

World FinTech Report 2017



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Preface: FinTech — Hype or Disruption?

The term 'FinTech'¹ might be both the most over-hyped and under-estimated term the industry has seen in decades. On one hand, from an investment standpoint, venture capital (VC) funding of the FinTech revolution has been staggering, resulting in billions of dollars of investment. We have seen a significant reduction in barriers to entry and customers' digital expectation demands explode. However, very few start-ups have managed to use their agility and innovation to fill gaping holes in the customer experience left by traditional firms² with viable business models that achieve scale and distribution.

At the same time, traditional firms have largely struggled with clunky legacy systems, regulatory burden and leadership challenged with balancing short-term profitability and long-term viability. Executive conversations are increasingly revolving around the need for customer-centricity and the importance of developing customer-centric rather than product-centric solutions. However, are traditional firms effectively putting this philosophy into practice, and what specifically are those 'Moments of Truth' (MoT)³ that have the biggest impact on customers choosing who they will leverage for their financial services needs?

We have seen a plethora of investment and activity in innovation labs, hack-a-thons, building internal FinTech teams, and even acquiring start-ups. And while there have been a few exceptions to the norm, most of these investments have failed to deliver their desired outcomes. Too often, innovation investments are too disconnected from the business or too close to the business and handcuffed by legacy culture.

Clearly, the investment and technology communities are enamored with FinTech. However, those investments have recently slowed down. What will be the real impact on the industry? Was it all hype or do they have viable business models to compete with traditional firms? What do customers think about these new players? Based on customer reactions, how should traditional firms respond? Do they have the ability to be agile and more innovative? What is preventing traditional firms from replicating the innovation solutions and services being provided by FinTechs? Are we truly seeing a disruption and revolution in the financial services industry or more of an evolution? Are the recent collaborations and partnerships between FinTechs and traditional firms a sign of more to come or could we be looking at completely new business models and a platformification of the business?

In our inaugural Capgemini and LinkedIn *World FinTech Report (WFTR)*, in collaboration with Efma, we address these important questions. Backed by a survey of more than 8,000 customers in 15 countries, as well as over 100 interviews with senior-level executives, and a world-class Executive Steering Committee, this report goes beyond the hype of FinTech. We look toward the future of 'Fin'ancial and 'Tech'ology by diving deeper into how leading firms are successfully applying innovation, while also providing precise recommendations and discussing whether we will witness a fundamental shift in business models.

Financial Services (FS) institutions may be facing one of their biggest challenges to date and likely the start of a long, disruptive journey. We encourage you to peruse our detailed examination of the specific actions institutions can take to better navigate this momentous shift.



Thierry Delaporte
Head of Global Financial Services
Business Unit and Member of the
Group Executive Board
Capgemini



Penry Price
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Vincent Bastid
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Efma

- 1 FinTechs are the new financial services firms that are less than five years old and have a relatively small but growing customer base
- 2 Traditional firms are generally financial services firms that have been in the business for at least five years and have a large, and established customer base
- 3 Moments of Truth (MoT) are defined as the moments when customers interact with their financial services provider and form or change an impression about that particular financial services provider, product, or service

World FinTech Report

Executive Steering Committee (ESC)

We would like to thank our incredible Executive Steering Committee for their guidance and insights provided over the last few 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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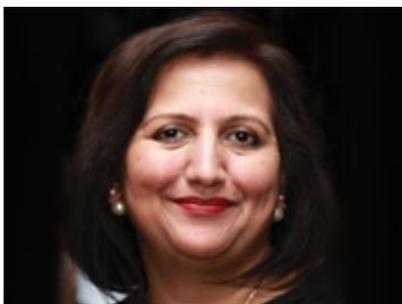
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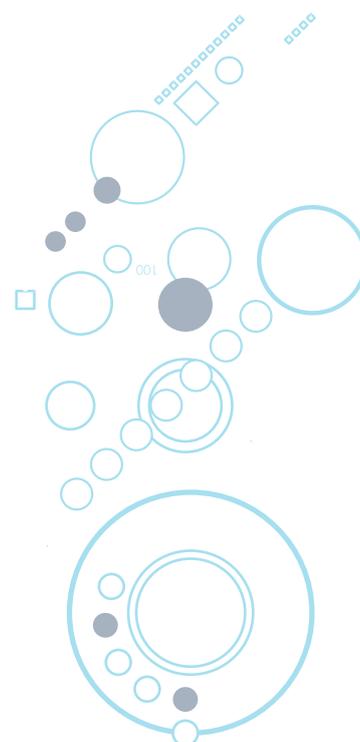
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Executive Summary

Rise of the FinTech Movement

- The rise of FinTech has been aided by a perfect storm, created by increasing customer expectations, expanding VC funding, reduced barriers to entry, and increased pace of technological evolution.
- Customers are embracing new FinTech providers, with 50.2% globally saying they do business with at least one non-traditional firm.
- Traditional firms hold an advantage over non-traditional firms as they closed the gap on areas of convenience and quality of service over the last year.

FinTech, Traditional Firms Both Must Improve on Delivering Positive Moments of Truth

- Customers indicated significantly low levels of overall positive experience. Mobile, however, struck a chord with key customer segments of Gen Y and tech-savvy.
- Both traditional and non-traditional firms struggle to meet customer expectations on the most important Moments of Truth, which revolved around digital transactions, transparency, convenience, and proactive updates.
- Gen Y and tech-savvy customers, widely regarded as influential customers of the future, offer higher revenue potential.

In Face of FinTechs, Traditional Firms Trying, but Struggling to Apply Innovation

- FinTechs have made headway into financial services, with close to two-thirds of executives stating FinTechs are setting the bar higher for the entire industry.
- Traditional firms have become more open to partnership with FinTechs, and they are pursuing a wide range of strategies in response to FinTechs. Almost as many firms are developing their own in-house capabilities (59.2%) as are seeking partnerships with FinTechs (60.0%).
- The actions of traditional firms to foster innovation have not measured up to the amount of effort put into them.

Inculcating Innovation Requires Methodical Approach

- Adopting a step-wise approach for applying innovation — for example, using the four stage Capgemini framework of Discover, Devise, Deploy and Sustain — can be useful in helping institutions spread innovation throughout the organization.
- Securing senior leadership commitment, having a clear vision, and adopting a more innovative culture will be important for addressing disruption.
- Financial services firms need to be prepared for prospective future disruptive scenarios such as entry of BigTech or platformification, which can lead to a fundamental shift in the industry.

Rise of the FinTech Movement

- **The rise of FinTech has been aided by a perfect storm, enabled by rising customer expectations for more personalized and digital experiences, increased access to VC funding, reduced barriers to entry, and accelerated advancements in technology.** But most important, the space has been ripe for FinTechs in large part due to traditional firms leaving a gap of unmet customer needs.
- **Customers are embracing FinTech providers, with 50.2% globally saying they already do business with at least one non-traditional firm.** Tech-savvy customers are supplementing traditional services with FinTech offerings twice as often as non-tech-savvy customers.
- **Traditional firms hold advantages over non-traditional firms, closing gaps in key areas from just last year.** Customers favor traditional firms in the areas of trust, quality of service, transparency, and security, and favor non-traditional firms in the areas of timely/efficient service and better value for money.



Perfect Storm Enabling the Emergence of FinTech

The financial services industry has undergone a considerable shift since the financial crisis, as traditional firms, once central to all financial relationships, have seen their relevance diluted by FinTech firms. A perfect storm of factors, including complacency on the part of traditional firms, increased customer expectations, lower barriers to entry, increased access to VC funding, and accelerated technological advancements (see Figure 1.1), have enabled FinTechs to quickly gain ground with solutions that cater to heightened customer preferences.

Figure 1.1: Key Enablers of FinTech Firms



Source: Capgemini Financial Services Analysis, 2016

Powerful BigTechs like Google, Amazon, Facebook, and Apple have raised the bar of customer expectations by delivering superior personalized and digital customer interactions. Inspired by the digital interfaces they encounter in their day-to-day lives, customers have started demanding similar levels of experience from their financial firms. At our London roundtable this summer, a UK banker noted, *“Financial services for a long time has been about a product you buy and then you might get sub-par self-service afterwards. But providing an experience and actual self-service is what FinTech is going to be about in the future”*.

Traditional firms have been slower to respond to rising customer expectations. The fast pace of technological development, especially through newer channels such as mobile, has only heightened the sense that traditional firms are lagging. FinTech firms, meanwhile, quickly identified the gaps in service left by traditional firms and began filling them with compelling offerings, taking advantage of the latest in technology to deliver better value propositions to customers in a number of areas and even catering to new customer segments. *“Everyone should focus on what they do best and for us it really is core innovation”* noted Hardeep Walia, Founder and CEO of Motif Investing. On a similar note, Kara Segreto, Head of Marketing & Communications Strategy for Next Generation Growth at Prudential said *“While still in its early days, we are excited by the ability of new, simplified financial technology to expand financial wellness opportunities to people that*

have not traditionally had access. Whether it's m-pesa and mobile wallets in Africa or low fee robo advice in the Western Hemisphere, we are excited by the solutions that are targeted at holistically helping people to improve their financial health no matter their age, level of affluence, or knowledge of financial products”.

Aiding FinTech firms is the fact that traditional financial services firms have typically faced competing priorities, including increasing regulations, inflexible legacy systems, and siloed channels, adding to operational costs. Most FinTech firms, meanwhile, embark on their journeys as nimble startups, able to take advantage of next-generation technology without worrying about existing systems or cultures. Plus, they can use already available services in the cloud to save on investment costs. These lower barriers of entry have created a fertile ground for FinTech growth. Eduardo Vergara, Head of Payments Services at Silicon Valley Bank, notes, *“The cost of starting a FinTech company has decreased significantly, leading to an increase in the number of FinTech start ups. Not all of them will survive, but those that do will have a significant and lasting impact on the Financial Services industry”*. The low barriers of entry may eventually serve the purposes of more powerful firms. Neal Cross, Chief Innovation Officer at DBS Bank, noted, *“In the future, banking will be everybody's business. Any organization, including the telecommunications and retailers, will be able to make money from finance”*.

In certain cases, regulators such as Financial Conduct Authority (FCA) in UK, are also pro-actively creating a conducive environment for FinTech by involving them in early stages of drafting regulations. New regulations such as Revised Payment Service Directive (PSD2) in Europe will provide an opportunity for FinTech firms to act as intermediaries between banks and customers. Simplified regulatory processes and removal of structural hurdles are expected to boost the innovation in financial services industry. Initial signs of regulators' actions across different geographies are an indication that regulators are increasingly realizing the importance of innovation, though not all of them are proactive in their approach.

Throughout the Report, be sure to check out our Agents of Change videos by scanning the QR code to watch the full interview.



If you are a FinTech player, you need to talk to a number of VCs, and all it takes is for one of them to say yes and you can launch your product. In contrast, at a big bank you probably need to talk to a large number of people before you can launch a product, and all you need is for one to say no and it doesn't happen”




– Eduardo Vergara
Head of Payments Services,
Silicon Valley Bank

VC funding in FinTech has increased exponentially over the last few years with worldwide investment reaching close to \$25 billion in 2015⁴ (though initial indications for 2016 indicate that this pace may be slowing. FinTech deal activity volume fell around 11% in Q2 2016 compared to Q2 2015⁵).

VC funding has provided a potent spark to the financial services industry as a whole, giving rise to FinTech innovation, while spurring traditional players to become more active in product development.



Investment in FinTech has grown exponentially over the last three years and this investment is giving entrepreneurs a platform to disrupt traditional providers. FinTech is enabling us (traditional firms) to disrupt ourselves and to better serve our customers through personalization, greater security, and removing friction in the system”

– Lubaina Manji
Director and Head of Rise & Group Innovation at Barclays

However, the intense focus of VCs on FinTechs may be giving them only an artificial lift, masking the possibility that many may not have scalable or viable business models, and may not be able to compete in the medium to long term. At the same time, some organizations are coming together to invest more than just money and have created FinTech hubs/accelerators to guide and mentor the new FinTech firms in their growth path.

FinTechs Gaining Traction, if Not Market Share

The future dynamic between FinTechs and traditional institutions is still unclear. Technological advancement has had a devastating effect on a wide range of industries, quickly putting an end to print photography and movie rentals, for example. At the same time, innovation also has a history of being able to co-exist with the traditional, much like e-books have with books.

We see signs that some FinTechs are finding their niche, with viable future business models. However, we also see far more who look like they will struggle to do so on their own. Simultaneously, we see signs of leading traditional firms moving quickly and successfully to build their own capabilities, both on their own and through collaboration with FinTechs.

Traditional firms have their own advantages when it comes to new product development.



A lot of the best innovations at Microsoft, we pulled them aside and then we built the new divisions around the innovation itself versus trying to bring it back in. So if it is an interesting model that you think has scale potential, there is a good opportunity to actually build everything around the nucleus”

– Hardeep Wallia
Founder & CEO of Motif Investing

Jim Marous, Co-Publisher of The Financial Brand, expands on this further, *“Some of the best innovations are being done by traditional banking organizations in live retail environments that provide immediate consumer feedback and the ability to test and learn. FinTech firms without physical delivery channels will miss this important multichannel opportunity”.*

As traditional firms ponder the future, they have little choice but to at least acknowledge that FinTech firms are having an impact and have redefined the terms of customer engagement. FinTech firms provide a real challenge with their ability to move quickly in delivering customer-focused solutions at low cost, often without the burden of heavy oversight or legacy systems and culture.

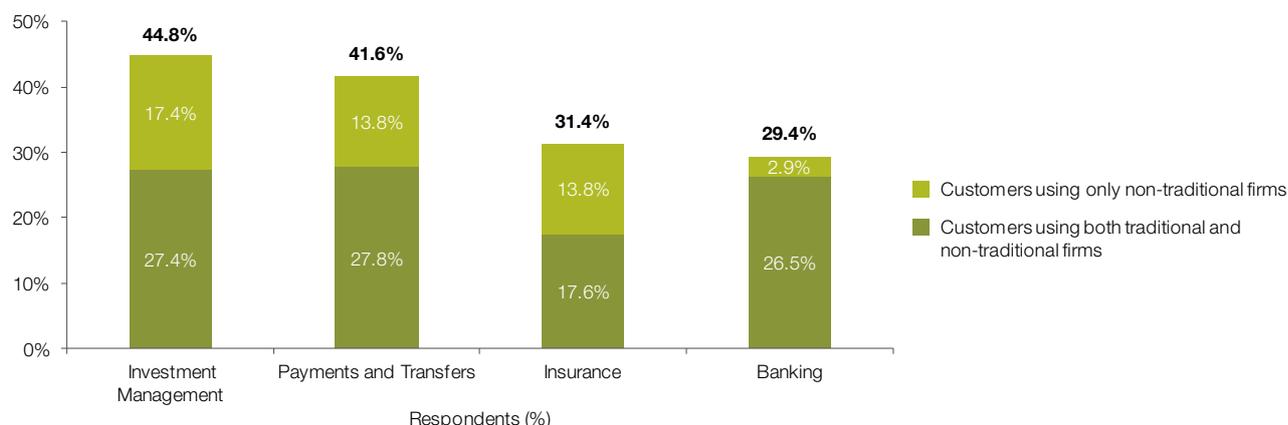
Using unique value propositions, FinTech firms have already made significant inroads into customer relationships. Globally, half of customers (50.2%) say they use financial services from at least one non-traditional firm for banking, insurance, payments or investment management, with the percentage reaching the highest in Asia-Pacific (58.5%).

FinTechs have made the greatest inroads in investment management, where 17.4% of customers say they rely solely on them and an additional 27.4% use them in addition to their traditional providers (see Figure 1.2). This incursion reflects the increased adoption of investment management by the affluent as well as the general population. With the advent of non-traditional players such as automated advisors, all customer segments, including those that never had access to affordable investment advice before, can take advantage of relatively low-priced automated investment services.

By country, customers turn the most to FinTech firms in China and India (both above 75%), followed by UAE, Hong Kong, and Spain (see Figure 1.3). The lowest adoption rates were found in France (36.2%), Belgium (30.4%), and the Netherlands (29.8%). This pattern indicates that FinTech, like other recent technological innovations, is following the trend of *First the Rest then the West*, as services from firms such as Ant Financial and Paytm first find wide adoption in China and India, then expand from there.

4 Global Investments in FinTech Companies, CB Insights database, October 3, 2016

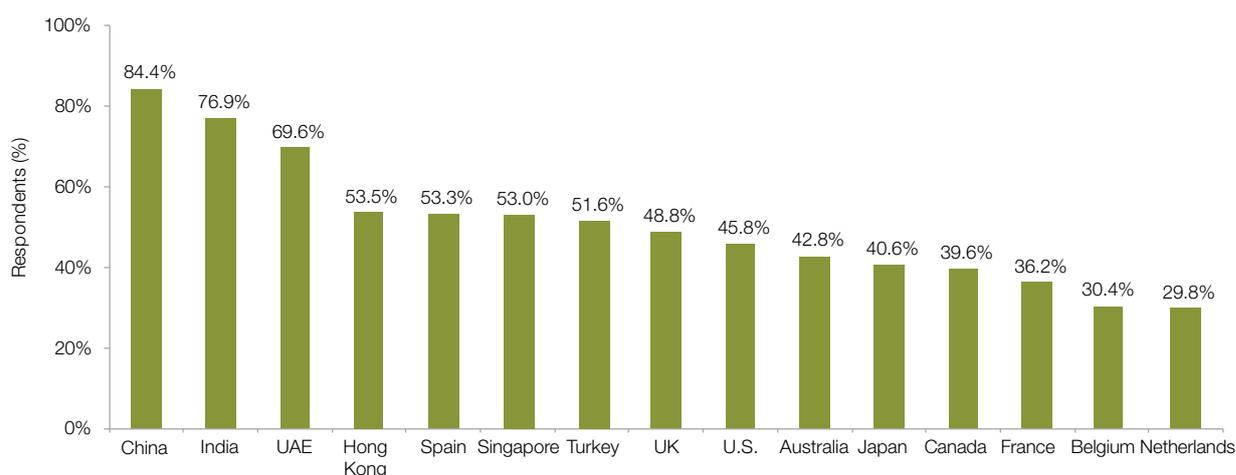
5 Ibid.

Figure 1.2: Customers Using At Least One Non-Traditional Firm for Financial Services, by Domain (%), 2016


Note: The percentage on the chart indicates the customers who use traditional and/or non-traditional firms

Question: "Please indicate if you use the following products and the nature of the firm you interact with for each product; Products: Banking, Payments and Transfers, Investment Management, and Insurance; Nature of Firm: Only traditional firms, Only non-traditional firms, Both traditional and non-traditional firms"

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

Figure 1.3: Customers Using At Least One Non-Traditional Firm for Financial Services, by Country (%), 2016


Note: The percentage on the chart indicates the customers who use only non-traditional firms or both traditional and non-traditional firms

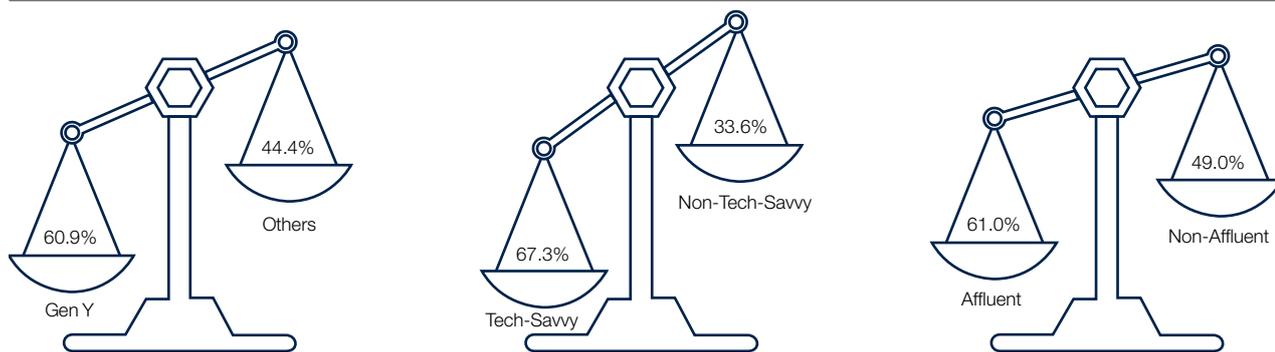
Question: "Please indicate if you use the following products and the nature of the firm you interact with for each product; Products: Banking, Payments and Transfers, Investment Management, and Insurance; Nature of Firm: Only traditional firms, Only non-traditional firms, Both traditional and non-traditional firms"

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

In general, customers who are younger, tech-savvy, and affluent are much more likely to round out basic financial services with FinTech offerings (see Figure 1.4). Tech-savvy customers are using services from FinTech firms twice as much as non-tech-savvy customers (67.3% versus 33.6%). The differentials are also sharp between Gen Y and others (60.9% versus 44.4%) and between the affluent and non-affluent (61.0% versus 49.0%). With Gen Y and tech-savvy customers expected to become increasingly prominent over time, the pool of customers turning to non-traditional firms is likely to grow.

When customers look beyond their usual providers for FinTech services, they tend to do so with increasing comfort. Nearly half of customers leveraging non-traditional firms (46.2%) have relationships with three or more non-traditional firms. Only 10.7% have a relationship with just one non-traditional firm. This trend of using multiple firms to fill specific needs may lead to disaggregation or unbundling of financial services resulting in reduced brand loyalty in financial services to dilute the concept of having a primary provider.

Figure 1.4: Customers' Usage of Non-Traditional Firms, by Customer Segment (%), 2016



Note: The percentage on the chart indicates the customers who use only non-traditional firms or both traditional and non-traditional firms
 Question: "Please indicate if you use the following products and the nature of firm you interact with for each product; Products: Banking, Payments and Transfers, Investment Management, and Insurance; Nature of Firm: Only traditional firms, Only non-traditional firms, Both traditional and non-traditional firms"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of Customer Survey, 2016

Nonetheless, most FinTechs are only operating within a small piece of the value chain, allowing them to focus on doing one thing very well. Many also struggle to take that next leap to gaining access to affordable distribution and scale. It is rare for FinTechs looking to take over the entire banking relationship, although the jury is still out on whether Big-Tech can pull that off (see "Inculcating Innovation Requires Methodical Approach", page 32, for more details on this). China and India are already on the way to testing that model.

Traditional Firms Still Hold Some Competitive Advantages

Trust is paramount in financial services relationships, but traditional firms have yet to corner the market on it as only about one-third of customers (36.6%) say they trust traditional firms. However, this still gives traditional firms a modest advantage over FinTechs, which are trusted by only 23.6% of customers.

A large percentage of customers say they neither trust nor distrust their traditional providers (55.6%) and thus could still be won over by FinTech firms. We found that when both traditional and non-traditional firms offer positive experiences, slightly more customers tend to trust the FinTech firm (56.3% versus 52.9%) (see Figure 1.5). In addition, the customer segments of the future — Gen Y and the tech-savvy — exhibit more trust in FinTech firms than other customer types. This gives FinTechs a solid platform on which to build trust, especially as many regulators take steps to encourage both competition and customer protection.

Non-traditional firms were found to offer other advantages in the eyes of customers, including better value for money, and timely and efficient service.

As Hardeep Walia, Founder and CEO of Motif Investing, said, *"We really study how humans work and then actually build the technology and the financial products around that"*. Traditional firms, meanwhile, are perceived as having an edge in fraud protection, quality of service, and transparency. Both types of firms are seen as evenly matched in terms of convenience and user experience (see Figure 1.6). For Gen Y customers specifically, FinTech firms were seen to be on par with traditional firms in terms of delivering basic transactions, such as opening accounts and providing access to information.

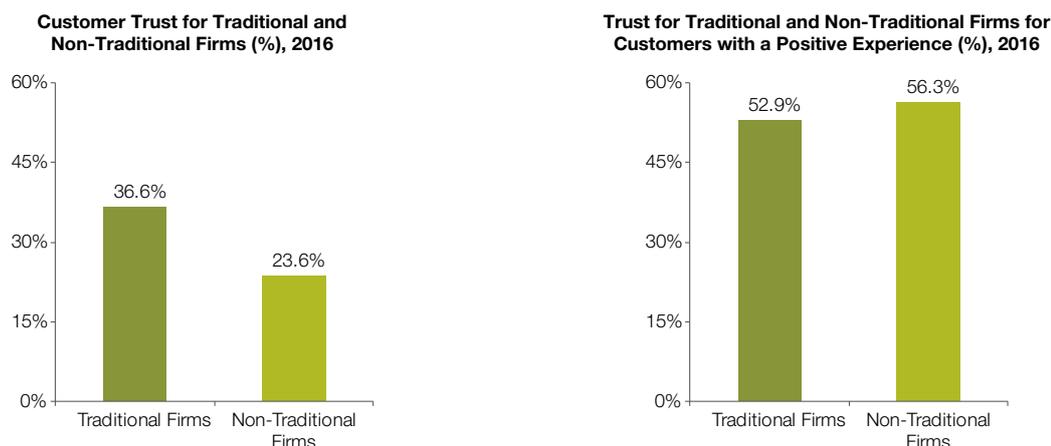
The results of this year's research suggest that traditional firms have made progress along a number of trajectories. The results were noticeably different in early 2016 when customers were surveyed for Capgemini and Efma's *World Retail Banking Report 2016*. Customers then reported that FinTech delivered higher value in areas such as ease of use (81.9%) and good service/experience (79.6%). While traditional firms have closed the gap in certain areas, such as quality of service, there is still a lot of work to be done. Both traditional and non-traditional firms are struggling to meet customer expectations, especially on key interaction points. Understanding the customer needs and preferences and building relationships with them will be really important.

💬

The world is moving so fast and it's changing at such a rapid rate that we really need to have a symbiotic relationship with our clients. With this, we can solve for their needs today and also continue to understand their needs for tomorrow"

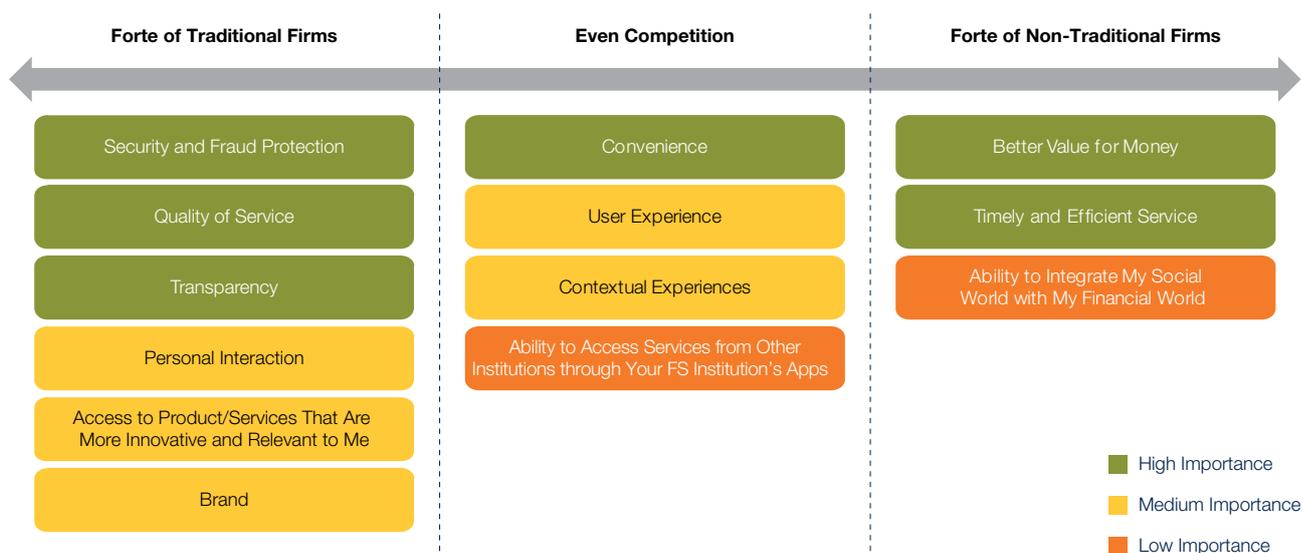
— Barbara Agoglia
Head of Global Brand & Communications, Global Commercial Payments, American Express

Figure 1.5: Customer Trust for Traditional and Non-Traditional Firms (%), 2016



Note: The customers who have rated 6 or 7 are considered to have trust, 1 or 2 to have distrust, and others as having Neither Distrust Nor Trust
 Question: "What level of trust do you have in the following entities: traditional financial services companies, non-traditional – "Big-Tech" firms (e.g., Amazon, Google, Apple, etc.), and non-traditional – FinTech firms? Please rate on a scale of 1 to 7"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

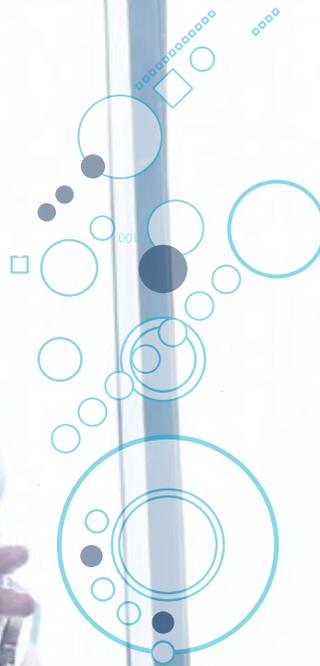
Figure 1.6: Customer Value Perception for Traditional vs. Non-Traditional Firms, 2016



Note: Elements have been classified under 'Even' if the difference in positive experience for Traditional and Non-Traditional firms is less than 10%; Classification under 'Forte of Traditional' and 'Forte of Non-Traditional' is done based on the customer's value perception on the experience that is provided to them by either of these firms
 Question: "How important are the following factors when working with your financial services provider and which type of firm provides a better experience on these factors?"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

FinTechs, Traditional Firms, Must Improve on Delivering Positive Moments of Truth to Customers

- **Customers indicated significantly low levels of overall positive experience. Mobile, however, struck a chord with key customer segments.** For Gen Y⁶ (47.6%) and tech-savvy (56.5%) customers, mobile emerged as the second-most important channel (after the computer) for interacting with financial services firms.
- **The most important Moments of Truth for customers revolved around digital transactions, transparency, convenience, and proactive updates.** However, both traditional and non-traditional firms struggle to meet customer expectations on the most important MoTs.
- **Gen Y and tech-savvy customers, widely regarded as influential customers of the future, offer higher revenue potential.** They are more likely to buy additional products, but are less likely to stay with their firm, making it important to find better ways to meet their expectations.



6 Gen Y refers to people aged 15 to 34; Only customers aged 18 to 34 (born between 1981 and 1997) were surveyed and therefore reflect the Gen Y customers for the purpose of this document

Customer Experience Levels Low, but Mobile Likely Poised to Follow Path of Computer Adoption

In our survey of more than 8,000 customers in 15 countries around the world, we found that customers are currently reporting low positive customer experience levels across all types of financial services. The overall positive experience level of 31.1% may reflect the industry's ongoing effort to add digital services against a backdrop of regulatory constraints, legacy systems and branch networks. Nevertheless, changing customer expectations, particularly among millennials, are forcing the industry to more fully address the need for digital solutions.

Within only ten years, an estimated two billion people will have had their first banking experience on a smart phone. This is almost as much as the number who are conventionally banking today.⁷ For these digitally literate customers, traditional bedrocks of banking, like the branch and the checkbook, simply have no place.

Banks lost ground on being able to dictate the terms of the banking experience once e-commerce sites began setting new standards for customer interaction. Highly customized digital experiences are now the baseline expectation.



When a customer uses mobile banking (or online banking), he/she is expecting the entire bank [functionality] to be there, including the entire breadth of products and also the products/functionalities relevant to them"




— Ashok Vaswani
CEO of Barclays UK

"Consumers expect every single bit of their interaction with your institution to be personalized to their needs", an executive at our San Francisco roundtable this summer said, noting, *"Amazon does it, why can't you?"* E-commerce sites have already established the tacit rules that guide such interactions, promising value in return for engagement. *"Consumers want more personalization and are willing to participate and share data as long as there is transparency and value received",* said Jim Marous, Co-Publisher of The Financial Brand.

For most consumers, the bulk of digital transactions occur over the mobile phone, easily the most versatile, functional, and portable digital touchpoint. Despite being considered an essential part of everyday life, our survey found that mobile has yet to overtake the personal computer as the most important and preferred banking channel.

While the computer touchpoint has matured, mobile has still not met its full potential, with only 40.1% of customers ranking it as important, compared to 43.4% for the branch, 45.4% for the phone, and 56.8% for the computer. At 48.3%, mobile is also providing the lowest levels of positive experience, compared to 49.2% for the phone, 54.4% for the branch, and 56.1% for the computer.

Part of the problem is that mobile banking functionality often falls short. David M. Brear, Founder & CEO at 11FS, likened mobile banking's shortcomings to Russian dolls. *"Imagine laying out nesting dolls in a row from largest to smallest. The largest doll represents a bank branch where you can do most of the functionalities followed by other channels. The mobile today represents the smallest doll",* he said, adding, *"The most handy way to bank (mobile) is the least helpful. I can't exchange currency with a swipe, I can't force touch a new account, I can't tap for more credit. The thing that I engage with most in my life has the least permissions and is the least powerful".*

Gen Y, Tech-Savvy Embrace Mobile

Though mobile has yet to make a big impact on financial services, the pieces are in place for it to rank as highly as the computer, which has evolved quickly to become the most widely regarded channel. Only 20 years ago, the Internet-connected computer was a novelty. Now it holds broad appeal for a wide range of customers. Even non-tech-savvy customers, who presumably would favor the branch, prefer the computer over all other channels by a wide margin, solidifying its status as mainstream. At the same time, importance of branch is relatively low for both Gen Y and other age groups.

Mobile appears poised to come on just as strongly as the computer has. Already, it has an avid following among two sets of influential customers, emerging as the second-most important channel for Gen Y (47.6%) (see Figure 2.1) and the tech-savvy (56.5%). While there might be an overlap between the Gen Y and tech savvy customers, the results help in highlighting how these growing forces in the overall customer pool are driving a change in touchpoint preferences. Mobile is also benefiting from the steady release of innovative offerings by non-traditional providers. To keep up with expected demand, as well as stay one step ahead of competitive offerings, firms must make development on the mobile channel a high priority. *"The era of omni-channel is definitely over, and the financial services industry is moving toward mobile-only and augmented channels",* said Alex Sion, a co-founder of Moven, and now the Executive Director of Mobile Banking at JPMorgan Chase.

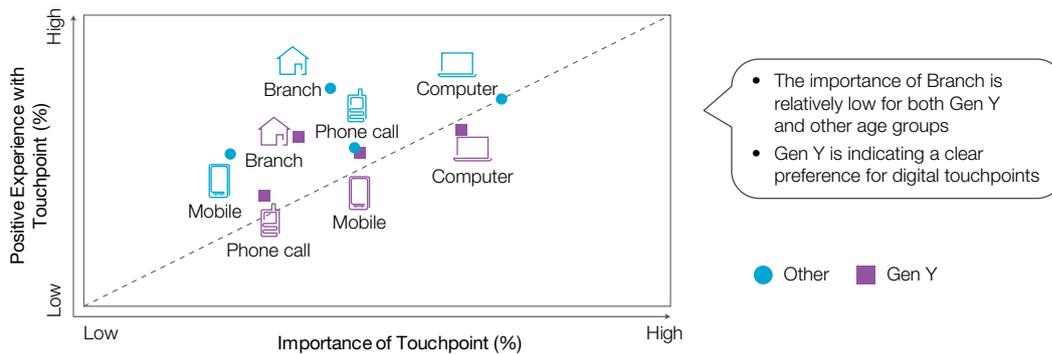
FinTech firms are highly focused on mobile, setting new standards for convenience and personalization. In the area of banking, Berlin-based N26 has introduced a mobile-first bank that offers simplified money transfers, one-click overdraft protection, and notifications to help users better manage their money.⁸ Moven, which overlays personal financial management features onto banking transactions, uses GPS to offer users real-time overdrafts if their funds are running low.⁹

⁷ "AI will massively disrupt the banking industry", Brett King, Moven, Yogesh Gupta, CIO, February 12, 2016, accessed September 2016 at <http://www.cio.in/news/ai-will-massively-disrupt-banking-industry-brett-king-moven>

⁸ "N26 enlists Siri for money transfers", Finextra, September 14, 2016, accessed October 2016 at <https://www.finextra.com/newsarticle/29430/n26-enlists-siri-for-money-transfers>

⁹ "Moven App Encourages Savings, Eliminates Product Silos", The Financial Brand, May 13, 2015, accessed October 2016 at <https://thefinancialbrand.com/51794/moven-contextual-mobile-savings-lending-app/>

Figure 2.1: Importance and Positive Experience at Touchpoints, by Demographic Segment (%), 2016



Note: The percentage on the chart represents the customers who have positive experience with touchpoints and customers who have given 6 or 7 on importance
 Question: "What is the overall importance of the interactions that you have with your firm through the following touch points? How satisfied are you with these interactions? Please rate on a scale of 1 to 7; Options: Physical/Branch Office, Phone Call, Computer, and Mobile Device"
 Source: Caggemini Financial Services Analysis, 2016; Caggemini and LinkedIn WFTR Voice of the Customer Survey, 2016

In the payments arena, an app from Ondot Systems lets users exercise greater control over their cards, including blocking certain types of transactions and limiting dollar amounts.¹⁰ In investment management, Openfolio lets users consolidate their accounts in one place and track their portfolio's performance against various benchmarks, such as similar investors.¹¹ The 100% digital Hedgeable app automates investing, overlaying each account with a proprietary risk management system aimed at downside protection.¹² Innovation is also evident in the insurance business. Trōv generates real-time pricing on insurance, and allows users to turn protection on and off through a simple swipe.¹³

Leading traditional firms are not far behind and many are directing their innovation efforts toward exploring new services through mobile. From creating interactive interfaces, such as Halifax's augmented reality-based home-finder app and Societe Generale's visual balance, to providing greater control with features such as Barclays digital lockbox and ICA Banken's digital card control, banks are steadily leveraging mobile as an effective tool to differentiate their offerings.¹⁴

The mobile device lends itself to applications that go beyond banking. For example, U.S. Bank's app, Peri, allows customers to scan traditional print ads and then shop for items on the spot using their mobile.¹⁵ Banks are also making the mobile channel more accessible and convenient for customers by allowing customers to have multiple mobile users on one device, as in the case of BNP Paribas. Banks are even going beyond traditional mobile devices, with Citibank designing the Citi Mobile® Lite App for iPhone® and

Apple Watch™, with the app being ready before the launch of the device.¹⁶

While many new creative financial services have been developed outside the confines of traditional firms, traditional firms have shown an ability to take advantage of their deep pockets and broad experience as they pursue optimal strategies for maximizing opportunities in digital delivery. As both traditional and non-traditional firms strive to meet the heightened demands of customers, they must deploy digital innovation wisely.

Moments-of-Truth Interactions Fall Short

One way to win loyalty is to excel in capitalizing on Moments-of-Truth — interactions in which customers form a lasting impression about a firm. Moments of Truth describe not only major life stages, but more important, day-to-day interactions that can have tremendous impact on how a customer feels toward an institution. When customers are pleasantly surprised, say by the ease of opening an account or being able to electronically sign a document, they transition from that Moment of Truth toward greater fidelity to an institution.

Identifying the most potent Moments-of-Truth interactions for customers will be key and may pose some challenges to firms. As a banking executive at our San Francisco roundtable this summer, pointed out, *"For me, the main challenge today is to find the right balance between push and pull, because the client wants you to anticipate on some things but not on others"*.

10 "Mobile Card Services, Consumer Control Over Payment Cards", Ondot Systems, accessed October 2016 at http://www.ondotystems.com/pdf/Ondot_SolutionBrochure_Web.pdf

11 Openfolio, accessed October 2016 at <https://openfolio.com>

12 Hedgeable, accessed October 2016 at <https://www.hedgeable.com/hedgeable-portfolio-construction-and-allocation>

13 "With \$25.5M in new funding, Trov launches on-demand insurance for individual items", TechCrunch, April 26, 2016, accessed October 2016 at <https://techcrunch.com/2016/04/26/trov-insurance-on-demand/>

14 "20 Top Mobile Banking Apps", Jim Marous, The Financial Brand, June 2, 2014, accessed October 2016 at <https://thefinancialbrand.com/40109/best-mobile-banking/>

15 "Five Mobile App Features that Show Yes, Banks Can Innovate", American Banker, accessed October 2016 at <http://www.americanbanker.com/gallery/five-mobile-app-features-that-show-yes-banks-can-innovate-1069469-1.html>

16 "Why Citi Was the First Bank on the Apple Watch", Mary Wisniewski, American Banker, March 13, 2015, accessed October 2016 at <http://www.americanbanker.com/news/bank-technology/why-citi-was-the-first-bank-on-the-apple-watch-1073246-1.html>



We look at the key moments of truth, such as birth, property, etc., but it is important to engage customers on a daily basis, and be more contextual to fully understand what the customer is trying to achieve in their day-to-day life”



– Neal Cross
Chief Innovation Officer at
DBS Bank

Our research captured the customer’s view on what some of these key interactions are (see Figure 2.2) and found that FinTechs and traditional firms both need to work on delivering better Moments-of-Truth experiences for the interactions customers view as most important.

Looking across all types of financial services, customers deemed having a transparent fee structure and quick account openings as most important. But only about a third of customers reported having positive experiences with these types of interactions through traditional firms (30.5% for transparency and 36.6% for account openings). FinTechs had an even poorer record of delivering positive experiences for these transactions (21.0% and 27.3%, respectively) (see Figure 2.3).

Gen Y and tech-savvy customers, however, had a different take. Gen Y customers said the most important interaction was the ability to update account details digitally. They reported virtually even levels of positive experience for this transaction (around 31%) through both traditional and non-traditional firms. Tech-savvy customers highlighted quick account openings as most important, and had about even levels of positive experience through traditional firms (38.0%) and FinTechs (35.0%).

When examined by different business lines (banking, payments and transfers, investment management, and insurance), customers did not indicate high positive experience levels with a wide range of Moments-of-Truth interactions (see Figure 2.4). Both traditional and non-traditional firms failed to live up to these important customer expectations, highlighting a need throughout the industry to do a better job of delighting customers on key interactions.

In the area of banking and lending, traditional firms performed better than FinTechs overall (42.8% versus 36.8%) in delivering positive experiences related to digitally updating limits, identified by customers as their most important Moment-of-Truth interaction. This trend held true across demographics, as well. Among Gen Y customers, 41.2% reported positive experiences in digitally updating limits through traditional firms, compared to 35.4% for FinTechs. Tech-savvy customers had higher levels of

Figure 2.2: Top Five General and Domain-Wise Moments of Truth for Customers, 2016

| Top Five General Moments of Truth (MoTs) | | |
|--|--|-------|
| 1 | Transparent fee structure | 74.6% |
| 2 | Quick account opening | 71.8% |
| 3 | Ability to update your account details digitally | 70.6% |
| 4 | Anytime/Anywhere access to aggregated information on all financial accounts/products | 66.9% |
| 5 | Real-time updates on problem resolution timeline | 66.7% |

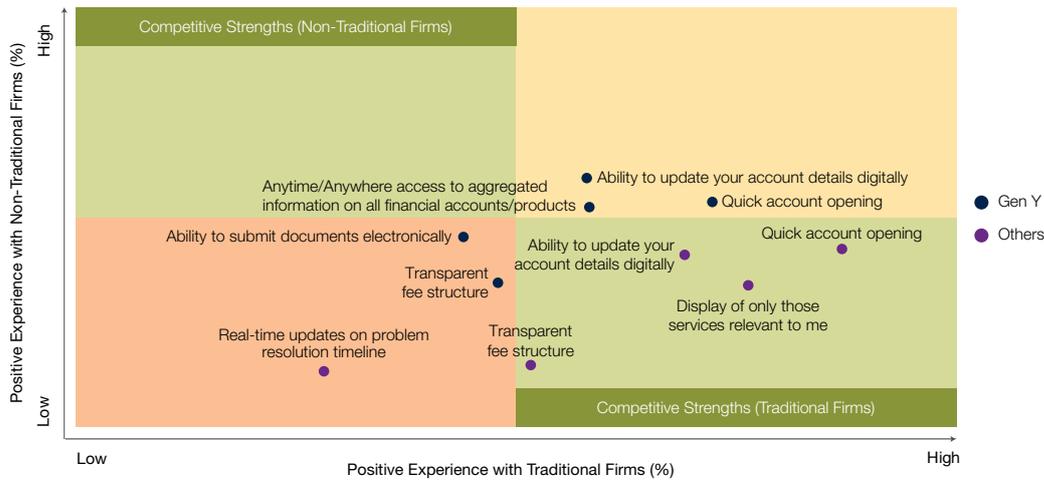
| Top Five Banking Moments of Truth (MoTs) | | Top Five Payments Moments of Truth (MoTs) | | | |
|--|--|---|---|---|-------|
| 1 | Digitally update transaction limits | 68.6% | 1 | Transfer money digitally | 69.8% |
| 2 | Real time alert notifications | 63.9% | 2 | Digital or contactless payment remotely | 59.6% |
| 3 | Real-time information to better manage your financial life | 60.0% | 3 | Alerts when exceeding monthly expenditures | 58.7% |
| 4 | Initiate or close a loan from digital channels | 57.6% | 4 | Digitally control cards | 58.7% |
| 5 | Real time loan quotes on mobile | 56.4% | 5 | Place/cancel/modify standing instructions from mobile app | 52.7% |

| Top Five Investment Management Moments of Truth (MoTs) | | Top Five Insurance Moments of Truth (MoTs) | | | |
|--|---|--|---|--|-------|
| 1 | Consolidated view of all assets | 65.9% | 1 | Proactive updates on status of claim | 69.2% |
| 2 | Personalized advice and data-driven recommendations for investment goal | 63.2% | 2 | Instant claim notification to insurer online/ on mobile | 66.8% |
| 3 | Display of only those services relevant to me, based on my usage patterns or behavior | 61.6% | 3 | Automatically connect to third parties to assist with an emergency | 65.7% |
| 4 | Track investment sentiments and trading activity of other users in real time | 60.4% | 4 | Policy renewal and cancellation digitally | 65.6% |
| 5 | Digital access to investment strategy research/ideas | 58.9% | 5 | Reward and incentive programs enabling savings on premium fees | 63.8% |

Question: “Please indicate your importance on a scale of 1–Not at all Important to 7–Very Important for the following interactions with your banking, lending, payments, insurance, and/or investment management provider”

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of Customer Survey, 2016

Figure 2.3: Top Five General Moments of Truth for Customers, 2016



Question: "Please indicate your importance on a scale of 1–Not at all Important to 7–Very Important for the following interactions with your banking, lending, payments, insurance, and/or investment management provider"

Note: The top 5 MoTs out of 15 were selected based on the ranking that customers accorded to these MoTs, and as a threshold, the minimum importance value that was considered was 5.0 (on a scale of 7.0)

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

positive experience overall, but also reported better experiences through traditional (44.6%) versus FinTech firms (39.7%). Non-tech-savvy customers were significantly less happy with FinTechs on the ability to digitally update (41.0% versus 28.7%).

In payments and transfers, the difference between positive experience with traditional firms and FinTechs was narrower (45.6% versus 42.7%) for the Moment-of-Truth interaction of digital transfers. Among Gen Y customers, FinTechs surpassed traditional firms (43.0% versus 41.6% for traditional firms). Tech-savvy customers, meanwhile, had more positive experiences through traditional firms (43.9% versus 41.1% for FinTechs).

In investment management, customers thought being able to view assets in a single consolidated report was most valuable, and found traditional firms to do a better job (36.6% versus 31.7% for FinTechs). Traditional firms also edged out FinTechs among Gen Y customers (35.7% versus 33.4% for FinTechs) and among the tech-savvy (37.7% versus 32.3% for FinTechs).

In insurance, customers rated the ability to proactively receive updates on claim statuses as the most important Moment-of-Truth interaction, except for tech-savvy customers who thought the ability to instantly send claim notifications to insurers was most important. FinTechs performed better than traditional firms on proactively sending out claim statuses among all customers (32.8% for FinTechs versus 29.9% for traditional firms), as well as among Gen Y customers (33.9% for FinTechs versus 30.2% for traditional firms). Tech-savvy customers deemed FinTechs and traditional firms virtually even in providing instant claim notification ability (around 34% for both types of firms).

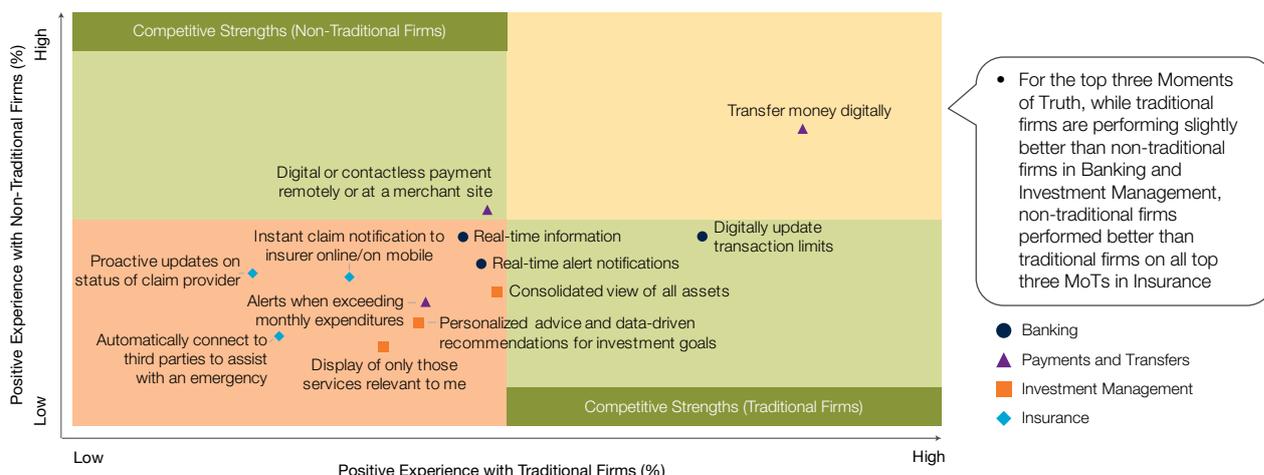
In the areas of banking and investment management, traditional firms performed slightly better than FinTechs on all top three Moments of Truth. In insurance, however, FinTechs performed better. In addition, positive experience reached higher levels in North America than in any other region by at least 10 points, likely due to greater innovation in this region.

Gen Y and Tech-Savvy Customers Key to Driving Profitable Customer Behavior

Innovation is expected to be an important tool when it comes to delivering better customer experiences. As noted by Eduardo Vergara, Head of Payments Services at Silicon Valley Bank, *"Customers' expectations around the user experience have changed across all segments. Clients expect simple intuitive solutions from their banking provider"*. Gen Y and tech-savvy customers, the key customer segments of the future, show a willingness to embrace innovation in their relationships with financial services firms, placing higher value on relatively more innovative Moments of Truth, such as biometrics like fingerprint and face recognition, rather than business-as-usual Moments of Truth, such as fee transparency. In practice, however, business-as-usual Moments of Truth are most likely to deliver higher positive experiences to Gen Y and tech-savvy customers (34.0 % and 39.4%, respectively), compared to Moments of Truth based on disruptive innovation (27.9% and 34.3%, respectively).

As a result, financial institutions should proceed with a focused plan to introduce next-generation offerings, especially to Gen Y and tech-savvy customers. These customers are choice targets for reasons that go beyond

Figure 2.4: Top Three Moments of Truth for Customers, by Domain, 2016

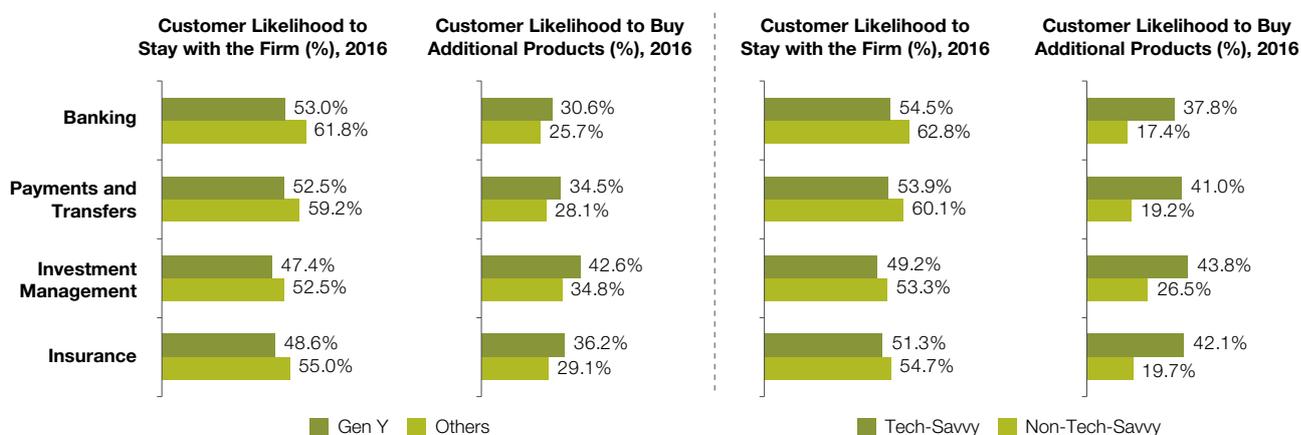


Question: "Please indicate your importance on a scale of 1–Not at all Important to 7–Very Important for the following interactions with your financial services provider"
 Note: Domain-level Moments of Truth represent customer interactions that are specific to their transaction needs for a particular domain such as Banking, Payments and Transfers, Investment Management, and Insurance
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

the value they place on innovation. First, they hold high revenue potential because of their propensity to buy additional products. For example, 37.8% of tech-savvy banking customers say they would buy another product over the next 12 months, compared to 17.4% of non-tech-savvy banking customers. Further, Gen Y and tech-savvy customers exhibit less willingness to stay with a firm if their expectations are not met. Among banking customers, for example, only 53.0% of Gen Y customers say they are likely to stay with their firm, compared to 61.8% of others (see Figure 2.5). By not sufficiently investing in innovation, firms may risk losing their most attractive customer segments.

FinTech firms' success in rapidly gaining trust and popularity shows that customers are actively seeking innovative services that cater to their personalized needs, and are quick to adopt firms that provide such services. To really ace customer experience in the long term, it will be important for both types of firms to understand the needs of the promising Gen Y and tech-savvy segments, as well as identify the key Moments of Truth for these customers, to create strong loyalty in an increasingly competitive industry. Neal Cross, Chief Innovation Officer of DBS Bank pointed to the importance of innovation at his bank, noting, "We have 160 customer journeys, and as an example, every single Managing Director has a KPI to reinvent their part of the business using [these] journeys".

Figure 2.5: Profitable Customer Behavior, by Customer Segments (%), 2016



Note: The percentage indicates the customers who have given 6 or 7 for the likelihood to stay and buy additional products
 Question: "Based on your interactions with your main provider, how likely are you to do the following over the next 12 months: Stay with the firm, Refer Friends and Family, Buy Additional Products. Please rate on a scale of 1–7"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of the Customer Survey, 2016

In Face of FinTechs, Traditional Firms Struggling to Apply Innovation

- **FinTechs have made headway into financial services, bringing new skills, expertise, and agility.** Close to two-thirds (62.7%) of executives say FinTechs are setting the bar higher for the entire industry. While 43.1% of executives agree that FinTech firms pose a significant threat, 22.4% believe they will not survive on their own.
- **As FinTechs continue to make progress, traditional firms have become more open to regarding FinTechs as partners, rather than competitors.** More than three-fourths (76.7%) of executives agree FinTechs provide partnership opportunities.
- **Traditional firms are pursuing a wide range of strategies in response to FinTechs.** Almost as many are developing their own in-house capabilities (59.2%) as are seeking partnerships with FinTechs (60.0%). Investment in a FinTech is the next-most popular activity (38.0%), though most institutions are stopping short of actually acquiring firms.
- **The actions of traditional firms to foster innovation have largely not measured up to the amount of effort put into them.** Only a small fraction (2.8%) say they have achieved the ideal of embedding innovation into their cultures. The greatest percentage (29.2%) say they have only “moderately structured” initiatives in place.



Eventual Impact of FinTechs on Traditional Firms Remains Unclear

While executives mostly agree that FinTechs are having an impact on the financial services business, there is little consensus on how far it will go. Some believe FinTechs do not have the ability to scale or maintain a value proposition that cannot be easily replicated by traditional firms. FinTechs also lack the capital of large financial institutions, and face uncertainty in venture capital funding. Nor do they have experience in dealing with regulators. As Hardeep Walia, Founder and CEO of Motif Investing, noted about differentiation and innovation, *"I always say follow the money. Does it change the economics of investing? If not, then it is usually a sign that it is not innovation, certainly not disruptive innovation"*.

Against this backdrop are some inherent advantages of traditional firms. *"We hate the infrastructure, but it may be a distinctive advantage tomorrow"*, said a banking executive at our New York roundtable this summer, adding, *"Human factor will become a differentiator"*. Having a physical presence could also be a positive, despite the expense. *"We only talk about digital, but there are physical aspects of the relationship that service customers, which help deliver a holistic experience"*, said another executive at our New York roundtable.

Others see FinTechs as niche players with very specific capabilities. Because of their limited functionality, FinTechs will end up collaborating with traditional firms, perhaps taking on second-tier roles, these executives say. *"FinTechs struggle to scale"*, noted a banking executive at our San Francisco roundtable, *"What we see is a lot of B2C start-ups, which due to difficulties of distribution, turn into*

white-label providers for banks, bringing innovation to the traditional firms".

Rather than play a secondary role, FinTechs might end up cherry-picking the best parts of a traditional firm's business. *"In specific verticals, FinTechs are very selective in terms of what parts of the value chain they focus on, and they are the most attractive ones"*, said Eduardo Vergara, Head of Payments Services at Silicon Valley Bank.

Still others foresee FinTechs using their expertise to fully disrupt existing markets. *"The FinTechs have been able to make headway"*, said Jim Marous, Co-Publisher of The Financial Brand, *"because even if they are not using Big Data, they are using the data that they have access to much more effectively than banks are"*. FinTech innovations often lead to entirely new ways of doing business. A banking executive in London noted, *"Alternative ways to represent assets are coming to the fore ... which is leading to direct interactions between borrowers and lenders, which is changing the dynamics of the markets"*.

Executives Believe FinTechs Excel in Delivering Better Customer Experience

Executives at traditional firms give credit to FinTech firms for providing a better customer experience in most areas of interaction. By margins ranging from about 25 to 60 percentage points, executives thought that FinTechs provided a better experience than traditional firms in convenience, user experience, transparency, timely and efficient service, as well as better value for money (see Figure 3.1).

Figure 3.1: Executives' View of Customers' Experience vis-à-vis Factors Important to Customers (%), 2016

| Customers' Importance of Factors While Working with Their Firms | | Executives' View of Customers' Experience | |
|---|---|--|--|
| | | Traditional FS Firms Provide Better Experience | Non-Traditional FS Firms Provide Better Experience |
| 1 | Security and Fraud Protection - (60.4%) | 74.3% | 5.4% |
| 2 | Quality of Service - (50.0%) | 47.3% | 21.6% |
| 3 | Better Value for Money - (47.2%) | 13.5% | 52.7% |
| 4 | Timely and Efficient Service - (46.7%) | 10.8% | 55.4% |
| 5 | Transparency - (45.9%) | 12.2% | 37.8% |
| 6 | Convenience - (45.4%) | 20.3% | 52.7% |
| 7 | User Experience - (35.2%) | 9.5% | 67.6% |

Note: Only top 7 factors important for customers (from Voice of Customer Survey) are considered for the comparative view of traditional and non-traditional firms' experience

Question: "How important are the following factors when working with your financial services provider"?

Question: "Which type of firm do you think generally provides a better experience to the customers on these factors"?

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Voice of Customer Survey, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Figure 3.2: Executives' View of FinTech Firms (%), 2016



Note: The chart represents the percentage of executives who have opted for strongly agree/agree
 Question: "Please indicate your agreement with these statements about non-traditional/FinTech firms?"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

However, executives may be overestimating the success of non-traditional firms in delivering better customer experiences (see "Traditional Firms Still Hold Some Competitive Advantages", page 14). For example, executives overwhelmingly believe FinTechs are doing a better job of providing transparency (37.8%) compared to traditional firms (12.2%). Customers, however, view traditional firms as doing better.

Executives are aligned with customers in the view that traditional firms are outperforming FinTechs in the area of greatest importance to customers — security and fraud protection (74.3% versus 5.4%). Traditional firms also view themselves as excelling in the second-most important area to customers, better quality of service (47.3% versus 21.6%).

Traditional Firms Increasingly View FinTechs As Partners

Given the wide range of views, it follows that traditional financial institutions are still coming to terms with whether FinTechs should be viewed as threats, potential partners, or blips on the radar. A majority of executives (76.7%) see opportunities for partnerships with FinTechs, allowing traditional firms to leverage FinTech expertise without engaging in expensive in-house development (see Figure 3.2). Eduardo Vergara, Head of Payments Services at Silicon Valley Bank, noted, "Partnerships are going to be absolutely critical. FinTechs have very strong products, but need scale and access to clients. On the other hand, banks have the scale and the clients, but struggle to build compelling products. With the right model, this can be a win-win".

This type of thinking represents a significant departure for traditional firms, which initially regarded FinTechs only as competitors.



Financial services firms should focus on the things they do well and realize the gaps that have to be filled, and they can take FinTech partnerships for filling the gap"




— Alex Sion
 Co-founder of Moven and now the Executive Director of Mobile Banking at JPMorgan Chase

Another large segment (53.7%) favors the idea of outright FinTech acquisition, an approach that gives traditional firms control over how to integrate new technology into its products and services. The acquisition approach, however, is not fool-proof. "For every acquisition that does do well, there are many more that fail, in any industry", said Hardeep Walia, Founder and CEO of Motif Investing. He called acquisition "a very expensive strategy for innovation", adding, "In the financial services industry, there is much more regulation and tons of restrictions that make acquisitions a higher risk proposition".

There remains a continuum of attitudes toward FinTechs, with 43.1% of executives agreeing that FinTech firms pose a significant threat. At the same time, more than one-fifth (22.4%) say FinTechs will not survive on their own.

Certainly, the role FinTechs play is likely to evolve over time. A banking executive at our London roundtable noted, *“FinTech 1.0 was all about disrupt and destroy the banking system. 2.0 is all about collaboration, while 3.0 will be something of a hybrid model”*. This hybrid strategy is already being adopted by a few organizations.



We have a three-part strategy: There are some applications and technologies that we will build ourselves, there are some where we are going to partner with FinTech companies and then there are some where we are going to both build and partner”




– Adam Carson
Managing Director, Digital Strategy & Partnerships, Global Technology at JPMorgan Chase

The good news is that the end result, whatever it may be, is likely to be better than what came before. Close to two-thirds of executives (62.7%) agree that FinTech firms are setting the bar higher for the entire industry.

As traditional firms respond to the FinTech challenge, there is strikingly little consensus in actual approach. Though a majority of firms view FinTechs as potential partners, traditional firms are pursuing partnerships with FinTechs (60.0%) and developing their own in-house capabilities

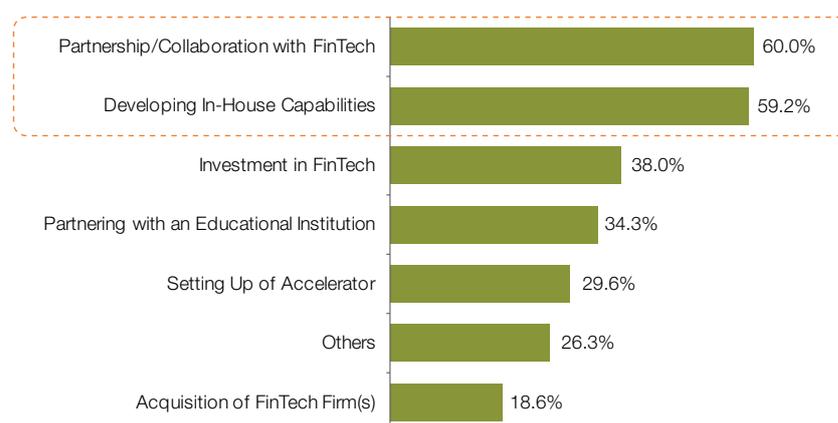
(59.2%) in about equal measure (see Figure 3.3). As a part of developing their in-house capabilities, some large firms have also started their own version of FinTech firms e.g., ING Direct which is the digital arm of ING. Investment in a FinTech is the next-most popular activity (38.0%), though most institutions are stopping short of actually acquiring a firm. More than half of executives say they view FinTechs as good acquisition targets, but only 18.6% say they are actually pursuing an acquisition.

Other approaches include partnering with educational institutions to research and test new technologies (34.3%) and setting up accelerators to nurture the growth of innovative ideas (29.6%). Many firms, including DBS Bank, are taking a mixed approach. *“FinTechs (and start-ups) are great resources to partner with and in the last 12 months we have partnered with, acquired, or licensed over 10 FinTech companies”*, said Neal Cross, Chief Innovation Officer, DBS Bank.

Progress on Innovation Slow at Traditional Firms, Despite High Confidence

Traditional firms may be laying the groundwork to address the challenges posed by FinTechs, but they continue to struggle in producing results. On the positive side, most are starting from a place of confidence. Forty-four percent of executives are very confident they have the right strategy in place to address FinTechs, while another 43.0% are moderately confident. The remaining 13.0% do not trust their strategy, a fact that will make it much harder for them to achieve success (see Figure 3.4).

Figure 3.3: Firms’ Activeness in Various Approaches of Applying Innovation (%), 2016

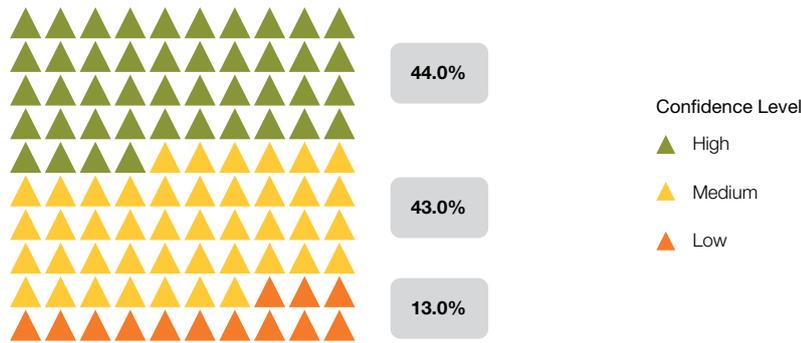


Note: A firm is considered active if the executive has given the response as 6 or 7 on a 7-point scale

Question: “How active is your firm in the following approaches to applying innovation”?

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Figure 3.4: Executives' Confidence Level in their Strategy to Address the Challenges Posed By FinTechs (%), 2016



Note: High represents the percentage of executives who are very confident or confident; similarly, medium – somewhat lack of confidence or neither confident nor lack of confidence or somewhat confident; low – lack of confidence or total lack of confidence
 Question: "How confident are you that you have the right strategy in place to address the challenges posed by FinTech related disruption?"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Despite the high rate of confidence, most firms are not skilled in fostering innovation, muting their ability to address FinTechs. Only a small fraction (2.8%) say they have achieved the ideal of embedding innovation into their cultures, and only 9.7% say they are proactively pushing innovation (see Figure 3.5). The greatest percentage (29.2%) say they have moderately structured initiatives in place, while another 22.2% call their initiatives well-structured.

The more institutions can make innovation a standard part of the way they do business, the better positioned they will be in relation to FinTechs.

Results in Innovation Not Yet Measuring to Effort

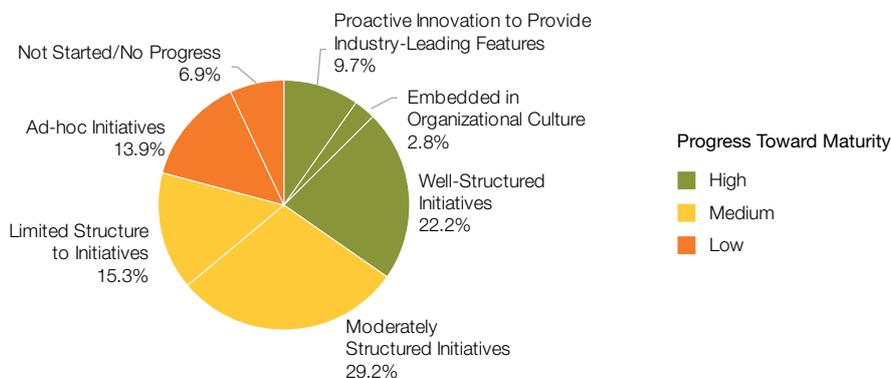
For the industry as a whole, effectiveness remains a challenge. Firms that are actively applying innovation are not necessarily effective in doing so. In fact, our

research shows that the areas in which firms are most active (partnering with FinTechs and developing in-house capabilities) are not reaching a commensurate level of effectiveness (see Figure 3.6). As the pace of FinTech disruption picks up, institutions may find themselves falling farther behind, despite their efforts to advance.

The next step beyond applying innovation is to achieve results, a goal that requires enterprise-wide adoption and cultural change. Along this parameter, traditional firms have noted they are even less effective. More firms (36.4%) say they are very effective in applying innovation, than they are in achieving results (10.0%) (see Figure 3.7). Numerous factors are hindering their success, ranging from the resistance of staff to a lack of long-term vision, to a dearth of metrics linking innovation to benefits.

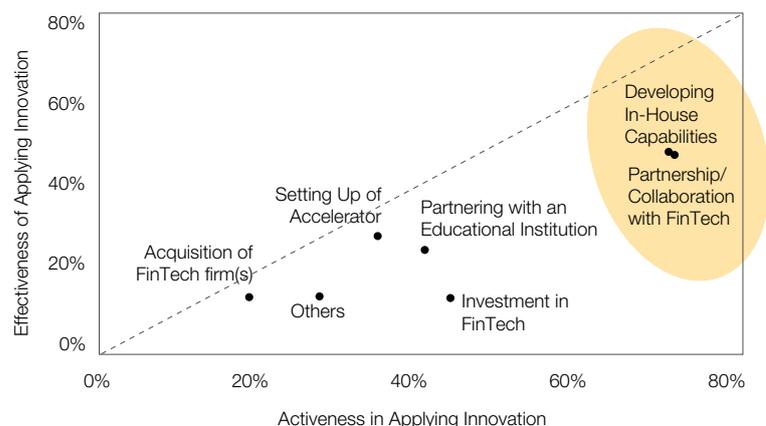
Low success in achieving effective innovation could leave traditional firms at a loss in the face of FinTechs. As an executive at our London roundtable noted,

Figure 3.5: Progress Made by Organizations in Implementing FinTech Strategy (%), 2016



Question: "Based on the progress being made by your organization on addressing/implementing FinTech strategy, where are you placed on the overall journey?"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Figure 3.6: Correlation between Firms' Activeness and Effectiveness in Applying Innovation, 2016



Note: Activeness represents the firms that have replied as very active or active and effectiveness represents the firms that have replied very effective or effective
 Question: "How active is your firm in the following approaches to applying innovation"?
 Question: "How effective have these approaches been in applying innovation and achieving results in your firm"?
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

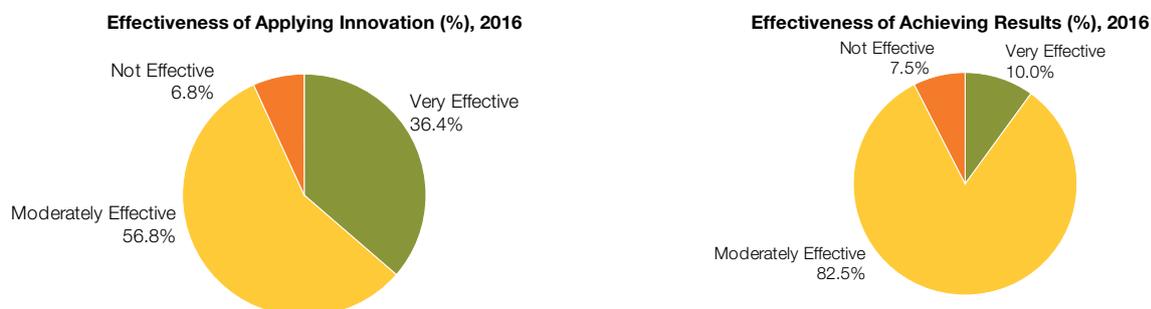
"You only need one FinTech company to come up with a different business model, where they say I will make my money in a completely different way". To compete with this type of thinking, traditional firms must embrace a new type of culture.

One of the most concrete ways to move forward in implementing a FinTech strategy is to put executives with strong technology backgrounds into leadership positions. Such executives are necessary to deploy advanced technology, seen as central to fueling innovation. Executives agree almost universally (89.5%) that Big Data and Analytics will have an impact on their business and operating models, mostly by helping them to improve the customer experience through more personalized service. Also top of mind are cloud computing, automated advisory

solutions (robo-advisors), Internet of things, and blockchain, with more than half of executives citing these technologies as having strategic importance.

With cloud computing, institutions can optimize their resources, reducing the cost of product development while also improving how quickly they respond to customer demands. Automated advisory solutions provide financial advice, especially portfolio management services, with minimal human intervention, making it possible to provide investment services at lower cost to a mass market. Blockchain, one of the most talked-about and rapidly expanding technologies in financial services, lets institutions support fast and secure transactions, in a decentralized, transparent environment.

Figure 3.7: Effectiveness of Applying Innovation and Effectiveness of Achieving Results (%), 2016



Question: For both applying innovation and achieving results, very effective represents executives who gave the response as 6 or 7 on a 7-point scale, likewise moderately effective for 3 or 4 or 5, and not effective for 1 or 2
 Question: "How effective has your firm been in applying innovation and achieving results with respect to your expectations"?
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Risk-Averse Cultures Squash Innovation

Traditional financial institutions recognize that they need to prioritize innovation to keep up with FinTechs. But the risk-averse nature of financial services means that most firms have created cultures that prize the status quo. Of all the obstacles holding institutions back, culture is foremost among them, with 40.3% of executives saying theirs is not conducive to innovation (see Figure 3.8). *“If you are a big bank and you have got 100 to 200 years of history, revolutionary changes are very hard because you’re putting all that on the line”*, noted an executive in our San Francisco roundtable.

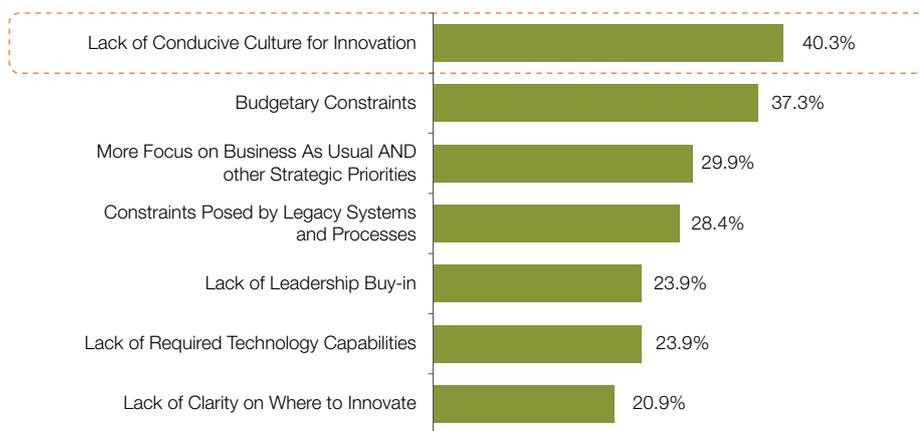
Budgetary constraints also play a role in thwarting innovation, according to 37.3% of executives, as does the ongoing focus on business-as-usual efforts (29.9%). *“A challenge for the traditional firms is to be able to separate maintenance. A lot of the budgets are focused on keeping the lights on, keeping the system running. And there is actually very little budget on long-term, big-bets kind of innovation. Hence, a lot of it is incremental innovation”*, said Hardeep Walia, Founder and CEO of Motif Investing.

Another factor holding back traditional firms is the presence of legacy systems (28.4%). Though legacy systems are widely recognized as being inflexible, constraining

innovation, few organizations are contemplating replacing them, given the cost and risk of doing so. In short, the burdens and demands of running the existing institution are causing innovation to sputter across the industry. *“The layering of cost, the raising of expectations, the speed of change — all that needs to be kept up with by the traditional banks, while managing the operations of today”*, noted a bank executive at our London roundtable this summer.

Innovation is also hard for institutions to accept, philosophically. First, it represents a shift in the way the industry as a whole has approached technological advance. *“Digital transformation over decades has been focused on making processes cheaper rather than making them better”*, said an executive at our London roundtable. As a result, the industry has sought generic one-size-fits-everybody banking experiences, even though customers now favor having an element of control over their financial relationships, this executive said. In addition, most financial institutions operate on strict return-on-investment principles, and do not look favorably on technologies that do not provide clear payback. With the links between innovation and profit difficult to discern in some cases, buy-in from top management can be problematic, an issue cited by 23.9% of executives.

Figure 3.8: Factors Holding Back Traditional Firms while Implementing Innovative and FinTech Capabilities (%), 2016



Note: The numbers in the chart correspond to the percentage of executives who have allocated more than 4 points (out of 20 points) for a factor
 Question: “What are some of the factors that might be holding you back while addressing/implementing innovative and FinTech capabilities?”
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Some of the findings from our analysis were further corroborated by a latest talent survey from LinkedIn.¹⁷ Some of the key highlights from the survey are:

- Nine in 10 Financial Services leaders/executives say it’s important for their business to catch up to industry technological changes over the next year (89%)
- Given the imperative to catch up technologically, nearly all of these leaders think it’s important that their business address certain key talent challenges in 2017 – whether hiring (95%), retaining (97%), or developing (94%) top talent with key skills.
- For Financial Services business leaders faced with the challenge of hiring new talent in 2017, two-thirds cite competition for talent with key skills as a top obstacle (67%) – this is twice as likely to be cited vs. any other obstacle mentioned.
- Overall, analytics/data science is the top type of skill sought by Financial Service leaders in 2017 (42%) – and those who are looking for this or any other tech skill are twice as likely to hire new talent with the skill rather than train existing employees.

17 2016 LinkedIn survey of 512 leaders at large financial institutions in the U.S.



Blockchain Finds Numerous Applications in Financial Services Industry

Blockchain technology, which forms the backbone of the popular virtual currency bitcoin, is increasingly penetrating the financial services industry. Ongoing trials and proof-of-concepts by various organizations are indicating that it can bring a number of benefits to the FS Industry. These include:

- Simplified Ecosystem via Common Ledger:** Using blockchain, a single common ledger can be utilized to share the transaction information across multiple intermediaries, reducing potentially proprietary systems and reconciliations
- Security from Fraud and Tampering of Records:** Since all the transactions have to be authorized by validators (Proof of Stake) or miners (Proof of Work), and each record has a reference to a previous record, the transactions cannot easily be forged or tampered, which makes blockchain a very secure database
- Decentralized and Transparent Operations:** As blockchain is a decentralized system and transactions can be monitored in real-time, it significantly boosts the transparency and redundancy of operations
- Increased Speed:** Due to streamlined operations, accounts of all the parties are updated simultaneously, thus increasing the speed of transactions versus traditional solutions that require batch processing or post-transaction reconciliations
- Low Cost of Operations:** The data is digitally distributed among all participants in a common format, which drastically reduces proprietary implementation and maintenance cost compared to traditional central ledgers

Blockchain technology has numerous applications in the financial services industry, including enhanced transfers of digital assets, identity management, and better management of reward and loyalty solutions. Blockchain also has multiple and unique applications across various domains with use cases such as notarization services and letter of credit processing in banking, payment authorization and clearing in payments, and automation of claims processing and peer-to-peer insurance in the insurance industry.

While these blockchain applications are gaining traction across all domains, the payments domain is an early adopter with use cases such as payment authorization, clearing and settlement, and cross-border payments (see Figure i). Capital markets use cases are the second most relevant after payments, with applications around the digital issuance, transfer, and management of various capital markets asset classes (private securities, bonds, swaps, and OTC derivatives) high on the minds of executives.

Blockchain solutions related to payments are expected to be implemented the most quickly. The most relevant use cases (payment authorization, clearing and settlement, and cross-border payments) are expected to be implemented the earliest (in the near future), along with micro payments (see Figure ii). Applications that span all the domains, including employee reward solutions, token-based royalty solutions, and identity management solutions, are expected to be implemented within the next three years. In insurance, blockchain applications such as claims processing and peer-to-peer insurance are also expected to be implemented within the next three years.

Figure i: Relevance of Blockchain for Use Cases in FS Industry (%), 2016



Note: a) Percentages represent the executives who have given ratings 6 or 7 on the scale of 1-7. b) Only top 9 relevant use cases are shown here, other use cases having lesser relevance included claims processing, syndicated loans, peer-to-peer insurance, and employee reward solution

Question: "For the use of blockchain in the financial services industry, how relevant are the following use cases"?

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Finally, applications for banking and capital markets are expected to be implemented only after three to five years.

While FinTech firms are leading the way in developing blockchain applications, traditional firms are also participating. As an example, R3, a financial innovation firm, is leading a consortium partnership with more than 45 of the world's leading banks to design and deliver advanced distributed ledger technologies to the global financial markets. Some of the leading financial institutions of the world, including Banco Santander, Bank of America, Barclays, BBVA Compass, JPMorgan Chase, Goldman Sachs, and Royal Bank of Canada, are a part of this group.¹⁸

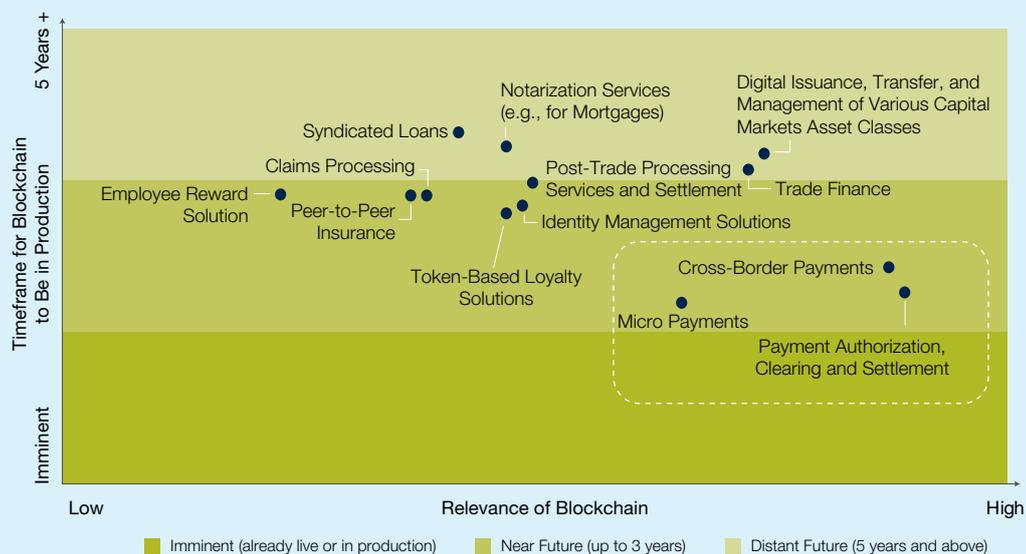
The Hyperledger Project is another example of a collaborative effort. This project, which aims to create a cross-industry open standard for distributed ledgers, is led by the Linux foundation and leverages many open-source best practices. Some of the member firms include ABN Amro, ANZ, BNY Mellon, State Street, Wells Fargo, CME Group Exchange, and Deutsche Börse Group Exchange.¹⁹

Individual firms are also undertaking their own collaborative efforts in blockchain. Banco Santander, for example, has partnered with Ripple for cross-border payments and UBS has partnered with IBM to replicate complete international trade transaction processing using the Fabric blockchain from Hyperledger.²⁰ Some firms, such as Barclays, have labs that are open for coders, businesses, and bitcoin and blockchain entrepreneurs. The Barclays accelerators provide mentoring for blockchain enthusiasts and a chance to work with the bank on specific projects.²¹

Despite all the activity, the industry as a whole is still struggling to understand blockchain. Most financial services executives (60.0%) display only a basic understanding of blockchain technology and less than 10.0% feel they have a very good understanding, according to our survey. As a result, some firms are instituting training on blockchain and others, including BBVA, Citibank, Santander, and Nasdaq, have also been active in investing in blockchain startups to leverage their expertise and knowledge.

One of the most important application of blockchain technology remains the area where it all started – bitcoin. Stored in digital wallets and used for transactions similar to bank accounts, bitcoins have made transactions (especially international remittances) cheaper, as there are no intermediaries. Now, ongoing innovations are advancing bitcoin further. Recent developments, such as bitcoin scaling events and the merging of segregated witnesses (SegWit), are expected to increase scalability, and sidechains for bitcoin exchanges has been released, which could considerably reduce the transaction time of bitcoin transactions. With increased scalability, bitcoin could be used to execute micropayments securely at much lower cost. In addition, crypto currencies such as Dash, Monero, and ZCash, are emerging to resolve privacy issues around bitcoin. As the scalability and privacy of bitcoin transactions increases, and costs come down, bitcoins have the potential to cause big disruption in how financial transactions are made in the future.

Figure ii: Relevance Vs Timeframe for Blockchain to Be In Production, 2016



Note: Timeframe for blockchain to be in production represents the sumproduct of all the executive responses and their chosen timeframe
 Question: "What is the likely timeframe you expect for each blockchain-related solution to be in production at your firm?"
 Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

18 "Meet the 25 Banks Working With Distributed Ledger Startup R3", CoinDesk, accessed October 2016 at <http://www.coindesk.com/meet-the-25-banks-working-with-distributed-ledger-startup-r3/>
 19 "Blockchain, near real-time projects and collaboration: viable approaches", Finextra, accessed October 2016 at <https://www.finextra.com/blogposting/13252/blockchain-near-real-time-projects-and-collaboration-viable-approaches?>
 20 <https://www.hyperledger.org/about/members> accessed October 2016
 21 <http://www.barclaysaccelerator.com/> accessed October 2016

Inculcating Innovation Requires Methodical Approach

- **Adopting a step-wise approach for applying innovation – for example, using the four stage Capgemini framework of Discover, Devise, Deploy, and Sustain – can be useful in helping institutions spread innovation throughout the organization.**
- **Securing senior leadership commitment, having a clear vision, and adopting a more innovative culture will be important for addressing disruption.** Nearly two-thirds of executives (64.0%) cited leadership buy-in as a key success factor in applying innovation.
- **Financial services firms need to be prepared for prospective future disruptive scenarios such as entry of BigTech or platformification, which can lead to fundamental shift in the industry.** The current disruption represents the beginning of a journey, requiring firms to be agile in their response.



Spreading Innovation Step by Step

There is no easy fix to overcoming the financial industry's resistance to innovation. Nor is the future easy to predict. With enough resources, traditional firms could become innovation machines, beating FinTechs at their own game. Or FinTechs may continue to grow, perhaps even by acquiring banks. BigTechs, like Google, Amazon, or Facebook, could decide to enter the fray, curbing the ambitions of both FinTechs and traditional firms.

Addressing the overall challenge will require institutions to act in a step-by-step manner, keeping the strategic goal of fostering innovation top of mind.



When organizations look to apply innovation, they must make sure to get the basics right first. Before organizations create an excellent delivery, deposit or loan innovation, it is imperative to first ensure that the most used current applications are simplified and designed for today's mobile consumer. Don't boil an ocean. Think big, start small, but just move forward in innovation efforts"



– Jim Marous
Co-Publisher of The Financial Brand

Capgemini has devised a four-stage framework as part of its Applied Innovation Exchange (AIE) program,²² aimed at propagating innovation throughout the institution (see Figure 4.1). This framework is a good example of taking a step-wise approach and with the help of this framework, many firms, including financial services firms, have been able to successfully apply innovation and achieve results. One of the recent example is Euroclear and Anne Swaelus, Managing Director Delivery Excellence ADM Division of Euroclear Group noted, *"Capgemini has a structured and collaborative approach to innovation which allowed us to*

leverage their strategic insight, industry research and SME network to identify and deliver new business and technology solutions. The focus on innovation in our relationship has enabled us to launch new services like mobile apps for our customers, apply big data analytics to various business use cases, and integrate partner solutions into our ecosystem". Firms that are able to cultivate environments that encourage innovative action will be better positioned to address whatever challenges the future brings.

Discover

The first stage, discover, requires institutions to develop robust feedback mechanisms to gather information from customers and employees, and identify pain points. Even at the risk of gathering an overwhelming amount of data, institutions should undertake a comprehensive effort to assemble and assign value to information from all stakeholders. Once the data is gathered, a formal process for analyzing it is necessary to provide actionable insights. In addition, a dedicated team with a focus on innovation should be deployed to assess the insights, find relevant solutions, and present the findings to senior management. *"We are looking at the emerging FinTech ecosystem very closely and our goal is now to work with that ecosystem to deliver better services to the customers"*, noted Adam Carson, Managing Director, Digital Strategy & Partnerships, Global Technology at JPMorgan Chase. On top of internal inputs, institutions also need to stay abreast of the latest industry trends, including cues from other industries on how they are applying the newest technologies.

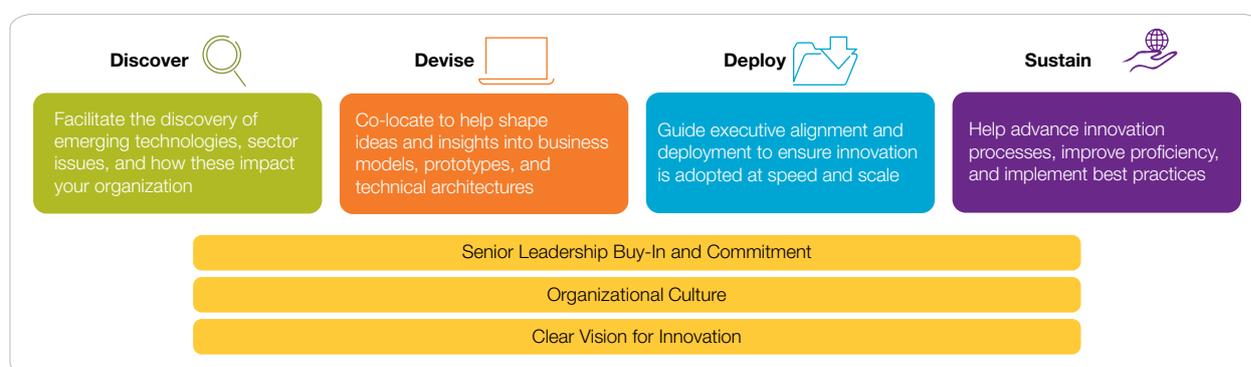


We have a team that examines every new technology, as we need to continually scan the horizon for what the next killer app, killer device, and killer channel is going to be"




– Stuart Rubinstein
Senior Vice President of Digital Solutions at Fidelity Investments

Figure 4.1: Capgemini's AIE Framework to Effectively Apply Innovation



Source: Capgemini Financial Services Analysis, 2016; Capgemini Applied Innovation Exchange Framework, <https://www.capgemini.com/applied-innovation-exchange>

22 The Applied Innovation Exchange is Capgemini's global platform designed to enable enterprises to discover relevant innovations to contextualize and experiment with them within the specific industry; The AIE Framework adds structure to the innovation process and helps instruct people on how to apply the latest methodologies and tools

Devise

Once the discover phase is complete, institutions need to devise a master plan for spreading innovation, taking into account their firm's internal strengths and weaknesses. A primary task is to identify a talented leader, with both vision and experience as well as strong technology background, to execute the plan.



You must have strong technology expertise within the leadership team of the bank. If you do not, you are going to fail"

– Chris Skinner
CEO, The Finanser and Author,
ValueWeb

This person may come from within the organization, or from another firm or industry. Given the wide range of technologies now being used in financial services, firms should also determine whether outside partnerships could add value.

The innovation team should work in concert with and in proximity to business partners to better identify and solve problems, and more quickly bring innovation to existing business models. *"The innovation team has to stay connected to the businesses because there needs to be a cultural shift"*, said Jim Marous, Co-Publisher of The Financial Brand. Though several teams or sites may operate as an innovation unit, all must have a common vision, and be aware of the bigger picture beyond their individual contributions. Firms also need formal processes for iterative development and rigorous testing, which will help eliminate unwanted surprises and ensure customer acceptance. *"We have to test innovation in a practical way and with a disciplined approach"*, said an executive in our New York roundtable, adding, *"How we scale and monetize and expand the capabilities is important"*.

Deploy

Key to deploying innovation with speed and scale is to get buy-in from all levels of management. Line managers and business unit heads will be crucial to the success of any rollout, so they must be fully engaged and well-informed of the benefits that can accrue to them. The same goes for employees, who may be struggling with changes to their job descriptions. It is important to create a culture of innovation and implement it effectively.

As Neal Cross, Chief Innovation Officer, DBS Bank noted, *"We take a strategy where an innovation group is not confined to being a custodian for innovation or creator of new products, and we decided to turn the whole bank into an innovation group"*. They not only need to be fully trained, but also have an understanding of why learning new routines will be worth the effort. Neal further added, *"The important thing is that you need to make a marketing push [for driving innovation culture] and you need to make it fun and different [for employees]"*. Firms can also win points with employees by setting up formal procedures for registering their issues and grievances.

Once the communications tasks related to deployment are complete, firms have a big decision to make. They can either roll out their solution in a phased approach – by geography, customer segment, or some other parameter. Or they can introduce it to all customers at once. Choosing the second option requires firms to be fully confident of the scalability of the solution, as well as the level of customer support behind it.

Sustain

The work is not done once the solution is rolled out. By adopting certain pillars of collaboration, traditional firms will have a better chance of optimizing the distinct culture and competencies of their FinTech partners. A successful collaboration strategy begins with selecting the right partners, focusing on those that complement the existing firm's strengths, while also bridging gaps in technology or expertise. Equally important is to choose the right engagement model, whether it be as an investor, acquirer, partner, or accelerator.

Firms also need to make a concerted effort to maintain the energy and pace of a start-up culture. This may require ring-fencing the innovation team and partners from the rest of the organization, allowing them to continue to sharpen their innovation skills in an environment where failure is accepted as part of the process. To encourage the spread of innovation throughout the organization, leaders should formulate incentives to recognize and reward good ideas. Finally, firms must regularly assess customer reactions and expectations to gain useful information in the development of future innovation.

This framework provides a broader approach to effectively implement and sustain innovation in the organization, and must be combined with a serious commitment to making a cultural shift. Having a clearly laid-out vision will help executives in motivating the staff to create a favorable environment for innovation. An organization with committed workforce and specified goals is much more likely to succeed in its innovation endeavor compared to the ones adopting ad-hoc approaches.

Culture Change Begins at the Top

While having a methodology for building and sustaining innovation can improve the odds of success, other factors are also necessary. The most important of these, by a large margin, is having support and buy-in from top leadership, cited by 64.0% of executives (see Figure 4.2). Neal Cross, Chief Innovation Officer of DBS Bank, noted, *“A big difference in banks that will thrive in the digital disruption rather than survive is that they generally will have a lower level of ego among executives, i.e., those who want to listen to different viewpoints and spend time with technology and startup companies”*. More than half of executives (50.7%) said shifting the culture of the organization toward innovation was important, while another 29.3% cited having a clear strategic vision and plan.



You have to be willing to go outside the norm and to be willing to redefine your product completely and start from scratch. We don't redefine but start from what the customers need. The second piece is you have to be able to invest in the talent and the culture”




– Yolande Piazza
COO, Citi FinTech

Even with all these success factors in place, challenges to collaboration persist. Picking the right partner is key, but fraught with potential difficulties. As budding businesses, many FinTechs are reliant on venture capital funding, which could become inconsistent or even dry up. As loosely regulated start-ups, FinTechs are also vulnerable to business continuity issues, such as disasters or security breaches that could put their businesses at risk. FinTechs also face difficulties in scaling up their processes, as well as compliance risks, given the gaps in regulatory scrutiny between traditional and FinTech firms.

Institutions with leaders who are committed to embracing innovation will be best positioned to pursue collaboration with FinTechs (see Figure 4.3). We identified several pillars of an effective collaboration strategy, including choosing the right partner. To this end, firms need to take into consideration the gaps that need to be filled and the specific expertise that a partner would bring. There are many ways to partner with FinTechs, including through acquisitions, accelerator funding and innovation labs, and traditional firms should spend time determining which approach best suits their needs.

Organizationally, traditional firms may need to ring-fence the FinTech unit from the rest of the institution to preserve a spirit of innovation. Other organizational considerations include developing rigorous testing environments and imposing a clear separation from legacy processes. Firms should also ensure that the customers' data is not exposed to vulnerabilities. Finally, institutions in collaboration mode should strive to be continuously open to outside input and ideas, even those that come from other industries.

Figure 4.2: Key Success Factors for Applying Innovation (%), 2016



Note: The numbers in the chart correspond to the percentage of executives who have allocated more than 4 points (out of 20 points) for a factor
Question: “What are the key success factors on the innovation being applied by your company for the FinTech Strategy”?

Source: Capgemini Financial Services Analysis, 2016; Capgemini and LinkedIn WFTR Executive Survey, 2016

Figure 4.3: Traditional Firms and FinTechs — Pillars of Collaboration Strategy



Source: Capgemini Financial Services Analysis, 2016

Disruptive Forces Loom for Traditional Firms

FinTechs are not the only challenge that could face traditional firms, making it even more imperative that they develop a strong foundation in innovation. BigTech firms, such as social media, e-commerce, and telecommunications companies, represent a potentially even bigger disruptive force in financial services since they have superior data processing capabilities and none of the challenges FinTechs have in winning over customer trust. *“It is a matter of time before the BigTech companies will be a threat to both the traditional firms as well as the FinTechs, since they have the scale and deeper personal relationships than banks to make inroads”*, said Hardeep Walia, Founder and CEO of Motif Investing. *“Our role model isn’t FinTechs”*, says Mariano Belinky, Managing Partner, Santander InnoVentures, adding, *“There is lots to learn from FinTechs and they can bring new ideas, opportunities and approaches. But when banks look at institutionalizing innovation at scale, it is the large technology companies that offer the most ideas in their programmes and approaches for us to learn from”*. Non-bank players like Google and Facebook have bigger infrastructures, a banking executive at our New York roundtable agreed, *“They are only a charter application away from game over”*.

In time, traditional firms could be reduced to providing back-end core processing services to FinTech firms that would own the front-end customer relationship. This platformification of financial services could potentially deliver a superior customer experience, but would result in a much lower profile for financial institutions, especially as additional types of services, say e-commerce, get bundled into the platform. *“There is a platform layer that would rise above banking, and organize commerce and experiences”*, said Alex Sion, a co-founder of Moven and now the Executive Director of Mobile Banking at JPMorgan Chase. Some of the big FinTech firms can also play the role of providing these services or platform to the firms that own the

front-end customer relationship. As an example, PayTech firms such as Paytm in India and Ant Financial in China, which also have a part of direct front-end customer relationship including mobile wallets, are already offering platform services to customer-facing firms such as Alibaba.

Another disruptive force on the horizon is blockchain technology, which eliminates the need for financial institutions to serve as trusted intermediaries, one of their most vital roles. With blockchain, the use of cryptography, rather than a central authority, makes it possible for users to execute and verify transactions over a network. The more blockchain becomes a reality, the less need there will be for financial institutions to serve as custodians in a wide range of transactions.

Banking on Identity, an innovative concept, has the potential to further disrupt the financial industry landscape by eliminating even the need for currency. Instead of exchanging cash for goods, people would be able to define what is valuable to them, create it, and hold it on their phones. It could be a voucher for a free coffee or a service that a person is willing to offer. This approach, which is being adopted by Secco, turns customers into the custodians of their own data, eliminating the problem of having to design the perfect data model.

 It is obvious to any enterprise architect that the customer should hold their own data, rather than spread it around everywhere and have inconsistencies”

– Chris Gledhill
CEO and Co-Founder, Secco





Closing Thoughts from Our Executive Steering Committee



You need to motivate the entire organization to change. Just building a couple of products that are cool, is fundamentally not going to be enough to rewire your organization for the new world of digital and the wave of disruption that we are going to see. For the executives, my recommendation is to lose their ego... and listen to people ten levels down below you, listen to the students, listen to the FinTech companies ... and blend that with the wonderful experience that you have. Finance is too hierarchical and we need to move more towards [being] a technology company"

– Neal Cross, Chief Innovation Officer, DBS Bank



In order to apply innovation, firms should have a [well defined] vision and a mission, which will help to really inspire people to work towards that. The mission should not be just to create value for shareholders, it should also be around creating positive impact or some evolutionary change or something that gets people excited"

– Chris Gledhill, CEO & Co-Founder, Secco



Barclays has formed a dedicated Group Innovation Office with the mandate to drive open innovation into the bank. Our services are focused on identifying and attracting the brightest minds in the industry, both internal and external, to co-create the future of financial services. It's important for us to have a platform where we take business problems and match them to the disruptive minds in FinTech to experiment and accelerate innovation within Barclays. That we can not only be faster and cheaper than doing it internally but by failing fast, can quickly learn and pivot back. Barclays partnership with Techstars in creating the world's leading FinTech Accelerator is a good example where we have applied innovation into the organization"

– Lubaina Manji, Director, Head of Rise & Group Innovation, Barclays



Underlying all FinTech and innovation initiatives is the need for enhanced data analytics across the organization. The consumer wants their primary financial institution (PFI) to know their financial goals and to partner for better financial outcomes. This requires a level of data capture and analytics not found in the majority of banking organizations today. More importantly, the application of these insights must go beyond great internal reports to impact the consumer directly. It is time for financial institutions to move beyond just talking about great customer experiences and delivering on the promise of personalized financial relationships"

– Jim Marous, Co-Publisher, The Financial Brand



Sometimes we forget that organizations are really just groups of people that share a common goal. It's the people who ultimately innovate, and we have to ensure that they understand the need to question the status quo and to take intelligent risks. For a long time, corporations have focused on having a unique and "strong" culture. What this often translates to is that there is essentially a way things are done in the company that employees adhere to steadfastly. While having a strong cultural identity is a good thing, we need to make sure that we are not crowding out dissenting voices that might be rightfully questioning the way things are done. We need to make sure that we convene truly diverse teams – in terms of gender, race, background etc. – and that we empower them to challenge the way things are done"

– Kara Segreto, Mktg & Comms Lead Center for Next Generation Growth, Prudential



For the incumbent financial services institutions there is a real challenge right now to digitalize all of their operations. The urgency of doing that is becoming more and more obvious every day as we see the open sourcing of FS with institutions using apps API, Analytics, Blockchain, Mobile – all the technologies that are currently enabling FinTech companies to open source everything. If a bank does not step up to that challenge then it will disappear"

– Chris Skinner, CEO, The Finanser and Author, *ValueWeb*



With change comes opportunities, and partnering with FinTechs can be the best defensive strategy for banks... It also requires a different way of innovating and developing products. The way FinTech providers work and what banks need to do is to very quickly put out a minimum viable product, and then very quickly iterate on it, based on real client feedback"

– Eduardo Vergara, Head of Payments Services, Silicon Valley Bank



[Organizations should] run a pilot very quickly. Some of our large firm partners have taken 2-3 years to go to market. I understand there are delays with regulators, but there are simple models where you start small, get a pilot, get it out of the door. Those are the kind of things you can do to spur up [innovation] and get some of the enthusiasm of getting products out of the door quickly"

– Hardeep Walla, Founder and CEO, Motif Investing





I doubt there is a financial institution anywhere in the world that has not yet woken up to the radical changes in the expectations of its customers, or the increase in competition from new and unexpected quarters. At Santander we believe these circumstances provide the opportunity to reinvent how we best serve and satisfy our customers. Inside the bank, transformation is embedded in the whole Group, and is especially inspired by the Innovation team. My own area, Santander InnoVentures, is part of the broader Innovation group. Our role is to find and invest in transformative technologies and businesses which may help us deliver new services. Our colleagues in Innovation also cover areas including research and development on emerging technologies, development of pilots, and the exploration of new business models and partnerships. Our collective role is to ignite and facilitate innovation across all of our businesses. This multi-layered approach – involving FinTech's as potential partners and suppliers – aligns well with the findings of the report. Only one thing is certain: change lies ahead. Only those banks that organize themselves to create and deliver innovative services will prosper”

– Mariano Belinky, Managing Partner, Santander InnoVentures, Santander



The transformation imperative that all insurance companies are facing is not just about process optimization and cost effectiveness. It is first and foremost about being more customer-centric and adapting to new risks and new ways to underwrite them. Through a smart use of technology, insurance carriers must solve their clients' pain points and serve their needs across all touch points. Only then, could they become a life partner, instead of simply be a payer”

– Guillaume Cabrere, CEO, AXA Lab Silicon Valley, AXA



FinTech has significantly reduced the product development lifecycle in Wealth Management, and with that the industry continues to evolve at an unprecedented rate. This change drove us to evaluate our own product development process, and in many cases, led us to partner with outside FinTech firms. We strongly believe the winning model is personalized advice provided by our industry leading Financial Advisors, combined with effective use of technology. Our opportunity to use technology is tremendous. We believe this evolution will continue to enhance our Financial Advisor's ability to focus on what matters most: putting clients first”

– Naureen Hassan, Chief Digital Officer, Wealth Management, Morgan Stanley



FinTech showed the financial services industry that true innovation is possible, and that technology can not only enable cost reduction but can also create unique selling propositions (USPs). Financial services firms need to act and think more like FinTechs, otherwise they will be dead in 5-10 years. At the same time, FinTech firms must deliver true innovation and through that true disruption. However, majority of FinTechs today are not fulfilling that. FinTechs will also need to understand how banks are acting and thinking, otherwise they will be dead in 1-2 years”

– Matthias Kröner, CEO & Chairman, Fidor Bank AG



Seismic shifts in the client journey from social, mobile, and digital technology are upending every aspect and business process within financial firms, from sales to product development to customer service. To succeed, innovation can't be exclusively owned by a CMO, CIO, or innovation team. Digital innovation has to become everyone's job, from the CEO and board down to advisors on the front line"

– Clara Shih, CEO & Co-Founder, Hearsay, and Author of *Social Business Imperative*



The intersection of finance and technology is both a complex and fascinating intertwining. Its implications and ramifications for the future of people and the world are about to undergo exponential change. The World Fintech report is an attempt to provide insight, illumination, inspiration and imaginative possibilities to this world of possibilities"

– Rishad Tobaccowala, Chief Strategist, Publicis Groupe



Journey Continues for Traditional Firms

The growing collaboration between FinTechs and financial institutions is the logical mid-term outcome of a fairly common pattern. Traditional firms, at the top of their game, fail to respond to the seemingly insignificant efforts of smaller, nimbler firms, until those firms manage to attract the attention of customers. Using disruptive technology and intent on gaining market share, the smaller firms continue to draw customers, forcing the hand of traditional players. At some point, constraints on both sides become evident, in this case with FinTechs realizing the challenges of profitably serving large amounts of customers while also protecting their privacy and security, and operating within regulatory boundaries. Traditional firms, meanwhile, understand that they have plenty to learn, but also valuable experience and expertise to provide.

Having reached this point, the financial services industry is at a crossroads. The exact nature of the collaboration between FinTechs and traditional firms remains uncertain, with firms exploring all types of possibilities, including partnerships, acquisitions, financial stakes, talent development, and idea exchange. Equally uncertain is the nature of future competition, with BigTech companies looming as potential adversaries and the possibility that some FinTechs will choose to operate on their own. Regulators are also expected to play an increasingly important role in enabling the new dynamics among various stakeholders in the industry and pushing the firms towards providing better customer experience through use of financial technology capabilities. In addition, technology continues to evolve, with blockchain capabilities introducing a wealth of opportunities and challenges. Financial institutions must take aggressive action to ensure they are prepared for whatever the future may hold.



Methodology

Capgemini and LinkedIn Voice of the Customer Survey, 2016

A global survey of customer attitudes toward financial services including banking and lending, payments and transfers, investment management, and insurance forms the basis of the first annual *World FinTech Report*. Capgemini and LinkedIn's comprehensive FinTech Voice of the Customer Survey polled over 8,000 financial services customers in 15 countries: Australia, Belgium, Canada, China, France, Hong Kong, India, Japan, Netherlands, Singapore, Spain, Turkey, U.S., UAE and UK.

The survey was administered in August and September, 2016 in collaboration with Phronesis Partners. The survey sought to gain deep insight into customer preferences, expectations and behaviors with respect to Moments-of-Truth transactions with their financial services providers which include traditional and FinTech firms. The survey questioned customers on their importance and general satisfaction with their financial services provider, the importance of specific touchpoints for executing different types of transactions, and their satisfaction with those transactions, among other factors. The survey also questioned customers on their likelihood to stay, refer a friend, and purchase another product from their financial services provider, why they choose to stay with/change, and their behavior towards using provider's products/services.

Capgemini's Proprietary Customer Experience Index (CEI)

The responses from the global FinTech Voice of the Customer Survey, which analyzed customer experiences across a number of data points, provide the underlying input for our proprietary CEI and positive experience. The CEI and positive experience calculates a customer experience score that can be analyzed across a number of variables. The scores provide insight on how customers perceive the quality of their interactions with their financial services providers which include traditional and FinTech firms. They can be dissected by demographic variables, such as country, age, investable assets, and comfort level with technology. The result is an unparalleled view of how customers regard their financial services firms, and the specific levers firms can push to increase the number of positive experiences for customers. The experience provides a foundation for these firms to develop an overall retail delivery strategy that will increase satisfaction in ways that are most meaningful to customers.

The information contained herein was obtained from various sources; we do not guarantee its accuracy or completeness nor the accuracy or completeness of the analysis relating thereto. This research report is for general circulation and is provided for general information only; any party relying on the contents hereof does so at their own risk.



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