chatbots, and Distributed Ledger Technology Are Key to Enhanced Efficiency and Better Understanding of Customer

While many firms are already implementing efficiency-related technologies, there is a considerable undertaking to develop and implement these emerging technologies at a larger scale and to deliver greater value to customers.

Robotic Process Automation: RPA can enhance operational efficiency and enable firms to deliver services with better returns on investments, quality, and compliance. Via software tools, RPA automates repetitive operational tasks, resulting in reduced human effort, with the flexibility to scale at ease and with reduced costs and commitment. Initially, financial services firms focused on digital transformation of the frontend. Now, with RPA, they can also digitize and automate tasks in the middle and back-office such as processing vast quantities of data. FinTechs (and particularly RegTechs) specialize in automating rule-based processes that do not require human judgment. Moreover, low error rates when processing large volumes mean faster turnaround.

Singapore-based RPA firm, Gleematic, helps automate repetitive tasks such as copy and pasting data from one application to another, reading data from PDF, Word, Excel and even performing the sentiment analysis.²⁹ In fact, a major British bank achieved an 80% return on investment within six months by automating time-consuming tasks. A (human) transaction that used to take about 30 minutes was reduced to 10 minutes.³⁰

WorkFusion³¹ is an intelligent automation software company that allows companies to automate complex end-to-end processes by combining multiple automation techniques into one platform. At the core of WorkFusion is a patented capability that identifies patterns in historical data and real-time work by people, creates quality data sets, and selects and trains the right machine learning model for the job. The combination of these enabling capabilities and machine learning is called cognitive automation. This unique ability to "automate automation" is valuable in high-volume processes such as fraud detection, trade finance, claims handling and AML that are too complex for rules-based automation alone.

The company's flagship product, Smart Process Automation (SPA), pairs cognitive automation with enterprise grade RPA, OCR, BPM and analytics to not only help operations teams rapidly improve service but also to allow CIOs to bring in the AI-first, data-driven infrastructure that ensures business growth and longevity. The old approach of bolting on RPA and AI to legacy infrastructure has extended the lifespan of legacy technology, but this becomes increasingly risky as the world becomes more complex. As customer and regulator expectations rise, the AI-first, data-driven approach will shift from being a competitive advantage to an operational mandate, and WorkFusion believes it will lead this evolution for businesses.

Chatbots: As a self-help channel, chatbots are revolutionizing customer service. However, human support should be available if required. Chatbots are computer programs that rely on rules and machine learning to provide a human-like response to communication with humans. Arguably, interactions with actual humans are more intelligent and personalized, but 24/7 human customer support is

²⁷ "The Most Important Thing in FinTech: Advent of APIs and Banking APIs Are Real Too," Let's Talk Payments, May 31, 2016, accessed November 2017 at

<https://letstalkpayments.com/the-most-important-thing-in-fintech-advent-of-apis-and-banking-apis-are-real-too/>

²⁸ Ibid.

²⁹ Gleematic profile, accessed November 2017 at <https://e27.co/startup/gleematic>

³⁰ Robotic process automation (RPA)—The next revolution of Corporate Functions, Capgemini, page 8.

https://www.capgemini.com/consulting-fr/wp-content/uploads/sites/31/2017/08/robotic_process_automation_the_next_revolution_of_corporate_functions_0.pdf

³¹ WorkFusion website, accessed December 2017 at <https://www.workfusion.com>

challenging. FinTechs have made significant progress in developing applications that not only work as 24/7 customer service representatives, but also as a personal financial advisor, a marketing tool to promote products and gather feedback, and fraud detection and prevention.

Through artificial intelligence and advanced chatbot support, firms can offer new or value-added services that enhance customer experience through functionalities such as real-time access to bank accounts, spending insights, tailored financial recommendations, expense tracking, budgeting, and smart investing. However, firms must be careful while going “all-bot” as it is unlikely that bots will be able to handle a full range of queries and conversations.

Sonia Wedrychowicz, Managing Director, Head of DBS Consumer Bank Technology in Singapore, said, *“AI-powered chatbots are already revolutionizing the customer servicing space and chat banking will soon replace mobile applications. The most natural form of human interaction is a conversation, and chat banking enables that experience at an extremely low cost.”*

Jake Tyler, FINN AI CEO and winner of the Capgemini Innovator Race 50 in Fintech & Mobility category, said, *“Our AI powered personal banking assistant enables banks and credit unions to interact with customers through a simple, intuitive conversational interface and helps them move beyond transactional banking and build deeper and more personal relationships with customers.”*

Personal financial management tool, Digit, can connect to a customer’s bank accounts to analyze income and spending data. The app identifies how much and when the user can save money without going into overdraft, and it moves that amount to a personal Digit Saving account. 1% interest is offered on the amount saved and can be withdrawn anytime with a single text query.³² Another firm that rewards customers is Moscow-based chatbot firm, TalkBank, which allows users to pay, transfer, and split bills and offers instant access to cards. Users can collect bonuses and chat with a bot for financial advice 24/7. TalkBank fetches information on deals

available through users’ credit cards. Its conversational interface leverages advanced analytics to provide intelligent and actionable insights.³³

Distributed Ledger Technology (DLT): A distributed ledger or a record of transactions shared by a network of participants, DLT offers transparency and speed along with enhanced security. DLT transactions are tamper-proof, in real time, and require no central supervision, which ensures transparency.

FinTechs have been at the forefront of exploiting DLT potential and have not only come up with virtual currencies but have also created innovative solutions for different industries including financial services (across domains such as banking, payments, insurance, and trade settlement) to facilitate convenient, cheaper, real-time, and innovative ways of working. Examples include loyalty solutions, syndicated loans, and trade finance solutions for banks, digital management of various asset classes and post-trade processing for capital market firms, and claims processing for insurance firms. Although DLT use cases and adoption are increasing across industries, DLT ecosystem development faces challenges including protocol interoperability (HYperledger Fabric, R3/Corda, Ethereum), as well as governance of distributed platforms built on DLT. Therefore, despite the fact that many firms and consortia are working toward implementable solutions, the financial services industry may not realize the full benefits of DLT for a few years.

“The industry moving to a decentralized, blockchain way would result in a really big change in the banking infrastructure.” said Teppo Paavola, BBVA’s Chief Development Officer, and GM New Digital Businesses.

Built on advanced blockchain (a type of DLT) technology that is scalable, secure, and interoperable, Ripple provides customers a frictionless way to send money globally. The FinTech has signed up more than 100 users to its blockchain network, RippleNet, including big-name clients such as Santander, UniCredit, UBS, and Standard Chartered.³⁴

³² “Chatbots and AI: The Fintech Trends to Watch,” Valeriia Timokhina, DZone, August 24, 2017, accessed November 2017 at <https://dzone.com/articles/chatbots-and-ai-the-fintech-trends-to-watch>

³³ TalkBank website, accessed November 2017 at <http://www.talkbank.io/en/#block-new188>

³⁴ <https://ripple.com/>; “Start-up Ripple has over 100 clients as mainstream finance warms to blockchain,” CNBC, October 10, 2017, accessed November 2017 at <https://www.cnbc.com/2017/10/10/ripple-has-over-100-clients-as-mainstream-finance-warms-to-blockchain.html>

Alignment with Customer Goals, Creation of Trust, and Delivery of Digital, Agile, and Efficient Processes Are Catalysts for Success

- **As customer focus combined with innovation is key for future survival and growth, firms need to align their strategy and culture to adapt to the new normal.** At the same time privacy, transparency, compliance, and trust are becoming key issues as the new paradigm leads to a multitude of data, which makes the customers more mindful of these aspects.
- **An effective customer focus involves empathizing with the customer, building trust, simplifying the customer experience, and aligning with customer goals and expectations.** Having a customer-centric approach and being fully transparent while offering a delightful, yet simple and consistent customer experience could help firms differentiate themselves.
- **To achieve effective customer focus, firms will need to invest in key areas of agility, digital, and operational excellence.** With changing customer expectations, firms need to ensure they have cross-functional agile teams centered around the customer, that are making focused digital investments to enhance the customer experience, all while keeping costs in check through technology and simplified processes.

While there is no surefire future-proofing strategy, there are some steps that help minimize the threat of being left behind.

1. Empathize with customers
2. Build and maintain customer trust
3. Keep it simple (for customers)
4. Strive for operational excellence
5. Invest in digital capabilities
6. Align customer and business goals
7. Adapt agile principles
8. Nurturing the right culture and talent

1. Empathize with customers: Among best practices for redefining the customer journey, one of the most important is customer empathy (Figure 4).

“

“I think the most important thing is to have empathy and really listen to your customers. I cannot emphasize enough how important it is to not simply talk as if you are customer-centric. You need to live and breathe this every day.”




Ben Chisell
Product Director
Starling Bank

Figure 4. Empathize with customers as a tool for change



Source: Capgemini Financial Services Analysis, 2018

When designing the journey, bank executives must put themselves in their customers’ shoes to accurately assess what they are thinking and what they want.

- Understand that customers do not care about a firm’s internal processes and departmental structures, for them the firm is a single entity.
- Customer journeys are more critical than individual touchpoints. While a customer might have an excellent experience at one touch point, if the next experience is bad, then the first one becomes irrelevant.
- Firms must put themselves in their customers’ shoes and experience service levels and pain points (responsiveness, turnaround time, required number of interactions.)

- Inefficiency is a customer red flag. Mitigate it through digitization, and be sure company culture complements the firm’s customer-centricity goals.
- Sustain the changes and remain agile to incorporate modifications. Be receptive to customer feedback as less than half (47%) of retail banking customers believe their bank listens to their feedback.³⁵ Align employees’ goals and incentives with the customer-centric approach.

Empower a governance body to continuously monitor these efforts. Redefining the customer journey requires more than an IT overhaul. A change in mindset is critical.

³⁵ *The Disconnected Customer*, Capgemini’s Digital Transformation Institute.

2. Build and Maintain Customer Trust: Firms must retain transparency and provide reliable financial advice to win customer trust by ensuring that customer data and privacy is protected.



“Trust in financial services is extremely important. 70% of millennials would rather visit their dentist than their bank branch. To build trust, you must have products and experiences that are on the side of the consumer. You must make it simple and transparent. That is very, very important.”



Harit Talwar
Head of Marcus
by Goldman Sachs

As a primary tenet of trust, firms must ensure that customers' data and privacy are always protected. While customer data is being utilized to develop personalized services, it should be with the consent of customers and personalization should not be intrusive. Transparency is another essential element of trust. Firms must ensure that customers are aware of what they are getting into. For example, compliance and terms and conditions must always be explained in direct, easy-to-understand language.

Customers who consider their financial firm to be a trusted partner are loyal. To that end, firms must precisely determine customer requirements based on individual customer needs and situations. Only then can a product that best suits those needs be recommended. Earning “trusted partner” status will have far-reaching impact. Conversely, broken trust can end relationships, harming customer retention and financial performance.

“The magic word is trust and the way you build trust is by serving consumers. We have a motto that says, ‘consumers first, employees second, shareholders third.’ If you take care of the consumers, employees are happy. If they are happy and are doing their jobs efficiently, then shareholders will be happy later,” said Alipay Americas President Souheil Badran.

While it may have been easier—back in the day—to maintain customer trust through personal relationships, in the digital world firms must rely on personalized and understandable offerings. CEO and founder of Moneytree Paul Chapman explains, *“How do you have a user experience that reflects trust? One is by being very transparent in what we are doing and what we are not doing. Two is by listening, because when people contact you, being present is just as important as making yourself approachable and contactable.”*

3. Keep it simple: Customers of all demographics value simplicity. Therefore, firms must strive to create positive and natural interactive moments via all processes and user interfaces. Overall, the customer experience must be consistently simple and delightful. However, simplicity does not imply that personalization is sacrificed. Data and analytics can be used to deliver relevant products and services that are easy to use.



“If we follow a design thinking methodology, you design for all. You look at the spectrum of needs and you design the best experience to meet the needs of the people from the fringes to the center. This way you provide the best experience for everybody.”



Theodora Lau
Director of Marketing and
Innovation, AARP

“We’re looking at something that we call ‘financial fulfillment.’ That means getting people to where they want to go in the simplest way possible. The way we do that is we look at first how customers find financial products, how they acquire them, and then how they use them at the end point,” said Ed Maslaveckas, CEO, and Co-Founder, Bud.

4. Strive for operational excellence: An operationally excellent firm strives to enhance productivity as well as customer experience. As reported in the Bank of England stress test 2017, banks may face increased competitive pressure not only from traditional peers but also from FinTechs that have low operational costs.³⁶ With

³⁶ “Stress testing the UK banking system: 2017 results,” Bank of England, November 28, 2017, accessed December 2017 at <https://www.bankofengland.co.uk/stress-testing/2017/stress-testing-the-uk-banking-system-2017-results>

such scenarios, banks or other incumbents must increasingly focus on cutting costs through technology and simplified processes.

Firms must acknowledge delivery of superior customer journeys as a key element of operational excellence and sensitize their employees to this. A strong customer-focused culture must be coached organization-wide, not just at customer-facing touchpoints.

Organizational structure: For the customer to have a single view of the firm, firms must ensure that they have clearly laid out cross-functional and departmental processes with well-defined roles and responsibilities. While employees should be empowered to take pre-authorized decisions in customer matters, there should also be a mechanism to address exceptional scenarios quickly.

Optimized data: These days firms have an enormous supply of data from a variety of sources, both internal and external, that can be used to simplify processes for customers (such as pre-filled forms). Applying big-data and benchmarking techniques, firms can understand how they are performing over time or in comparison to the industry.

Enabler tools: Real-time availability of data, functionally rich dashboards and decision-making tools (creditworthiness, e-know your customer) will help firms to serve customers efficiently. Firms must keep up to date in identifying new tools, upgrading their supporting infrastructure, and maintaining a contingency plan.

Managing costs: While the pressure is on to deliver superior customer journeys, it is no secret that resources are often limited. Therefore, careful planning is needed when developing firm capabilities such as personnel, IT, and other incidentals. A return on investment metric will help sustain efforts. Removing inefficiencies helps with customer experience as well as cost-cutting and bolstering employee productivity. Pivot fast, listen to the customer and quickly modify the customer journey.

5. Invest in Digital Capabilities: Apart from organizational changes, IT digital transformation is a given. Abandoning legacy systems can be costly, but firms must modernize their core to support compatibility with the latest technologies and third-party systems. APIs can help achieve this by connecting a firm's internal systems with third-parties. A scalable, robust IT infrastructure must be built depending on requirements, cloud-based infra might offer a solution.

Kick-start or strengthen the practice of agile development.³⁷ Quickly develop minimal viable products (MVPs) and test them in a sandbox environment.³⁸ Keep a holistic approach in mind during product development strategizing.

Empower the digital team to redefine the customer journey under the leadership of a Journey Product Manager. These initiatives will identify and implement customer journey programs that may require cross-functional collaboration. The team should continuously enhance services in order of prioritization based on customer feedback, relevance to the customer journey, potential return on investment, and technical and financial feasibility.

Investing in digital is not a sunken cost because an enhanced customer experience not only results in higher loyalty, 79% of retail banking customers are willing to spend more for a better experience.³⁹ Pre-defined metrics can help firms track ROI to justify and motivate further investments.

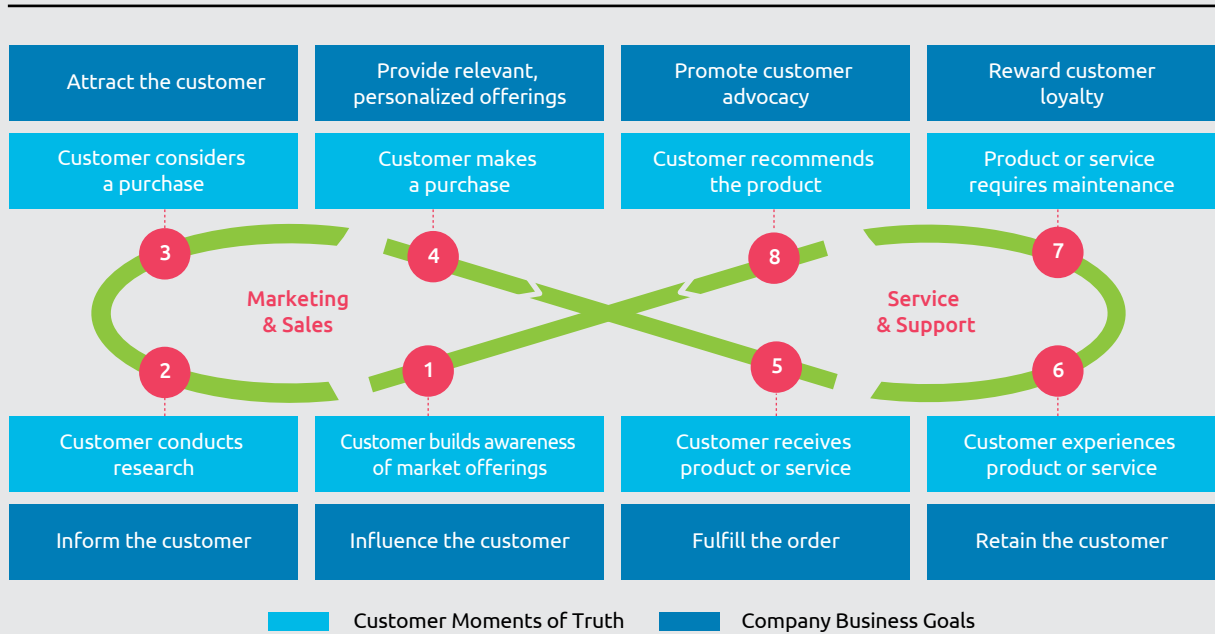
6. Align Customer and Business Goals: It is imperative for firms to align customer journeys with business goals to avoid conflict, mixed messages, or wasted resources. Alignment may not happen overnight, but by motivating staff to serve customers better, an overarching awareness of customer-centricity can be driven across the organization, ensuring that all phases of the customer lifecycle are prioritized and that customers stay top of mind even after they have purchased a product (Figure 5).

³⁷ Agile development is a time-boxed and iterative approach, which is characterized by the division of project and tasks into short phases of work and involves frequent reassessment and adaptation of plans.

³⁸ A sandbox is an isolated environment used for developing products and solutions that are untested, and aids in outright experimentation since it is isolated from the production environment or repository, thereby protecting live servers and their data.

³⁹ *The Disconnected Customer*, Capgemini's Digital Transformation Institute

Figure 5. Aligning customer and business goals



Source: Capgemini Financial Services Analysis, 2018; The Disconnected Customer, Capgemini’s Digital Transformation Institute, 2017

7. Adopt Agile Principles: Collaboration with FinTechs can help traditional financial services firms boost agility and responsiveness to changing customer expectations. Incumbents must develop truly agile teams through a top-down approach that starts with executive leadership. Agile teams work well cross-functionally because they strive to quickly understand the business objectives of those involved, and ameliorate unresolved conflict. An agile culture may begin with a series of small or mid-size efforts, rather than big-bang transformations that may require capital expenses and risk.

The customer journey is at the heart of Marcus by Goldman Sachs. *“We are organized around the customer and the customer journey, not by function or department,”* said Harit Talwar, Head of Marcus. *“Our agile, cross-functional teams put the customer at the center, so development focuses on the customer journey.”*

Change software development models: In the past, firms relied on a traditional (waterfall) model for software development. However, FinTech firms pioneered a more agile approach that incorporates elements of design thinking to create unique customer-centered processes to leverage cheaper and faster software methodologies that are more flexible and responsive.

“

“An organization must be agile to meet rapidly changing customer expectations effectively. That is why we changed our organizational structure to remove hierarchical silos of marketing, product development, process management, and IT to create an agile environment.”

Ralph Hamers
CEO, ING Group

Agility helps firms to experiment fast and fail fast. Why is that a good thing? Because it saves time and money over the long term and it channels valuable investment to the most feasible ideas in the near term.

8. Nurturing the Right Culture and Talent: While all the strategies mentioned above are essential to great customer journeys, firms require the complete

support and buy-in from leadership to successfully implement them. Customer-focused leadership will nurture the culture of innovation and customer-centricity for quick wins as well as long-term relationship building.

As noted in the *World FinTech Report* 2017, nearly two-thirds of executives (64%) cited leadership buy-in as a key success factor in applying innovation.⁴⁰ Leading by example motivates employees to respond and



“Talent is very important. Roughly a third of our talent is from within the firm, Goldman Sachs. Another third is from traditional consumer finance companies like Citi, AMEX, Capital One, and Discover. Then another third is from other consumer facing companies like Facebook, Google, Amazon, Gatorade, and Michael Kors. It is about having a culture where you bring in talent from different backgrounds and put them together.”



Harit Talwar
Head of Marcus by
Goldman Sachs

act in ways that keep customers at the center. With changing customer expectations, executives, as well as employees, must champion the customer.

Beyond creating an agility-fostering culture and environment, firms must also ensure they are building teams with the right mix of skills. Success in the future will require new and different skills. Many firms have been adding talent from a mix of financial institutions from incumbents to FinTechs and BigTechs, as well as non-financial sectors such as retail. As financial institutions look to innovate and to partner with FinTechs, they need the right people and culture in place to drive organizational change.



“The biggest barrier to innovation and the digitalization of banking in the next 5 years will be the lack of talent. Making this issue worse is that the demand by private industry is limiting the number of professors teaching these skills at the university level.”



Jim Marous
Co-Publisher of
The Financial Brand



“Startups will help us define our future. Banks can significantly enhance their value proposition and customer experience working with start-ups. Each party will bring what it does best and combine resources. External orchestrators will be essential to make banks and startups collaborate fast, well and efficiently.”



Gonzalo Rodriguez Rodriguez
Head of Digital Banking,
BBVA Spain

Incumbents must objectively rethink their approach to customer journey enrichment. Experiencing the journey through a customer lens will help firms understand the mindsets of users. Moreover, a fresh perspective may unearth actionable intelligence to help meet goals.

Embracing emerging technologies and developing capabilities to accommodate redefined and dynamic customer journeys today and tomorrow will require sustained effort and investment. Capability transformation covering human resources, IT, and finance must be deployed across the spectrum of the customer lifecycle.

Firms can hit roadblocks when they are technologically constrained. In such cases, collaboration with FinTechs could leverage already-developed applications and solutions. To ensure successful collaboration, however, FinTech and traditional financial services firms must commit to understanding each other's viewpoints.

⁴⁰ Capgemini's World FinTech Report 2017.





The Symbiotic Relationship between FinTechs and Traditional Financial Institutions

In collaboration with



FinTech and Incumbent Firms' Respective Competitive Advantages and Shortcomings Make Collaboration a Logical Fit



Finding the Right Partners for Collaboration Is Essential



Successful Collaboration Requires Commitment and Agility from FinTechs and Incumbents

FinTech and Incumbent Firms' Respective Competitive Advantages and Shortcomings Make Collaboration a Logical Fit

- **FinTechs and incumbents have symbiotic sets of competitive advantages and challenges, making collaboration a win-win situation for both entities.** FinTech firms' primary competitive advantages are their agility, laser focus on customer experience, and not being burdened by legacy systems while incumbents bring infrastructure, scale, customer trust (and brand name), and ability to deal with regulations.
- **Despite select competitive advantages, most FinTech firms face significant challenges in scaling-up their business.** Most FinTech firms suffer due to lack of customer trust, brand name, established distribution infrastructure, capital, and expertise in handling regulations.
- Most successful FinTech firms have focused on very narrow, discrete functions or segments underserved by traditional financial institutions, but have struggled to profitably scale on their own. **Achieving the next level of high growth and scale will require FinTech firms to collaborate with incumbents to gain access to a larger customer base. A robust partner ecosystem is also critical for creating better customer-centric products and services.**

Gaps Left by Traditional Financial Institutions Lead to FinTech Success

Leveraging the latest technologies, FinTech firms are disrupting the financial services industry with innovative products and services, while transforming the way products are consumed. FinTech firms' have benefited by starting from scratch leveraging the latest technologies. They also have not been burdened by legacy systems when compared with the those of traditional financial services firms. New technology can more easily be integrated by FinTech firms that tend to leverage best practices from technology players in other industries that are known for superior customer experience.



"We want to help customers through those moments in their life where most financial institutions don't. And, we provide our services via online and mobile, so that customers have quick access."



Joanne Bradford
CMO of Social Finance Inc. (SoFi)

What do FinTech firm leaders believe are their competitive advantages? More than 90% of FinTech firms participating in the *World FinTech Report* Survey said agility and providing enhanced customer experience are their key competitive advantages.

More than 75% of FinTech firm respondents said they consider new product development and innovating existing products and services as critical competitive advantages (Figure 6).



"FinTechs have solved many specific problems that are challenging for banks. They have the agility to focus on products that meet specific needs. Banks, on the other hand, have scale, brands, and distribution. Collaboration between both entities could be a magical combination."



Michael Roberts
Chief Marketing and Digital Strategy Officer, Bank of America Merchant Services

The agility to adopt the latest technologies, combined with best practices from other industries, has enabled FinTechs to develop these competitive advantages.

Agility to experiment with new technologies and business models has been the hallmark of FinTech firms thanks to their freedom from legacy baggage, and a negligible cost of failure. FinTech platforms are compatible with the latest technologies, such as cloud, artificial intelligence, and DLT, which allows them to quickly offer new products and services. Data analytics systems are constantly evolving to handle huge volumes of unstructured data in real-time and

Figure 6. FinTech key competitive advantages, FinTechs' view (%), 2017



Note: The percentages represent FinTechs that have given a rating of more than 5 on a scale of 1–7 for each of the options.
 Question: "Please rate the impact you feel FinTech is having on the following areas in the financial services industry." (Please rate the following options on a scale of 1–7, with 7 being the highest value-add, and 1 being the least.)"
 Source: *World FinTech Report Survey*, Capgemini, LinkedIn, Efma, and MaRS, 2017

those can also be integrated with existing FinTech systems. Moreover, regulators today are facilitating financial services innovation by promoting mainstream FinTech adoption by leveraging APIs. Simply stated, in an industry that was difficult to join, barriers to entry have been dropped, flat organizational structures with little bureaucracy have been added, and an innovation mindset and accelerated pace are being encouraged.

Enhanced customer experience is offered by FinTech firms across various touchpoints with online and mobile-first solutions. Customer experience was the impetus behind UK-based Bud, a web and mobile app that aims to make different financial services accessible from a single interface. *"We are trying to bring a lot of time and attention back to the banking app or through the voice channel by allowing the customer to do more things and through a more helpful experience,"* said Ed Maslaveckas, Bud CEO, and Co-Founder.

InsurTech firm Hippo leverages smart home sensors and IoT data to prevent damages in the home, enhance customer experience, and reduce claim incidents.⁴¹ Wizdee combines business intelligence reporting

with natural language processing technology to give customers predictive insight into their personal finances.⁴²

New products and services are the specialties of agile and innovative FinTech firms that leverage the latest technologies. Slice Labs Inc. has introduced on-demand insurance products for home-share platforms such as Airbnb.⁴³ Users purchase insurance coverage for only the duration of their stay. And,



"We're offering services that many banks currently don't provide. We view such services as complementary and an extension of what banks are offering today."



Souheil Badran
President, Alipay Americas



"Our customers are very tech-savvy when it comes to managing their finances and they really appreciate this control or transparency that we offer through our app. They really like our product, design and the customer experience we offer."



Nicolas Kopp
US CEO of N26

Monese provides a digital banking service that lets users open a UK banking account on a mobile phone (regardless of their citizenship).⁴⁴

Innovation is a core competency of FinTech firms, enabled by an innovative culture and strong leadership support. Since most of FinTechs were formed to provide a solution for concerns that incumbents had not been addressing, innovation is engraved in the DNA of FinTech firms. InsurTech firm Next Insurance has launched a chatbot via Facebook Messenger that enables small businesses to request insurance quotes and purchase insurance.⁴⁵ FinTech Qapital Inc. developed a personal finance management (PFM) app for iOS and Android that motivates users to save money through gamification of their spending behavior. It moves money from a user's checking account to a separate Qapital account, when specific rules are triggered.⁴⁶

⁴¹ "Hippo Insurance Launches A Mission To Redesign The Home Insurance Market," Omri Barzilay, Forbes, April 26, 2017, accessed December 2017 at <https://www.forbes.com/sites/omribarzilay/2017/04/26/hippo-insurance-launches-on-a-mission-to-redesign-the-home-insurance-market/>

⁴² "Three areas where fintech start-ups are revolutionizing the customer experience," Telus International, January 25, 2017, accessed December 2017 at <https://www.telusinternational.com/articles/how-fintefch-startups-are-revolutionizing-customer-experience>

⁴³ Slice Labs' website, accessed December 2017 at <https://www.slice.is/>

⁴⁴ "20 FinTech Products From 4 Countries That Millennials Love With 1 Thing in Common," Amit Goel, Let's Talk Payments, March 14, 2016, accessed December 2017 at <https://letstalkpayments.com/20-fintech-products-from-4-countries-that-millennials-love-with-1-thing-in-common/>

⁴⁵ "Next Insurance launches Facebook Messenger chatbot to replace the insurance agent," Eileen Brown, ZDNet, March 21, 2017, accessed December 2017 at <http://www.zdnet.com/article/next-insurance-launches-facebook-messenger-chatbot-to-replace-the-insurance-agent/>

⁴⁶ "Four technologies reshaping fintech customer experience—a look at IoT, AI, RPA and more," Telus International, January 12, 2017, accessed December 2017 at <https://telusinternational-europe.com/technology-fintech-customer-experience-iot-ai-rpa/>

Cost optimization is a key competitive advantage for FinTech firms as they tend to employ cost-effective solutions such as mobile or online as a primary communication channel. For example, InsurTech firm Wrisk provides motor, travel, and home insurance via mobile app,⁴⁷ thereby reducing operational cost, while Lending Club leverages technology to operate a credit marketplace at a lower cost than traditional bank loan programs.⁴⁸

Data management comes naturally to most FinTech firms because their systems are compatible with the latest data analysis tools, which can derive keen insights from structured and unstructured data. In many cases, FinTech firms are simply leveraging bank data more effectively than the banks themselves. InsurTech firm Amodo collects data from various devices (including customers' smartphones and onboard diagnostic devices) and builds customer profiles with insight into potential risk exposure.⁴⁹ While, myInvenio reads firms' IT systems' data to visualize processes, and reveal bottlenecks, critical activities and resources that slow down the financial process flow.⁵⁰

FinTech Advantages Often Offset by Bigger Shortcomings

Although FinTech firms are successful in introducing innovative products, they face challenges in scaling-up and creating financially viable business models. While the growth of FinTech firms is keeping pace with the number of novel FinTech offerings, only a few FinTech firms and products have reached a significant scale. Moreover, while the FinTech space fills with new competition, traditional financial institutions are catching up and often replicating select FinTech successes.



"We are seeing rapidly improving customer experiences in banking, so if the only thing you do as a FinTech is have a better experience than the banks will copy it. So the business model has to be more disruptive."



Teppo Paavola
Chief Development Officer
and General Manager of
New Digital Businesses
at BBVA

SoFi CMO Joanne Bradford offered words of warning, *"Today, anybody can build new products leveraging technology. You can build an app, you can build anything. But it's a very complex thing to get that established as a financial services company."*

FinTechs firms can successfully scale up and become a sustainable business only if they address the key challenges before them.

Unique value proposition—Typically, FinTechs look to resolve customer issues that traditional firms have yet to address. FinTech firm success and the ability to stand out are contingent upon a unique value proposition offered by no other existing player. Also, before a FinTech firm's product or service gains broad customer reach, the new-age firm risks replication by similar firms or even by larger traditional firms. Hence, a unique solution that is either hard to replicate, or that can be protected by means such as a patent, becomes critical.

Distribution infrastructure—Unlike traditional financial services firms, FinTechs do not have a well-established distribution infrastructure, which can affect their outreach to a broad customer base.

Customer trust—The established brand name and regulatory backing of traditional financial services firms have earned the trust of most consumers when it comes to key financial services. Building customer trust will be a challenge for FinTech firms as it will take time.

Brand name—Generally speaking, most FinTechs do not have a well-recognized brand name. Brand building requires both time and significant investment in marketing.

Regulations—Regulatory bodies across the world are framing protocols for FinTech firms. However, most of the FinTech firms do not have the expertise to navigate through complex regulatory mandates.

"Regulations across geographies are somewhat different," advises Nicolas Kopp, the US CEO of mobile banking solution N26. *"We want to make sure that we are fully compliant with regulation, so our users' money is safe and secure, and they're protected against fraud."*

Capital—Heavily reliant on venture capital funding, FinTech firms and their operations will be affected if their new ideas do not generate interest.

Economies of scale—Low-cost FinTech offerings can be profitable only with economies of scale. However, when they attempt to go it alone, FinTech firms face challenges in new customer acquisition and expansion.

⁴⁹ "Amodo and HERE help companies to understand their customers", Philip Barker, Here 360, June 12, 2017, accessed December 2017 at <https://360.here.com/2017/06/12/amodo-help-companies-understand-customers>

⁵⁰ European FinTech Awards 2017, accessed December 2017 at <https://europe2017.fintech.nl/companies/myinvenio>


Collaboration Is a Win-Win Situation for Industry Players

FinTech firm challenges are often the natural strengths of traditional financial services firms, which is why collaboration is a big opportunity for FinTech firms and vice versa. FinTech firms and traditional financial services firms have a different set of competitive advantages. Through collaboration, mutual needs are identified and strengths swapped for a mutually-beneficial win-win situation (Figure 7).



Teppo Paavola, General Manager of New Digital Businesses at BBVA, states the importance how partnership is important for disruption and innovation, *“The FinTechs do change the industry, do change, have already changed, will change depending on a case by case and our approach is to partner and to go as far as to enable them, enabling them to disrupt the industry and to disrupt us.”*

Sabine VanderLinden, CEO, Startupbootcamp InsurTech, has seen insurers face similar challenges as their banking counterparts *“Insurers are today forced to rethink their first wave of digital experiences and look outwardly towards new engagement approaches. This means that to achieve results insurers must move their investment from traditional product development models to flexible inclusive innovation approaches. In a world where knowledge is widely distributed and accessible, it is best for corporate entities – in particular those insurers that do not yet have an open innovation strategy in place that includes external nimble collaborators – to start working on such a game plan to gain a competitive edge.”*

Regulators also see the merits of collaboration between FinTechs and traditional financial institutions. Regulations play a key role in facilitating innovation and, therefore, impact FinTech-incumbent collaboration. In Europe, PSD2 regulations are pushing traditional financial services firms for adoption of application programming interfaces, which is encouraging



“Banks have advantages that are very challenging for FinTechs to replicate - customer base, regulatory expertise, and core infrastructure. But, there are also a lot of things that FinTech firms can do that are challenging for banks, the most important being that we are hyper focused on being great at just one thing. I think that synergy is very powerful and we’ve had a lot of success working with banks, large and small.”

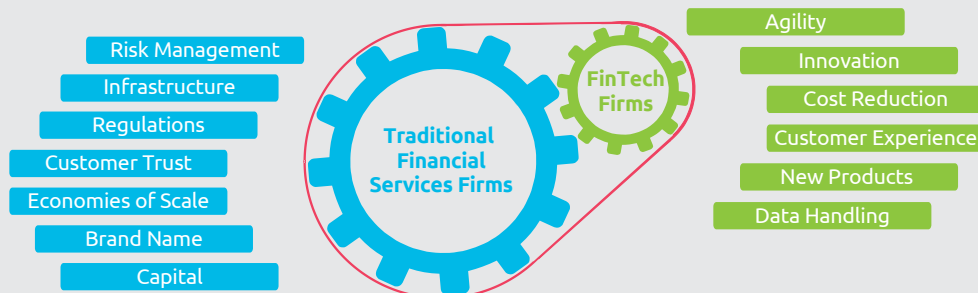



Jake Tyler
CEO of Finn.ai

collaboration. The Financial Conduct Authority (FCA), the United Kingdom’s regulatory authority, has rolled out initiatives and policies conducive to innovation, including a regulatory sandbox that has expedited FinTech growth in the UK.

In Asia-Pacific markets such as Hong Kong, Malaysia, and Singapore, regulatory bodies are providing strong support and accelerating FinTech growth. The number and quality of these firms will offer options for traditional financial services firms to pick and choose suitable partners. However, Japan had stringent regulations for FinTech firms, which has been a roadblock for the rapid growth of FinTech there.

Figure 7. Collaboration: A win-win situation



Source: Capgemini Financial Services Analysis, 2018

Case Study: ING Moves into Digital Wealth Management with Scalable Capital

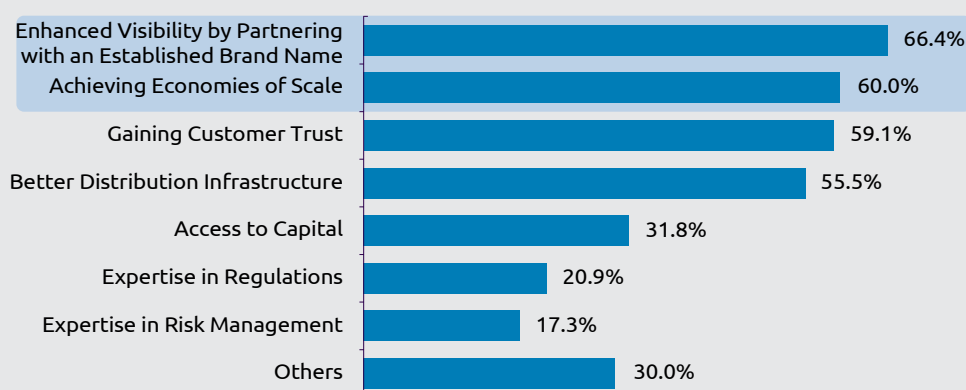
Innovation is a strategic ING Group priority and the Dutch multinational banking and financial services corporation looks outside to create differentiating customer experiences that are personal, seamless, and relevant. Through a partnership with online wealth manager **Scalable Capital**, a leading European robo-advice firm, the FinTech will offer ING's retail customers in Germany a fully-digital investment solution. Scalable Capital had a ready-to-use solution that will help reduce ING's go-to-market time. Based on success in Germany, ING and Scalable Capital will consider expanding their online portfolio-monitoring service in other geographies. The FinTech solution is offered directly on the investment platform of a large retail bank. The solution is in the emerging robo-advice space, and with advancements in computational power and artificial intelligence, there may be rapid progress in robo-advice over the next few years, enabling unprecedented levels of personalization for financial consumers.⁵¹ Since the start of the partnership, 7,000 ING-Direct customers have invested over EUR150 million in Scalable Capital.⁵²

By partnering with traditional financial services firms, FinTechs can provide their offerings to a broader customer base. More than 55% of FinTech firm executives polled in the WFTR 2018 said that gaining visibility, achieving economies of scale, earning customer trust, and establishing a better distribution infrastructure as crucial reasons for partnering with traditional financial services firms (Figure 8).

More than 75% of FinTech firms cite collaborating with incumbent firms as their primary business objective (Figure 9). The inclination to collaborate is higher in FinTech firms irrespective of the stage of the firm. Kabbage has partnered with a few incumbents such as Scotiabank (for streamlining online lending), MasterCard (for providing business loans through MasterCard's network of acquirers), ING (to provide capital to small businesses), and Santander (for offering loans to small and medium enterprises).⁵³ InsurTech firm Wrisk and Munich Re have signed an agreement in which Munich Re will be the carrier to Wrisk's business underwritten in the United Kingdom, Europe, and the United States.⁵⁴

"ING should be freeing up time for its clients. For example, with our partnership with Kabbage, we can now offer loans to Small Business in less than 10 minutes. This is a great illustration of how a bank and a FinTech can effectively partner," said Benoit Legrand, CEO, ING Ventures and Global Head of FinTech, ING.

Figure 8. Key reasons FinTechs partner with traditional financial services firms (%), 2017



Note: The percentages represent FinTechs that have given a rating of more than 5 on a scale of 1–7 for each of the options.

Question: "Please rate the importance the following factors have when looking to partner with traditional financial services firms." (Please rate the following options on a scale of 1–7, with 7 being the most important reason, and 1 being the least; In case you are not partnering with traditional financial services firms, please write 'Not Applicable' under 'Others'.)

Source: World FinTech Report Survey, Capgemini, LinkedIn, Efma, and MaRS, 2017

⁵¹ "ING: Partnering for innovation," Efma, December 5, 2017, accessed December 2017 at <https://www.efma.com/article/detail/28338>

⁵² "Scalable Capital assets jump to €500 million," Selin Bucak, City Wire, November 9, 2017, accessed December 2017 at <http://citywire.co.uk/wealth-manager/news/scalable-capital-assets-jump-to-500-million/a1067676>

⁵³ Kabbage website, accessed December 2017 at <https://www.kabbage.com/blog/>

⁵⁴ "Munich Re Partners with InsurTech Start-Up Wrisk," Insurance Journal, November 22, 2016, accessed December 2017 at <https://www.insurancejournal.com/news/international/2016/11/22/433048.htm>

While most FinTech firms want to collaborate, less than one-fifth of FinTech firms cited a preference to compete. This might reflect their understanding of their own strengths and multiple challenges that FinTechs face to succeed on a large scale. Collaboration with traditional financial services firms is the secondary objective for most FinTech firms that want to compete independently or merge or become acquired. UK mobile banking startup Monzo acquired a banking license in 2016 and is looking to expand into other European countries and the United States.^{55 56} InsurTech Lemonade offers homeowners and renters insurance.

It is a licensed insurance carrier that leverages artificial intelligence for quicker claims processing.⁵⁷

In addition to partnerships with traditional firms, as FinTech firms operate mostly within specific focus areas, they must create a partner ecosystem and associate with other technology firms and other FinTech firms as was all players such as lawyers and regulators to enhance and fill gaps within their service offerings. Ben Chisell, the Product Director at mobile-only challenger Starling Bank said, *“We want to build a great consumer product. We want to work with partners through our marketplace platform and our open APIs to allow other partners to offer a selection of really great FinTech products to our customers through our app.”*



“Banks can work with a lot of different people to provide a really good service to their customers. Banks don’t have to build the stuff themselves. They can rely on somebody else to help bring portions of an offering. So, I actually expect us to work with even more tech firms moving forward.”

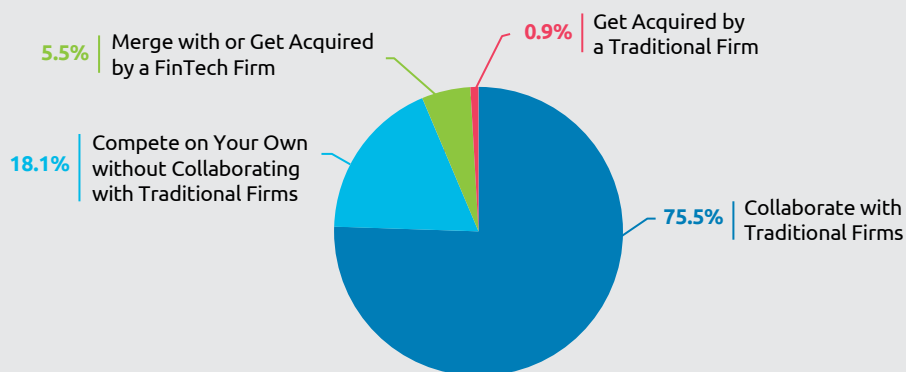


Steve Ellis
Head of the Innovation Group, Wells Fargo



Souheil Badran
President, Alipay Americas

Figure 9. Primary business objectives of FinTechs (%), 2017



Note: The percentages represent FinTechs who have chosen the particular option.
 Question: “What is the primary business objective of your firm?” (Please choose an applicable option.)
 Source: *World FinTech Report Survey*, Capgemini, LinkedIn, Efma, and MaRS, 2017

⁵⁵ “App-only bank Mondo just got a banking license,” Oscar Williams-Grit, Business Insider, August 11, 2016, accessed December 2017 at <https://www.businessinsider.in/App-only-bank-Mondo-just-got-a-banking-licence/articleshow/53653715.cms>
⁵⁶ “Monzo is touting expansion to Europe, US, and Asia to investors—just not yet,” Oscar Williams-Grut, Business Insider, March 2, 2017, accessed December 2017 at <http://nordic.businessinsider.com/monzo-crowdfunding-investor-deck-europe-us-asia-expansion-2017-3/>
⁵⁷ Lemonade website, accessed December 2017 at <https://www.lemonade.com>

More than 70% of FinTech firm executives interviewed said they tend to associate with other technology firms when it comes to delivering their products and services (Figure 10). The pressure is on FinTech firms to reduce go-to-market time, and this highlights the need to focus on their core competency and to partner with other FinTech firms for successful operations.

One of the leading examples is the partnership between two of the biggest FinTech firms in Europe, N26 and Younited Credit, to offer a mobile-only consumer loan product to N26 clients in France.⁵⁸ N26 was able to achieve product extension in consumer loan space while Younited Credit was able to distribute its new product through the wider distribution network of N26 as well as through integration with other apps using APIs.

Geoffroy Guigou, co-founder and COO, Younited Credit said, *“It is very rare to have two large FinTech firms with common assets such as full banking licenses, a real European footprint (17 countries for N26, five countries for Younited Credit), and their proprietary banking infrastructures and systems and still collaborate. We were able to achieve a lot in a short period of time as the deal was signed in six weeks and the product was fully live after four months of coding, way faster than just meeting with a traditional bank and agreeing to sign an NDA!”*

Some further examples include, Lending Club partnering with Google to provide low-interest financing to eligible Google partners. The partnership will leverage Lending Club’s ability to cost-effectively provide access to credit in a highly automated manner and allows Google to purchase the loans, thus investing its own capital in its partner network to drive business growth.⁵⁹ SafeShare

has launched a DLT-based insurance product for the sharing economy in partnership with financial services technology firm Z/Yen Group, and the product is distributed through an alliance with Vrumi, a sharing-economy firm.⁶⁰ InsurTech service provider RISK and data science company Sentiance (an expert at analyzing data from IoT devices to derive insights) are working on a new way to price insurance premiums by examining the consistency of customer behavior.⁶¹

FinTechs also need strong support from other entities. More than 50% of FinTech firm executives said they want to associate with regulators because regulatory bodies provide sandboxes and incubation labs to help in overcoming innovation obstacles via a safe environment for testing products, services, and business models, while ensuring data protection and security. FinTech firms also want to partner with system integrators, lawyers, and consulting firms. System integrators are ideal partners for complex technical implementations, as they combine various subsystems into an integrated solution and streamline the work among multiple partners.

Software partners, on the other hand, specialize in specific software applications and provide necessary software solutions and components for implementation. FinTechs also associate with lawyers for various aspects including a contractual agreement with venture capitalists and ensuring the legality of their new products and services. Consulting firms are often tapped by FinTechs to formulate their business strategy and to take their products to prospective clients. Across the board, leading consulting firms are beefing up their relationships with FinTech firms by establishing strategic partnerships.

Figure 10. Association of FinTechs with various entities (%), 2017



Note: The percentages represent FinTechs that have chosen the particular option.

Question: “Which entities are you currently collaborating/working with now?” (Please choose all the applicable options.)

Source: World FinTech Report Survey, Capgemini, LinkedIn, Efma, and MaRS, 2017

⁵⁸ “N26 partners with Younited Credit to offer credit to its clients in France,” N26 Press Release, accessed December 2017 at <https://n26.com/content/uploads/2016/12/20171212-younited-credit-n26-pr-en.pdf>

⁵⁹ “Google and Lending Club Partner to Deliver New Business Financing Program,” Lending Club website, January 15, 2015, accessed December 2017 at <https://www.lendingclub.com/public/lending-club-press-2015-01-15.action>

⁶⁰ Safe Share Insurance website, March 15, 2016, accessed December 2017 at <http://www.safeshareinsurance.com/2016/03/>

⁶¹ “RISK: from Usage to User Based Insurance,” Sentiance website, February 27, 2017, accessed December 2017 at <http://www.sentiance.com/2017/02/27/risk-from-usage-to-user-based-insurance/>

Finding the Right Partners for Collaboration Is Essential

- **Globally, more than 7,500 FinTech firms, combined, have raised over 109.8 billion. Yet most will likely fail because: they could not find the right product-market fit, the high cost of scaling up, inability to find the right partner, and the struggle to create, launch, and quickly gain market share for a differentiated product that cannot be replicated.** Firms need to set out a strategy and clear set of criteria to ensure effective identification and assessment of potential FinTech partners.
- **Future partner potential should be assessed on four parameters: People, Finance, Business, and Technology.** Capgemini has launched a Scale-Up Certification program to identify and qualify the most prepared scale-ups for efficient and effective collaboration with financial institutions.
- **FinTech leaders have struggled with traditional institutions' lack of agility, willingness to partner, and culture fit.** However, FinTechs also need to be mindful of incumbents' constraints and clearly articulate the value proposition they can achieve together to be a collaborative partner.

FinTech Firms Raise Over Billion since 2009, but Most Will Likely Fail

Through more than 7,500 deals since 2010, FinTech firms have raised an estimated 109.8 billion (up to end of Q3 2017). Annual funding growth was exponential from 2010 to 2016—from 5.1 billion to 28.4 billion. FinTech fundraising in 2017 yielded 18.1 billion (up to end of Q3).⁶² The Funding comes primarily from VC firms, which have invested 13.9 billion across 986 deals in 2016 and 12.2 billion across 818 deals in 2017 (up to Q3 2017).⁶³ FinTech firms are flourishing in hubs in Bengaluru, Berlin, London, New York, Paris, Silicon Valley, and Singapore. FinTech hubs have evolved thanks to government support, resource availability (infrastructure and talent), and proximity to financial hubs. For example, London and Singapore are located within financial hubs with forward-thinking governments and regulators that support entrepreneurial culture and competitiveness. Availability of resources has enabled Silicon Valley and New York FinTech hubs to drive innovation. However, most FinTech firms are focused within a region or country and face challenges if they opt to expand globally. Scaling outside their home geography is often problematic.

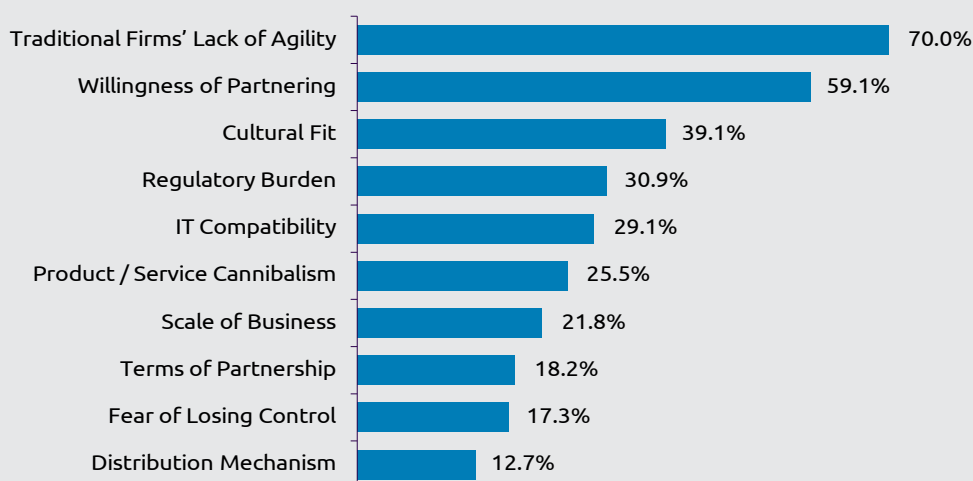
Sure, various support for FinTech growth exists—the flow of capital from multiple entities, the presence

of incubators/accelerators and FinTech hubs, and government support for innovation—but the majority of FinTech firms continue to fail. While a firm may have a good idea and the ability to build the minimum viable product at low cost, operational scale-up costs can be daunting. Moreover, FinTech firms need buffer capital to face the ups and downs in business due to macro-environmental factors. However, most FinTech firms are underfunded as investors favor a few select firms that have showed signs of success. FinTech firms may also struggle to earn customer loyalty, as the cost of switching is low and similar offerings appear to materialize regularly. FinTech firms also jeopardize success by not focusing on or not being able to find the right business and technology partnerships. This is a huge challenge for traditional firms too, as there are thousands of FinTech firms in different life stages, and choosing the right one is an uphill task.

Cutting through the Noise to Find the Right Partners

Traditional firms' general lack of agility and perceived unwillingness to partner have been main hurdles for FinTechs attempting to find a suitable partner (Figure 11). More than three-fourths of FinTech and InsurTech executives surveyed for the *World FinTech Report 2018*

Figure 11. Challenges FinTechs face while looking for a partner (%), 2017



Note: The percentages represent FinTechs that have given a rating of more than 5 on a scale of 1–7 for each of the challenges.

Question: "Please rate the following challenges which you feel a FinTech firm may face when looking for a traditional financial services firm as a partner." (Please rate the level of the following challenges on a scale of 1–7, with 7 being extremely challenging, and 1 being least challenging.)

Source: *World FinTech Report Survey*, Capgemini, LinkedIn, Efma, and MaRS, 2017

⁶² "FT Partners Quarterly FinTech Insights and Annual Almanac: Q3 2017 FinTech Insights," FinTech Technology Partners, accessed December 2017 at <https://www.ftpartners.com/fintech-research/almanac>

⁶³ "The Global Fintech Report Q3 2017," CB Insights, accessed December 2017 at <https://www.cbinsights.com/research/report/fintech-trends-q3-2017/>

said their top challenge was the apparent lack of agility on the part of incumbents. The major concerns deterring incumbents from partnering with FinTechs involved a negative impact on customer trust and brand, and changing internal culture. For InsurTechs, IT compatibility was the number-two challenge (41.7%). Addressing these challenges at the start of a relationship will help clarify objectives and make sure all entities are on the same page.

With an eye on enhanced customer experience and maximized customer value, FinTechs and traditional financial services institutions must leverage each others' strengths, such as incumbents' wide suite of products and services and the frictionless and superior customer experience that FinTechs deliver. Well managed, these synergies will foster better cross-selling and cross-channel engagement.

During FinTech and incumbent collaboration, customer experience must stay top of mind to ensure the best service levels. The goal of collaboration remains to maximize the product portfolio by delivering frictionless customer experience.

To maximize the efficiency of collaboration, financial institutions should keep four parameters in mind before embarking on a partnership with a FinTech: People, Finance, Business, and Technology.

- **People:** Does the FinTech have the "Right people in the Right seat?"
- **Finance:** Will the FinTech still be in operation in 12 months?
- **Business:** Does the FinTech have the right early traction and signs of success?
- **Technology:** Is the technical solution of the FinTech built to last and scale?

People: By far, people are the most important resource in a FinTech. Having the right set of people in the right roles to drive innovation, growth, expansion, and successful collaboration is the formula for success.

Right experience: FinTechs need to have the right mix of people with high levels of business acumen and deep technical expertise. Starting at the top, management and governance must be in place for optimal use of limited resources. Ex-industry practitioners, in management or customer-facing roles, often lend credibility to industry knowledge and practices, making them more attractive to incumbents for collaboration.

Passion for the customer experience: FinTechs are passionate about creating the best customer experience by solving industry problems and

eliminating customer friction. For example, TNG Wallet, a FinTech firm providing e-wallet service in Hong Kong, first focuses on people's need and then develops a solution that fits in their technology platform to better serve their customers.⁶⁴

Culture: FinTechs and financial institutions will need to understand the importance of having the right cultural fit. For the collaboration to be productive, both parties need to be flexible and look to find the middle ground between a highly hierarchical bank and a very horizontally-managed startup.

Jim Marous, Co-Publisher of The Financial Brand shares the importance of culture, *"The increase in FinTech partnering is being driven by the inability of traditional banks to meet the needs of an increasingly digital consumer. The question will be whether an organization is willing to change the internal culture that will be requisite for transformation."*

Jake Tyler, Finn.ai CEO and Capgemini Innovator Race 50 winner, shares the importance of cultural alignment, *"The big challenge working with banks is that they are big companies (particularly compared to us), and we work best when there's a lot of cultural alignment."*

Finance: Without the right revenue model, cashflow demonstration, and funding, it will be difficult for FinTechs to make an attractive value proposition, take it to market, and build early traction.

Viable Business Model and Positive Cashflow: For any traditional firm to invest time, energy, and focus in a collaboration, it will be critical for the FinTech to showcase that they have the right revenue generating model, that can help obtain a positive cash flow in the not-too-distant future.

Capital and Funding: To successfully invest in customer acquisition, customer experience, research and innovation, the firm should have access to capital.

Business: Business traction and a proven business model, customer adoption, and value creation are the backbone of any potential collaboration.

Unmet business needs: Traditional financial institutions need partners that can solve problems they struggle to address themselves due to legacy systems, processes, and culture. A FinTech must bring proven solutions to efficiently compensate financial institutions' limitations in offerings, pain-points, business strategy, and market presence.

Unique value proposition and defined results: The FinTech's "value add" comes by offering a unique value proposition the financial institution cannot produce on

⁶⁴ "TNG Wallet: strategies to compete and grow," Allan Tan, FinTech Innovation, December 26, 2017, accessed December 2017 at <https://www.enterpriseinnovation.net/article/tng-wallet-strategies-compete-and-grow-1192534418>

its own. The unique selling proposition (USP) should always tie to the new customer moto of “a transparent and instantaneous rewarding experience.” For Example, Faircent, a peer-to-peer lending platform has a unique feature to automatically send proposals on-behalf of the lenders, to prospective borrowers, based on a pre-selected lending criteria.⁶⁵



“FinTechs have to speak the same language as the banks, because as with any other business, you have to understand what each other’s goals are and how can you help your partner achieve those goals.”



Teppo Paavola

Chief Development Officer
and General Manager of
New Digital Businesses
at BBVA

Technology: Scalability, cybersecurity, and structured documentation are requirements to successful bank platform connection.

Technological considerations: Integrating new technology with target partner’s legacy systems could be risky and costly, and the FinTech firm would need to ensure their products and services passes the scalability and cybersecurity through tests of the bank.

Documentation and integration: Banks are very strict on documentation of any IT solution; FinTechs need to be able to answer all requests from the bank to provide the right information on time and in the right format. The integration process should be simple and designed to touch as little existing infrastructure as possible. Finally, a solid risk mitigation plan should be in place.

Having a live and scalable solution running: A FinTech will need to demonstrate its solution is already running smoothly and can scale without any stress as a financial institution could quickly offer the solution to hundreds of thousands of customers.



“Collaboration is challenging for all parties and FinTech firms must understand that we’re not a lab in which they can experiment to the max. We’re dealing with real customers and real customer information. When we release a product it can’t be simply a trial. We have a brand to protect, a promise to protect.”



Ralph Hamers
CEO, ING Group

ScaleUp Certification Helps Advanced-Stage FinTechs Accelerate Success

Collaborative engagements between traditional financial services and FinTech firms often end during the NDA/procurement stage. The unfortunate result is that collaboration is snuffed out before product commercialization.

To give a collaboration a better shot at long-term survival, Capgemini now offers the Capgemini ScaleUp⁶⁶ Certification process to encourage smoother sailing between traditional financial institutions and scale-ups. Scale-ups are revenue-generating startups that have raised institutional or private funds and have a dedicated C-suite team. The certification process was developed especially for those scale-ups most likely to integrate with financial institution’s solutions efficiently.

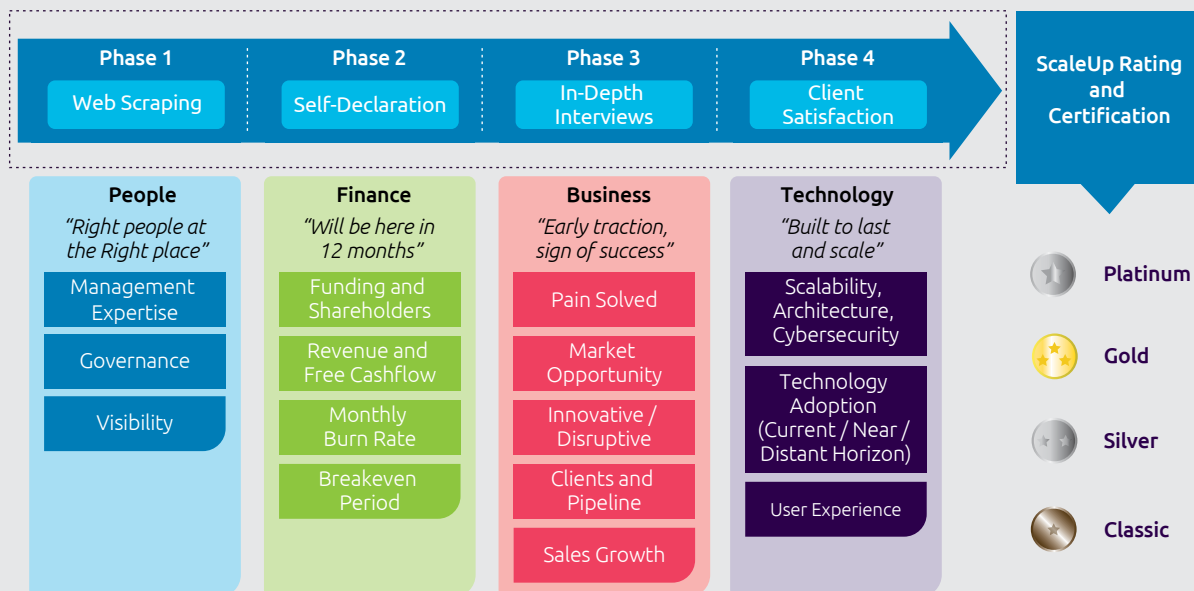
ScaleUp Certification involves a 360-degree qualification of a FinTech firm across four phases (Figure 12) to determine whether the firm has the characteristics necessary for sustained business success. Participants are evaluated based on four pillars: **People, Finance, Business, and Technology.**

The certification works to ensure the scale-up is prepared to effectively collaborate with business partners and integrate easily to quickly deliver a better customer experience.

⁶⁵ “Faircent.com launches fully-automated ‘Auto Invest’ feature,” Business Standard, July 26, 2017, accessed December 2017 at http://www.business-standard.com/article/news-ani/faircent-com-launches-fully-automated-auto-invest-feature-117072600748_1.html

⁶⁶ Capgemini ScaleUp Certification is a comprehensive process, leveraging Capgemini’s expertise in technology, cybersecurity, insights and data, digital customer experience (DCX), and consulting to identify and qualify the most prepared scaleups for efficient and effective collaboration with financial institutions.

Figure 12. Capgemini ScaleUp Certification: Four fundamental pillars for growth



Source: Capgemini Financial Services Analysis, 2018

1. The phased certification process begins with an assessment of the candidate's reputation in the market via a thorough **web scraping**.⁶⁷ A scraping algorithm collects publically-available information about the ScaleUp Certification candidate. The objective is to obtain "market sentiment" about the firm. Positive customer feedback, great website, and a solid track record deliver a positive sentiment. At the contrary, unhappy customers, lack of information, no solid business traction will get a "negative sentiment" that will limit the opportunities for partnerships.
2. Next, the certification candidate is invited to answer a detailed questionnaire through a **self-declaration** exercise, including the web scraping findings. The firm may either confirm or modify the collected information or add missing details.
3. The third phase involves **in-depth interviews** with Capgemini subject matter experts covering Business, Technology, and People. The candidate's answers are qualified in relation to the business opportunity, the scalability and cybersecurity of the platform and most important, team dynamics.
4. Phase four involves discussions and interviews with clients (financial services firms and third-parties) that have collaborated with the FinTech to assess earned **client satisfaction**.

Upon completion of the four phases, the scale-up receives a comprehensive evaluation, a quantitative rating and a certification level (Platinum, Gold, Silver, or Classic). Certification levels are a means to determine a good collaborative fit between the scale-up and an incumbent or other business partner.

Once certified by Capgemini, the scale-up can use this certification in its commercial and fund raising business development activities. Additionally, Capgemini will promote the certified FinTech scale-up to its extensive customer base.

⁶⁷ Web scraping through various methods collects information from across the internet. Generally, it is done with software that simulates human web surfing to collect specified bits of information from different websites. Web scraping is also called web data extraction, screen scraping, or web harvesting.

Successful Collaboration Requires Commitment and Agility from FinTechs and Incumbents

- **There is no one-size-fits all approach to successful collaboration because participants select from among various engagement models to best suit their strategic objectives.** The most common engagement models are white-labeling, in-house solutions, and leveraging APIs.
- **Some firms attempt to drive innovation from inside their organization, but most work externally through incubators, accelerators, hackathons, and venture funds.** FinTechs' greatest concern in working with traditional financial institutions was their lack of agility and struggle to move quickly.
- **Most FinTechs cite the importance of CxO-level leadership buy-in, as well as common objectives and vision as criteria for successful collaborations.** However, creating a compelling product or service through collaboration requires both firms to keep their eyes and minds open with a genuine focus on collaboration.

Multiple Models for Successful Collaboration Are Emerging

Successful collaboration depends on the right engagement model, driven by strategic objectives from both the FinTech firm and the traditional financial services firm. Depending on the life stage, target market, and nature of business of the FinTech, the preferred collaboration model varies, although certain high-level trends seem to be emerging. While engagement models vary in every partnership, most (66.4%) FinTech executives say they prefer to white-label their solutions for traditional financial services firms (Figure 13).

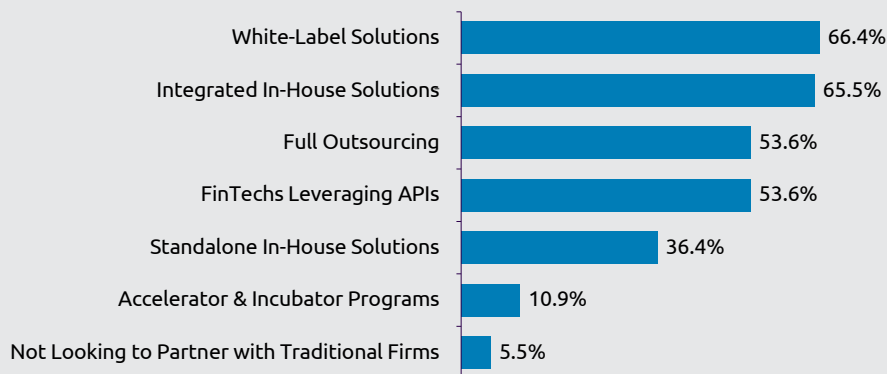
White label solutions: Traditional financial institutions buy products or services from a FinTech firm and implement them under their own brand. For the bank customer, the offering is the service from the traditional firm (and not from the partner FinTech). This model allows for the FinTechs to have a one-to-many service model, offering their solution to many traditional firms without being fully dedicated to just one. It also allows for the solution to be quickly taken to market leveraging the traditional firm’s brand image, infrastructure, and distribution network. From a traditional institution point of view, they are able to deliver more cutting-edge products and services in a

fast and agile manner without significant investment in the development of the innovation.

Integrated in-house solutions: For traditional firms, this engagement model means products and solutions are hosted in-house (typically for larger firms) or as a Software-as-a-Service (for smaller firms). Like with standalone in-house solutions, integration can pose a significant challenge. ABN Amro collaborated with Swedish FinTech startup Tink to build an application (GRIP) that gives customers greater control over their finances.⁶⁸ The bank launched its pilot version to 10,000 clients and solicited feedback to refine the app for the final roll-out. Currently, more than 150,000 use the application, which is linked to ABN Amro’s mobile banking application. InsurTech Oscar offers health insurance in partnership with Humana, one of the biggest insurance firms in the United States, to form a joint venture that has expanded its scope beyond serving individuals by offering programs to small businesses.⁶⁹

Full outsourcing: Full outsourcing, where financial institutions outsource non-core competencies to a FinTech firm, was cited by 58.3% of InsurTech executives polled as part of the World FinTech Report 2018 as their most preferred engagement model, compared with BankTechs at 35.4%.

Figure 13. Engagement models preferred by FinTechs (%), 2017



Note: The percentages represent FinTechs that have chosen the particular option.

Question: “Which approach(es) are applicable to your strategy of engaging with traditional financial services firms?” (Please choose all the applicable options.)

Source: *World FinTech Report Survey*, Capgemini, LinkedIn, Efma, and MaRS, 2017

⁶⁸ “ABN AMRO launches pilot for financial planning app,” ABN Amro Press Release, December 15, 2015, accessed December 2017 at <https://www.abnamro.com/en/newsroom/press-releases/2015/abn-amro-launches-pilot-for-financial-planning-app.html>

⁶⁹ “Oscar Health to Join Humana in Small-Business Venture,” Michael J. de la Merced, *The New York Times*, July 12, 2017, accessed December 2017 at <https://www.nytimes.com/2017/07/12/business/dealbook/oscar-health-humana-insurance.html>



“There are plenty of good solutions out there, so why reinvent the wheel? Why not partner up? Instead of creating the solution itself, why not create an infrastructure that is easily accessible and then distribute it into your existing customer base?”



Matthias Kröner

CEO and Co-Founder, Fidor Bank and Fidor Solutions

API model: Leveraging APIs offered by traditional firms was mentioned by 58.3% of InsurTechs and 49.2% of BankTech respondents. A traditional firm provides APIs that enable FinTech firms to deliver various capabilities, or the incumbent uses APIs that have been offered by the FinTech firm. The API model works both ways. Multinational insurance company Aviva has partnered with Appian, a provider of low-code business process management (BPM) software for digital transformation, to automate business processes. Aviva has automated over 40 applications on its existing infrastructure with this association.⁷⁰ Aviva has also partnered with Tencent, China’s largest internet services provider, and Hillhouse Capital, an investment management firm, to create a digital insurance company in Hong Kong.⁷¹ BBVA provides an API Market platform where FinTechs can access a robust set of financial tools and begin to innovate within their businesses. They can enhance their business, developing new personalized commercial pathways and services with eight available APIs. This API Market also enables further collaboration with FinTechs and startups by connecting with the developer community. It also educates visitors about APIs, business, and Open Banking by publishing articles, infographics, e-books, events, and interviews.

Stand-alone in-house solutions: Typically used when a traditional firm launches a new business (such as a niche banking/insurance product), stand-alone in-house solutions leverage the FinTech partner’s technology as a stand-alone platform. However, challenges may be encountered when it comes to integrating the technology with the traditional firm’s systems.

Accelerators and incubators: Traditional firms provide dedicated accelerators and incubators for FinTechs to scale innovation. Visa Europe launched its innovation hub (Visa Europe Collab) adopting a 100-day proof-of-concept innovation funnel that takes ideas from initial scoping and qualification, through market testing and design to POC and live testing.⁷² The successful POCs are integrated into Visa business and nurtured into services to be rolled out to Visa member banks, retailers, and consumers across Europe.

Marketplace platforms: Third parties source business applications from partners, FinTechs, and traditional financial services firms and provide aggregated self-service solutions over a platform, acting as integration facilitators between incumbents and FinTechs. For instance, ABN AMRO International leverages Temenos’ MarketPlace platform through APIs, interfaces, and data services, thereby allowing it to quickly onboard FinTech partners.⁷³ However, there is some blurring in this model. For example, Paytm in India could be categorized as either platform (funded by Alibaba) or as a pure-play FinTech firm. Lending Club partnered with Alliance Partners, which manages the BancAlliance network (a national consortium of community banks), to offer co-branded personal loans to customers through the Lending Club platform.⁷⁴ With more than 200 community banks on board, customers received access to Lending Club platform’s low cost of operations paired with the banks’ low cost of capital to help drive down the cost of credit.

FinTechs take the lead by partnering with traditional financial services firms to scale their operations, or by innovating through technical expertise.

⁷⁰ “How Aviva used automation to transform its customer experience,” Dale Walker, Cloud Pro, August 8, 2017, accessed December 2017 at <http://www.cloudpro.co.uk/leadership/6967/how-aviva-used-automation-to-transform-its-customer-experience>

⁷¹ “UK’s Aviva teams up with Tencent, Hillhouse Capital to launch Hong Kong insurer,” Carolyn Cohn, Reuters, January 20, 2017, accessed Dec 2017 at <https://in.reuters.com/article/aviva-gb-jv-tencent-holdings/uks-aviva-teams-up-with-tencent-hillhouse-capital-to-launch-hong-kong-insurer-idINL5N1FA1JZ>

⁷² “Visa Europe Collab opens its doors to a new generation of payments services,” Visa Europe website, May 1, 2015, accessed December 2017 at <https://www.visaeurope.com/newsroom/news/visa%20europe%20collab%20opens%20its%20doors>

⁷³ “Temenos launches brand new MarketPlace store and website for FinTech providers,” Temenos website, January 27, 2016, accessed December 2017 at <https://www.temenos.com/en/news-and-events/news/2016/january/temenos-launches-brand-new-marketplace-store-and-website-for-fintech-providers/>

⁷⁴ “Lending Club Partners With BancAlliance, a National Consortium of 200 Community Banks,” PR Newswire, accessed December 2017 at <http://www.prnewswire.com/news-releases/lending-club-partners-with-bancalliance-a-national-consortium-of-200-community-banks-300032620.html>

Partnership Driving Innovation through Accelerators, Hackathons, and Venture Funding

While FinTech firms look to engage through certain engagement models to plug in their gaps, traditional firms also are looking to collaborate with FinTechs to support their agile culture and innovation agenda. Both FinTechs and traditional financial institutions have indicated that they prefer to collaborate through accelerators⁷⁵ and incubators.⁷⁶ Traditional firms also state that they use hackathons⁷⁷ and funding to promote internal collaboration. Firms such as BBVA, Credit Suisse, American Express, Blackrock, ING, and Morgan Stanley provide support via dedicated funding, accelerators, and by conducting annual hackathons. Firms within the cards-and-payments space mostly offer support via accelerators, incubators, and hackathons. Insurers provide dedicated funding to FinTechs through accelerators and incubators.

Some high-profile banks have successfully collaborated with FinTechs through accelerators and incubators, and insurance firms have also shown interest in building innovation labs and accelerator programs to introduce new technologies.

Startupbootcamp FinTech & CyberSecurity Growth Accelerator program is a leading global accelerator focused on the innovation in the FinTech and CyberSecurity industry. Supported by a strong network of major banks, leading financial services and insurtech partners such as Rabobank, ING, PGGM, NN, de Volksbank, Moneyou, Capgemini, PwC and Vivat, as well as an extensive mentor and alumni group from all over the world. Startupbootcamp FinTech & CyberSecurity is a part of the global award-winning Startupbootcamp, accelerator programs, a network of industry-focused startup accelerators. Successful Startupbootcamp alumni include Buzzmove, Relayr, and 24 Sessions.



"I am a big believer in a collaboration model between banks and FinTech companies that offer ready-made customer-centric products that can be plugged into banking solutions easily and at low cost and great efficiency. At DBS we are running programs aimed not only at identifying suitable startups via hackathons, but also accelerating them or directly integrating them into our solutions. We have opened our APIs to external partners by launching the biggest API portal and sandbox in the world!"



Sonia Wedrychowicz
Managing Director, Head of Consumer Bank Technology Singapore, DBS Bank



"We work with the largest banks, insurance companies and financial leaders in our FinTech & CyberSecurity Startup growth program. These corporates have run many pilots and partnerships with our startups, from small ones to nationwide campaigns. Of course, with larger innovations you need to have the buy-in from the C-level. We therefore actively involve our partners as 'Intrapreneurs in Residence' during the startup selection process and throughout the program, so they can validate the crelevance, and make sure the startups connect with the relevant internal stakeholders from the start and guarantee a strategic fit."



Michael Dooijes
Managing Director at Startupbootcamp FinTech & CyberSecurity

⁷⁵ Accelerators are fixed-term, cohort-based programs, that connect FinTechs with mentors, guidance, resources, and funding. Accelerators are typically short-term engagements for FinTechs (often in return for some equity), with the engagement ranging from 3–6 months.

⁷⁶ Incubators provide a shared space and mentorship to early-stage FinTechs, and both entities often collaborate in a coworking environment to develop a prototype for a product or service. The engagement period also typically lasts longer than that for accelerators.

⁷⁷ Hackathons bring together FinTech developers in developing financial products and discovering new technologies, wherein FinTechs take a problem statement or idea, and provide a unique solution.

Barclays Accelerator⁷⁸ in partnership with Techstars is a 13-week program, where 10 FinTechs are given access to Barclays' APIs and data, as well as guidance in building and refining their business models. Selected participants receive up to USD 120,000 in investment, a network of high-profile mentors and dedicated office spaces. Some notable program participants include Seldon, Wave, and Wisor.

Wells Fargo Accelerator⁷⁹ is a six-month virtual program for startups that provides coaching, and access to business mentors, venture capitalists, and bank executives. Selected companies receive direct equity investments of up to USD 500,000. After six months, FinTechs are given the option to continue working on proofs of concept across multiple business lines. Successful participants include EyeVerify, Kasisto, and Zumigo.

Swiss Re⁸⁰ launched "InsurTech Accelerator," a 16-week accelerator program to mentor and curate startups focusing on disrupting insurance practices. Swiss Re provides six startups with mentors, resources, and operational support. Focus areas are the Internet of things, systems of engagement, and smart analytics.

LumenLab⁸¹ is a Singapore-based MetLife innovation center that has launched a three-month accelerator program named "Collab" that offers InsurTech startups the opportunity to work with MetLife. Focus areas are innovations in customer engagement, claims, insurance business models, and sales.

Commonwealth Bank⁸² has three innovation labs in Hong Kong, London, and Sydney that feature incubation "Garages," "Usability Labs," and "Collaboration Hubs." The labs incubate experiments while working with other financial institutions, clients, regulators and FinTechs for understanding and testing potential technology use cases. Participants

interact with real-time data, interpret trends, brainstorm solutions, and collaborate with the bank's project teams.

AXA Kamet⁸³ ventures is an InsurTech incubator, founded with USD 100 million funding from AXA. Kamet incubates disruptive insurance products and services. The projects are led by AXA employees or external entrepreneurs with access to AXA resources. Kamet has built an international network of experts to accelerate the growth and success of the companies it launches.

Other institutions are leveraging unique approaches to drive innovation including:

UBS⁸⁴ The Future of Finance Challenge is a competition for FinTech companies across the Americas, Europe, and APAC. It offers commercial and technical expertise to participants and provides access to UBS senior leaders. Apart from cash prizes, finalists also get funding for their proof-of-concept or pilot opportunities, and 250+ hours of dedicated coaching and mentoring from UBS experts.

BBVA⁸⁵ Open Talent Competition is an annual competition for FinTechs (with less than EUR 2.5 million in investment and EUR 1.5 million in revenue). Six finalists receive EUR 30,000 and two immersion weeks with BBVA senior executives. The grand-prize winner receives EUR 50,000 and one-on-one consultation with BBVA senior leaders.

DBS⁸⁶ HotSpot pre-accelerator is a three-month program, supporting FinTech, social enterprise, and all digital startups, with top teams selected for a boot camp that mentors firms on how to scale their innovation and business. The top nine teams also receive legal advice and training on skills such as marketing and pitch presentations as they work to secure funding.

⁷⁸ Barclays accelerator website, accessed December 2017 at <http://www.barclaysaccelerator.com/#/about/>

⁷⁹ Wells Fargo accelerator website, accessed December 2017 at <https://accelerator.wellsfargo.com/>

⁸⁰ "Meet the 6 insurtech startups in Swiss Re accelerator's first batch," Sumit Chakraberty, Tech in Asia, July 25, 2016, accessed December 2017 at <https://www.techinasia.com/6-insurtech-startups-swiss-re-accelerator>

⁸¹ "MetLife Launches "Collab": The Insurance Tech Accelerator," Business Wire, November 13, 2016, accessed December 2017 at <https://www.businesswire.com/news/home/20161113005063/en/MetLife-Launches%E2%80%9CCollab%E2%80%9DInsurance-Tech-Accelerator>

⁸² Commonwealth Bank of Australia website, accessed December 2017 at <https://www.commbank.com.au/about-us/innovation-lab.html>

⁸³ Kamet Ventures website, accessed December 2017 at <https://www.kametventures.com>

⁸⁴ "UBS launches second competition to find solutions for the bank of the future," Startupticker.ch, June 14, 2017, accessed December 2017 at <http://www.startupticker.ch/en/news/june-2017/ubs-launches-second-competition-to-find-solutions-for-the-bank-of-the-future>

⁸⁵ "BBVA launches the world's biggest fintech challenge: Open Talent 2017," BBVA website, March 15, 2017, accessed December 2017 at <https://www.bbva.com/en/bbva-launches-worlds-biggest-fintech-challenge-open-talent-2017>

⁸⁶ "9 Startups For a Fiery Competition at DBS HotSpot 2016 Pre-Accelerator Programme," Fintechnews Singapore, July 21, 2016, accessed December 2017 at <http://fintechnews.sg/3984/fintech/9-startups-for-a-fiery-competition-at-dbs-hotspot-2016-pre-accelerator-programme>

Aviva:⁸⁷ Aviva joined The DMZ, Canada's top university business incubator for early-stage startups, to launch an accelerator. The four-month program includes mentorship from Aviva Canada executives. Aviva will provide dedicated workspace, and Aviva ventures will appraise the startups for investment.

AXA:⁸⁸ AXA partnered with Jerusalem Venture Partners (JVP) to launch an InsurTech competition. The winners of the event will have access to AXA insurance group for investments and will have an opportunity to join Kamet Ventures, an InsurTech startup studio funded by AXA. More than 80 FinTech firms from Israel, the United States, and Europe participated in the event.

Some traditional financial services firms have been evaluating and innovating solutions to address the challenges of scaling the innovation for FinTechs. Santander partnered with Monitise in a GBP 20 million joint venture to scale FinTech businesses.⁸⁹ The venture caters to growth-stage companies that have a proof of concept (POC) but that have not yet launched. Monitise has made technology and APIs available to FinTechs, to bring innovative new digital financial services and products to market easily and faster.

Bank of America Merchant Services' Chief Marketing and Digital Strategy Officer Michael Roberts is a long-time advocate of FinTech partnerships. *"Understanding the FinTech and their culture is absolutely important. Partnering with a FinTech that understands bank regulations and processes, and has some experience on that front, is also important,"* he said.

Effective Collaboration: An Ongoing Commitment

Collaboration is not a short-term relationship. It is a multi-faceted and evolving process. It is important to understand what it takes to sustain a collaboration once the partner has been identified and what are the concerns or challenges that need to be anticipated and addressed in any partnership.

Harit Talwar, Head of Marcus at Goldman Sachs, notes *"When you get people from different cultures and backgrounds and experiences, you must have the higher purpose of what you're trying to do for consumers because that brings them together."*

What makes partnerships work?

When traditional firms become deeply involved and offer guidance based on their business knowledge and expertise, the partnership is solidified. As FinTechs have limited resources (i.e., personnel, funding), dedicated resources provided by traditional firms (such as infrastructure) helps FinTechs focus on their core competencies during the partnership. A well-defined partnership strategy, objectives, and a responsibility matrix are also helpful. Allowing the FinTechs access to a broad flow of customers and data, while preserving the FinTech culture goes a long way in building trust.

Ignacio Cea, Strategy & Innovation Director at Bankia, considers clear communication between the two entities to be a very important aspect of a successful partnership, *"To interact and excel in the relationship with FinTechs, a 'specific communication protocol' is required. This relationship should be based on creativity, speed, and agility. Innovation can be a useful catalyst for starting a conversation between the traditional firm and the FinTech firm."*

What doesn't work as well?

Not surprisingly, fixed hierarchical ownership of assets, processes, and resources does not foster healthy collaboration. The ability to scale the innovation may be diminished when the proof of concept or prototype (developed at an accelerator or incubator) cannot smoothly be integrated into the core systems. Business model and operational process differences can erode collaboration between FinTech firms and incumbents. Similarly, cultural dissimilarity and inadequate alignment with each-others' business goals can be divisive.



"The first rule is never incorporate a startup into the banking organization structure, as that will kill them. Second, is always look for complementary solutions that use progressive technologies that would take years to build yourself. Third, test it and experiment with it looking for relevance and customer adoption."



Sonia Wedrychowicz

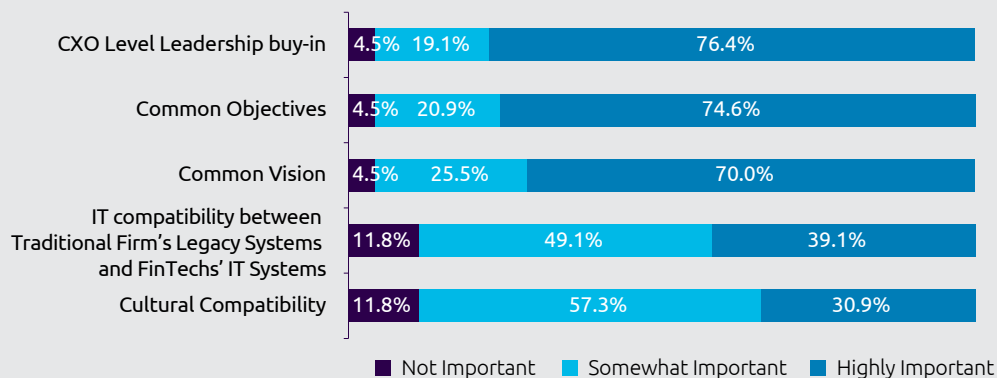
Managing Director, Head of Consumer Bank Technology
Singapore, DBS Bank

⁸⁷ "Changing the Insurance Industry—the DMZ and Aviva Canada Launch an Insurtech Accelerator Program," Aviva Canada website, February 28, 2017, accessed December 2017 at <https://www.avivacanada.com/article/changing-the-insurance-industry-dmz-and-aviva-canada-launch-insurtech-accelerator-program>

⁸⁸ "JVP invests \$2m in insurtech cos GetmeIns, Seegnature," Globes, February 23, 2017, accessed December 2017 at <http://www.globes.co.il/en/article-jvp-invests-2m-in-insurtech-cos-getmeins-seegnature-1001178387>

⁸⁹ "Banco Santander and Monitise to Launch FinTech Joint Venture," Owlery, accessed December 2017 at <https://www.owler.com/reports/monitise/santander-and-monitise-form-fintech-venture/1435742164114>

Figure 14. Key success factors for collaboration, FinTech perspective (%), 2017



Note: The percentages represent FinTechs that have given a rating of 1 or 2 for Not Important, 3, 4, or 5 for Somewhat Important, and 6 or 7 for Highly Important on a scale of 1–7 for each of the factors.

Question: "How important are the following factors for a successful collaboration between FinTechs and traditional financial services firms?" (Please rate the following options on an importance scale of 1–7, with 7 being the extremely important, and 1 being not important at all.)

Source: World FinTech Report Survey, Capgemini, LinkedIn, Efma, and MaRS, 2017

Successful collaboration requires leadership buy-in and commitment, as well as common objectives (Figure 14).

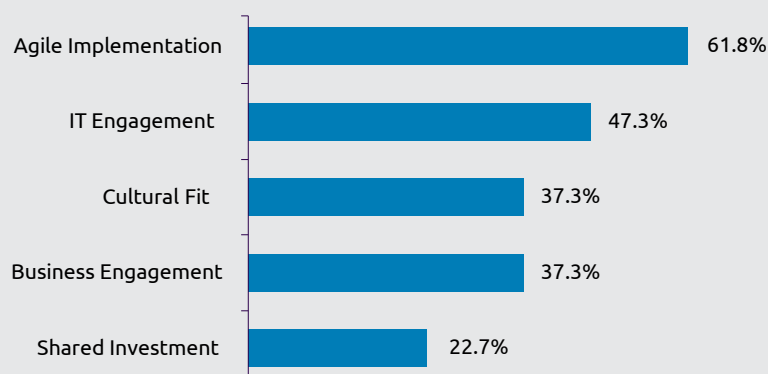
Partnering Challenges are not Insignificant

Once both entities commence working in a partnership, cultural differences and technical challenges are major concerns that can jeopardize a fruitful collaboration between both entities. Lack of incumbents' agility and inadequate IT engagement are the primary concerns that FinTechs face while working with their incumbent partner.

To realize collaborative synergies, a clearly-defined strategy for each of these aspects is vital. FinTech executive Valentin Stalf, N26 CEO and Co-Founder, believes that shared vision and goals help put a new partnership on solid footing. *"For niche products, moving forward, there will be more working together with traditional banks. But, ultimately, I see traditional banks focusing on specific products. Eventually, the question will be, 'Who owns the customer and who has the customers' trust?'"*

Effectively collaborating while working together can turn out to be more complicated, culturally and technically. While working together, FinTech firms are most concerned about their partner's lack of agility and inadequate IT engagement (Figure 15).

Figure 15. Concerns when working in a partnership, FinTech perspective (%), 2017



Note: The percentages represent FinTechs that have given a rating of more than 5 on a scale of 1–7 for each of the concerns.

Question: "Please rate the following concerns that you have when working with a large traditional financial services firm." (Please rate the following concerns on a scale of 1–7, with 7 being extremely concerning, and 1 being least concerning.)

Source: World FinTech Report Survey, Capgemini, LinkedIn, Efma, and MaRS, 2017

Of all FinTech executives surveyed, 47.3% cited inadequate IT engagement of their incumbent partner as their number two concern. However, for a subset of that group, InsurTechs, the concern was more overwhelming. Three-quarters of InsurTechs cited inadequate IT engagement as their top concern, followed by nearly 67% who named a lack of agile implementation.

Some traditional firms have yet to implement an API and security framework, which deters integration of data and user-management with third parties. Therefore, managing a federated data architecture and securing customer data is a significant challenge for FinTechs within a collaborative partnership.

Patrick de Zeeuw, co-founder of Startupbootcamp and Innoleaps said, *“There could be many reasons that make it difficult to foster a fruitful collaboration between the two worlds, including lack of trust and mutual interest, not speaking each other’s language, legal and financial barriers, and completely different ways of working. It is important for the startups and corporates to constantly communicate about the issues they might come across and solve them fast.”*

Work style differences also can stymie healthy collaboration. For instance, FinTech firms used to a flat corporate structure may view their incumbent partner’s big company organization as a complex bureaucracy. Over one-third of FinTech’s mentioned cultural fit as a concern when in partnerships with traditional institutions.

“Culture has to be the biggest challenge working with FinTechs,” said Teppo Paavola, BBVA General Manager of New Digital Businesses.

When working in partnership with traditional financial institutions, 44.6% of BankTech executives named

business engagement as their second-most important concern. Agile implementation was their top concern (63.1%), which mirrored overall survey responses from FinTech executives.

Recommendations for FinTechs for an Effective Collaboration

While it is a given that most collaborations are likely to have teething troubles, knowing that a handful of concerns seem to be the most prevalent and may have the most impact, firms can look to anticipate these and have a mitigation plan in place well in advance.

Successful ways to work together must be determined on a case-by-case basis as there is no standard one-size-fits-all partnership framework. However, general elements of a collaborative partnership include understanding the challenges, focusing on innovation and agility, and mitigating risks.

The following recommendations may help FinTech firms to work more productively when partnering with traditional financial services firms.

Emphasis on agility: Although the traditional firm partner may aim to embrace innovation, FinTechs might face examples of native conservatism from incumbents. Therefore, FinTechs should periodically ensure that they are using the digital engagement methods that best suit their partner.

Leadership involvement: Because FinTechs firms need ongoing business engagement, regular and timely dialogues must be scheduled with senior innovation sponsors and stakeholders who are keen to ensure the firm supports the partnership. Continuous alignment of overall business objectives is essential as well.

Proactive innovation: FinTechs must ensure that the innovation process is continuous and that the partnership invests ahead of the customer need.

Cultural dynamics: During a partnership, FinTechs and their partner incumbents should strive to create cultures that adapt to business and regulatory change. Collaboration will require flexibility and willingness to listen on both sides of the relationship.

Regulatory responsibility: Amid disruption and fast-changing regulations, FinTechs must keep up to date on compliance, regulations, and licensing information that could affect the collaboration.

Governance and management: Managing the onboarding and integration of services requires a unified view by both FinTechs and traditional firms, which requires a tight relationship between business and IT.



“Given the scale and complexity of financial institutions, their needs vary widely - even within the same bank. We’re focused on enabling innovation and allowing our customers to build the tools, services, and experiences across all of financial services that will create better experiences, solutions and best serve the evolving digital needs of their customers.”



Zach Perret
CEO and Co-Founder, Plaid

Risk management framework: FinTechs must be highly vigilant, especially if they are given access to their collaborator’s intellectual property and customer data. Model risks and business resiliency also must be appropriately tested (e.g., outsourcing of KYC/AML services to FinTechs would essentially be material outsourcing of a key risk area for traditional financial services firms).

Scaling the innovation: Determining and eliminating technological obstacles during the proof of concept or pilot phase will help to quickly scale the innovation. Assembling the required technologies beforehand and using integration layers to ensure data security will help



to streamline the process. Continuously building and upgrading digital capabilities are also critical to sustaining and scaling the product and service innovations.

“We are a small tech company and when working with a large bank, we make sure we have all our systems and controls in place. So, the bank is comfortable and happy trusting us with data.”




Ed Maslaveckas
CEO and Co-Founder, Bud (Cappgemini Innovators Race 50 Runner-Up)

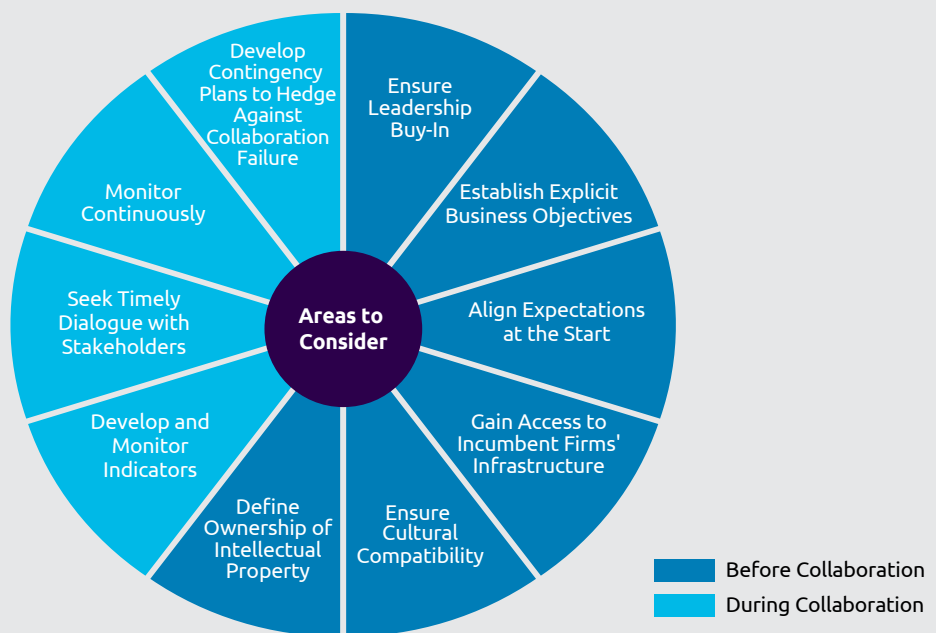
“I think there is not enough appreciation of what both parties bring to the table. I have seen banks dismiss FinTechs. I have seen and heard FinTechs dismiss banks. I don’t think it makes a lot of sense. I think we both bring really strong elements of things, which put together, can create some compelling new services. But it requires us to open our eyes and our minds and our hearts to really want to collaborate.”

Steve Ellis
Head of the Innovation Group, Wells Fargo

Although FinTechs may have specific requirements for an ideal partner, successful collaboration hinges on some pivotal areas (Figure 16).

Figure 16. 10 areas FinTech firms should consider throughout collaboration



Source: Cappgemini Financial Services Analysis, 2018

FinTech Firms Interested in Sustaining a Lasting Collaboration Must Understand the Incumbent's Business Priorities and Ask Critical Questions

It is strategically sound to seek answers to thoughtful questions sooner rather than later. Begin with these probing internal questions:

- Do we have a comprehensive understanding of the traditional financial services firm's challenges?
- Do our products/services fit the traditional financial services firm's infrastructure?
- Do we have adequate data security measures in place?



"Corporates first need to define what they want to change internally and acknowledge that none of this will have any success unless banks invest heavily in culture change. The financial services sector has a particularly steep learning curve because there is no R&D culture. There is a lack of understanding that you need to try multiple things at the same time and that failing is an important part of the process, to find the one thing that will actually work. Success and a real evolution of financial services will come from an industry recognition that startups can't solve every problem. This is where venture building comes in - there is a need for the industry to come together to solve structural problems and create a mechanism that works for all players."



Nektarios Liolios
CEO and Co-Founder,
Startupbootcamp FinTech
and Rainmaking Colab

Then, turn to the traditional financial institution partner for answers to these questions:

- Does your firm have the necessary resources?
- Have you established Key Performance Indicators (KPIs)?
- Do we understand each of our accountabilities? What do you expect from us?
- Are macroeconomic factors a gate to collaboration?
- Is our relationship exclusive, or are we open to bringing in others?
- Are cultural differences challenging for one or both of us (for the FinTech or the traditional financial services firm)?
- Will integrating solutions into your core systems pose technological complications?
- Will regulations or local consumer behavior be a significant concern?





The Path Forward: An Impending Role for BigTechs?



Increased penetration of internet and mobile devices has enabled firms from across different sectors to rethink their offerings and strategy. Subsequently, many have ventured outside their comfort zones and traditional footholds.

Today, boundaries between industries are becoming blurred (particularly within consumer-focused sectors such as retail banking and insurance) as consumers increasingly move toward digital and mobile. Global technology-based firms with widespread adoption across geographies, often referred to as BigTechs, are leading the boundary-pushing charge.

Google, Apple, Facebook, and Amazon (GAFA) enjoy “first-in” status when it comes to consumers’ digital lives. What consumer does not have a GAFA relationship these days? If financial services become the next boundary that BigTechs unconditionally cross, the long-term impact could be momentous.

BigTechs have redefined customer experience, which has had a profound impact on all sectors, including financial services. GAFA and GAFA wannabes have grown exponentially in terms of active users and time spent with users. Built on a digital platform, BigTechs are efficient and have the know-how to reduce operational costs. With a strong focus on research and development these firms have huge volumes of customer data to help them understand and predict behavior as well as vast cash reserves for new ventures. It goes without saying that BigTechs command customer trust and loyalty.

The BigTech phenomenon is regionally agnostic, although its impact is being most strongly felt in certain China and Southeast Asia markets.

Ant Financial—a Tech-Powered Success Story

When China’s most prominent online commerce company, Alibaba, launched in 1999 it was quick to leverage innovation and technology to fuel growth. In 2003, it started Taobao as a consumer e-commerce platform (online shopping website) and added Alipay to Taobao in 2004 as a third-party online payment platform.⁹⁰ Since then, Alipay (renamed Ant Financial in 2014) has played a vital role in Alibaba success and has successfully built its standalone presence with a wide range of financial offerings,⁹¹ including:

- **Payments**—Ant Financial provides payments services in the name of Alipay. Ant Financial has around 112 million partners across 15 countries. Globally, it serves 520 million users directly.⁹²
- **Wealth management**—Ant Financial established Yu’e Bao, a money-market fund that invests left-over monies from Alipay digital wallets. Just four years

from its inception, it manages assets of USD 211 billion.⁹³ Wealth management app, Ant Fortune, acts as a retailer that sells selected financial products from its sister companies or third-party financial institutions. As of FY2017, Ant Fortune had 330 million cumulative users with 17% year-over-year growth.

- **Lending**—Ant Financial’s online bank, MYbank, provides micro loans to small- and mid-sized businesses. MYbank’s outstanding loans had reached USD 17.31 billion through the first half of 2017.⁹⁴ Ant Financial’s Zhao Cai Bao marketplace allows third-party financial institutions to offer loans to small and medium enterprises, individuals, universal insurance and structured funds. Ant Credit Pay (Alipay’s consumer credit product) has 100 million active users.
- **Insurance**—Ant Financial’s open platform hosts around 80 insurance companies selling more than 2,000 products. Ant Insurance Service has 392 million users and is growing premiums at 43% year over year (as of FY 2017).

⁹⁰ Alibaba website, accessed December 2017 at <http://www.alibabagroup.com/en/about/overview>

⁹¹ 2017 Investor Day-Financial Services for Consumers and Small Businesses, June 2017, accessed December 2017 at http://www.alibabagroup.com/en/ir/pdf/170609/Ant_Financial-Financial_Services_for_Consumers_and_Small_Business.pdf

⁹² Number of direct Ant Financial users during the 12 months ending on March 31, 2017.

⁹³ “Meet Alibaba spin-off Yu’e Bao: The world’s biggest money-market fund,” Yifan Xie & Chuin-Wei Yap, September 14, 2017, accessed December 2017 at http://www.business-standard.com/article/international/meet-alibaba-spin-off-yu-e-bao-the-world-s-biggest-money-market-fund-117091400274_1.html

⁹⁴ “Despite Concerns, Online Lending Set to Rise in China,” Man-Chung Cheung, December 4, 2017, accessed December 2017 at <https://www.emarketer.com/content/despite-concerns-online-lending-set-to-rise-in-china>

- **Credit reference**—Zhima Credit is a social credit system that generates credit scores based on five dimensions of information: personal information, payment ability, credit history, social networks, and behaviors. It had 257 million annual active users and achieved 95% year-over-year growth for the financial year ending on March 31, 2017.

Ongoing and rapid expansion in different financial services arenas underscores Ant Financial's recent success. However, the achievement did not come without focused efforts. Ant Financial is building and enhancing its financial services' strength by putting customer delight at the heart of its business strategies.

Building and leveraging tech competencies

Following a comprehensive risk assessment process via relevant models and customer data, Ant Financial developed "3-1-0" online lending, a service standard characterized by a three-minute application process and one-second loan granting—all with zero manual intervention.⁹⁵

Moreover, emerging technologies have taken center stage at Ant Financial with the latest BigData, facial recognition, cloud-computing, risk-control and artificial intelligence knowhow powering the company's robust IT infrastructure.

Souheil Badran, President, Alipay Americas, emphasizes the importance of technology, *"We view ourselves as a techfin company not just fintech. It's really technology that's driving financial services."*

Innovative, customer-friendly products

Alipay launched its "Online Inquiry System" in 2005 to enable online servicing of customers, and is about to introduce a voice-controlled payment system for mobile users in China. It also tapped the offline market with the novel "payment with barcode," and "soundwave payment" technologies. In 2014, Alipay became the first in China to implement fingerprint-verification, bringing mobile payments into the biometric recognition era.⁹⁶

Customer trust—Ant Financial has built significant customer trust over the years with initiatives such as its "Internet Trust Scheme" on behalf of its more than 300,000 enterprise users and 44 million individual users. What's more, an account balance protection service allows users to claim compensation if the

balance on their Alipay account is lost through account theft. In 2016, Ant Financial and 59 other finance and FinTech firms jointly pledged to safeguard consumer interests.⁹⁷

Proactive collaboration—Ant Financial was quick to recognize the importance of partnering with incumbents. In 2005, just a year after launch, Alipay established collaborative relationships with Visa, China Merchants Bank, and Industrial and Commercial Bank of China. By 2009, five major state-owned banks and 15 national banks had established cooperation with Alipay.⁹⁸ Additionally, Alipay has been actively building FinTechs partnerships. For example, it partnered with Stripe and enabled the San Francisco-based FinTech merchant network to accept payments from hundreds of millions of Chinese consumers globally.⁹⁹ Continued collaboration with other firms has helped Ant Financial to scale up, expand offerings, and build customer trust.

Cross-industry integration—Though initially, Alipay was a medium to pay through Alibaba, it soon expanded the reach of its services. For example, users can pay utility bills via Alipay and can access tax reimbursement services for overseas shopping. In 2016, Alipay partnered with Uber to enable Chinese travelers to request and pay for Uber rides all over the world through Alipay.

Ant Financial Is Not the Only BigTech Working to Redefine Customer Experience

GAFAs actively collect customer data by capturing the digital trails left by customers who access their platforms. BigTech's advanced data-processing capabilities yield meaningful insights about customer behavior and expectations, which allows them to deliver truly personalized customer offerings proactively.

While Alibaba revolutionized the Asian eCommerce and financial services industries, tech-powered Western hemisphere firms such as Amazon could make waves through expertise in:

Customer experience—A pioneer in superior customer experience, Amazon has developed its digital and data analytics skills to provide personalized services in a user-friendly digital platform.

⁹⁵ Ant Financial website, accessed December 2017 at <https://www.antfin.com/exploration.htm>

⁹⁶ Ant Financial History, accessed December 2017 at <https://www.antfin.com/history.htm>

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ "Stripe strikes global partnerships with China's Alipay, WeChat Pay," Anna Irrera, Reuters, July 10, 2017, accessed December 2017 at <https://www.reuters.com/article/us-stripe-partnerships-china/stripe-strikes-global-partnerships-with-chinas-alipay-wechatpay-idUSKBN19U10S>

Innovation—Amazon has been a leader in original offerings such as virtual assistant Alexa. “Amazon Go” stores and quick deliveries via drones have also been innovation standouts.

Diversification—From its original incarnation as an online bookstore, the firm has diversified itself into many businesses including retail, cloud services, and the payments space.

Infrastructure—Amazon has a well-developed digital platform and an established physical distribution infrastructure. It forged technical capabilities such as cloud infrastructure services that not only enable its own business but also serve as a significant revenue driver for other firms and industries.

Fail-fast culture—Even at its current “BigTech” size, Amazon’s agility fosters new products and services. The firm maintains a culture of “failing fast and learning along the way.”

Vision and leadership—Amazon has a long-term vision, and a leadership team focused on investing in future technologies and business models.

BigTechs have been successful within their sectors and are now looking to expand their footprint in the financial services market. Details of potential penetration are to be determined, but the possibility of rapid expansion cannot be ignored, given BigTech strengths:

- An established financial services presence, particularly in payments and lending.
- Google has made inroads in payments with Google Wallet, Android Pay, and recently, the India-based mobile payments app Tez. The firm is collaborating with LendingClub to finance its partners and invest in FinTech firms via “Google Ventures.”¹⁰⁰
- Apple is viable in the payments space with Apple Pay; as is Samsung with Samsung Pay.
- Leading financial services firms have launched chatbot services in Facebook messenger, some of which can handle cross-border transactions.

Amazon is casting a long financial services shadow with various offerings, which include:

- Amazon Pay wallet service for Amazon consumers, and Amazon Pay Express that enables merchants to add the Amazon Pay button to their websites and mobile apps for easy integration of payment systems.
- Short-term business loans that range from USD 1,000 to USD 750,000 (for up to a year) for micro, small and medium businesses selling on the Amazon platform. It so far has issued loans of USD 3 billion.¹⁰¹
- Partnership with The Warranty Group’s London General Insurance Company offers insurance for protecting Amazon customers against accidental damage, breakdown, and theft of Amazon purchases.¹⁰²
- Amazon Store Card and Amazon Prime Store Card are offered in collaboration with Synchrony Bank. Customers can use the card on the Amazon website, select physical stores, and other partner websites.¹⁰³
- Amazon invested USD 60 million in BankBazaar.com,¹⁰⁴ an online financial services portal, and has acquired Emvantage payments, an online payment gateway platform. Along with Fidelity Investments and Thomson Reuters, Amazon is backing a FinTech start-up program that enables FinTech firms to access data for free or at a discounted price.¹⁰⁵

With initial footprints and capabilities in place, it is only a matter of time before BigTechs make an even more significant impact in the financial services space. Alibaba has taken the lead in Asia, and others may soon follow in other markets. Some of these firms have already demonstrated disruption in other segments (such as Amazon in retail and book-publishing, Apple in mobile handsets, etc.). There is no doubt that the financial services industry has become increasingly dynamic and may continue to witness the arrival of new, versatile, and potentially powerful new players in the months and years ahead.

As traditional financial institutions and FinTech firms alike build out their plans to adapt to customer evolving expectations through innovation and collaborations, leaders are likely to anticipate the role BigTech firms may play in the future and start forging partnerships to get ahead of this forthcoming disruption.

¹⁰⁰ “Google and LendingClub Partner to Deliver New Business Financing Program,” LendingClub website, January 15, 2015, accessed December 2017 at <https://www.lendingclub.com/public/lending-club-press-2015-01-15.action>

¹⁰¹ “Another industry Amazon plans to crush is small-business lending,” Rohit Arora, CNBC, June 16, 2017, accessed December 2017 at <https://www.cnbc.com/2017/06/16/amazon-plans-to-crush-small-business-lending.html>

¹⁰² “A Look At Amazon Protect: Amazon’s Warranty Insurance Brand Expands In Europe,” CB Insights, September 2017, accessed December 2017 at <https://www.cbinsights.com/research/amazon-protect-product-insurance/>

¹⁰³ Amazon website, accessed December 2017 at https://www.amazon.com/iss/credit/storecardmember/ref=footer_plcc?_encoding=UTF8

¹⁰⁴ “BankBazaar Scores \$60 Million in Funding Led by Amazon,” Julie Muhn, Finovate, July 2, 2015, accessed December 2017 at <http://finovate.com/bankbazaar-scores-60-million-in-funding-led-by-amazon/>

¹⁰⁵ “Thomson, Fidelity, Amazon to Create ‘Sandbox’ for Fintech Startups,” Amilda Dymi, American Banker, May 29, 2014, accessed December 2017 at <https://www.americanbanker.com/news/thomson-fidelity-amazon-to-create-sandbox-for-fintech-startups>

Methodology

WFTR 2018 Survey—Capgemini, LinkedIn, Efma, and MaRS

A global survey encompassing responses from traditional financial services firms and FinTech firms including banking and lending, payments and transfers, investment management, and insurance, forms the basis of the World FinTech Report 2018. Questions sought to yield perspectives from both FinTech and traditional financial services firms—exploring various aspects of the customer journey, and key success factors for customer journey enhancement.

The survey sheds light on the evolving relationship between incumbents and new-age players with a focus on the FinTech viewpoint, and an analysis that may help both entities achieve collaborative and business success.

Agents of Change Series—LinkedIn and Capgemini

As part of the development of the World FinTech Report 2018, we spoke to several leading industry executives from FinTechs, as well as traditional firms, on their view of the evolving customer journey and FinTech–incumbent collaboration. These executives are some of the leading agents of the change that the industry is witnessing today. Their interviews contributed valuable insights throughout the development of the World FinTech Report 2018. Excerpts from these interviews have been released in the form of “Agents of Change” videos on www.FinTechWorldReport.com website.

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