Winning with Digital in Consumer Financial Services:

Lessons from Leaders and Laggards

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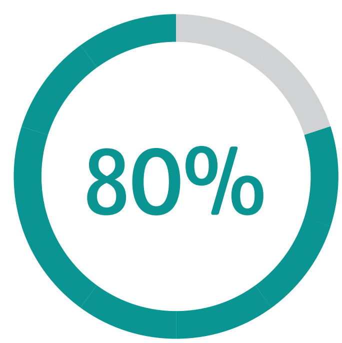
THE RACE IS ON

The race is on among large financial institutions to gain a competitive edge through the application of digital technology. An increasingly large and demanding group of customers is watching, energized by the promise of immediate access from any technology platform, frictionless transactions, and comprehensive service and support. To win their allegiance and reap the broader business benefits that digital promises, financial institutions are trying to address the entire "surround system" of digital (mobile, social media, analytics, and the cloud), integrate it into strategy and operations (across the front, middle, and back office)—and ultimately steal a march on rivals.

How are they faring? To find out, Marakon and Heidrick & Struggles recently surveyed the chief digital officers (CDOs) of 10 financial institutions that together cover about 80% of US households, conducting in-depth interviews with seven of these executives. We also drew on our extensive experience working with leaders throughout the industry. We wanted to learn how they are meeting the challenges of digital in the following four areas that are critical to success:

1. **Strategic intent:** Establishing clear linkages between digital initiatives and corporate strategy, building an integrated front-to-end approach to meeting client needs, and evaluating digital performance through key measures of success
2. **Digital organization:** Building a foundation on a well-defined corporate structure and culture for digital teams, with skilled and balanced talent and top-down management support
3. **Delivery approach:** Integrating emerging and legacy in-house technologies and forming external partnerships that can generate innovation and growth
4. **Capabilities:** Developing the necessary infrastructure to seamlessly connect front, middle, and back offices to gather data and deliver superior experiences for clients



We surveyed digital officers of financial institutions that cover 80% of US households.

Based on this research and our industry experience, the picture appears to be mixed. Many financial institutions are lagging in one or more of these categories, as we will detail in this report. We also offer numerous examples of firms that are getting at least some aspects of digital right. And whether your organization focuses on wealth management, retail banking, payments, or insurance and is leading or lagging in the digital race, we think you will find valuable insights here.

We conclude by providing some resources to help you on your digital journey. First we present a tool that you can use to profile your organization's digital readiness and help guide your digital design choices in the future. Then we provide a summary of best practices in each of the four areas we investigated—practices that you can put to work in your organization today.

KEY FINDINGS

STRATEGIC INTENT

Investments in digital are generally happening in isolation and are not well linked to strategy—or economic value.

Incumbent financial institutions tend to take a case-by-case view of digital initiatives, often evaluating ideas against tried-and-tested methods, such as a three- to five-year business case or net-present-value analysis on individual projects, rather than systematically taking a portfolio view with an eye toward diversification. Organizations with structured digital transformation efforts may go a step further and develop charters that require several layers of approvals based on investment thresholds. The uncertain nature of digital investments and their disruptive potential are often overlooked by traditional approaches to measuring investments.

Firms are missing the opportunity to take a portfolio view across digital initiatives.

We found limited evidence that firms, including leaders in their space, were planting enough seeds with higher risk on individual investments. Such investments, as part of a diversified portfolio, hold the potential for outsized gains on truly transformational ideas. Without those investments, firms may see only incremental gains versus the sorts of "step-change" impacts on their business models that many hope to achieve.

"Industry leadership will be defined by those companies that provide a true real-time digital experience . . . and demonstrate continual innovation."

Mike Rogers, president of State Street Corporation, as quoted in *The Globe and Mail*

Clear linkages between digital initiatives and economic value drivers are lacking.

Firms have used control groups, A/B testing, and pilots for digital initiatives, but isolating the impact of an individual initiative from market movement, competitor action, and business cycles can be tricky. Firms that do link digital initiatives to value drivers combine a strong executive focus on value at the outset with a scientific approach to measuring results on the back end. For instance, Joseph Hooley, CEO of State Street Corporation, announced a $600 million expense reduction target before embarking on a multiyear digitization program for the custodian. Five years in, the firm has achieved over $625 million in pretax savings.[1] By pegging the digitization program to a publicly stated business goal that was internally championed by the CEO, State Street realized more savings than it would have otherwise.

Digital investments are not being held to a tight standard, sometimes deliberately.

In several cases, we found firms throwing good money after bad, with pet projects often influenced by executive biases. Consider the experience of a large, multinational bank that attempted to bring a major customer service initiative to a new market after successfully launching it in a single region. The program quickly proved inapplicable to the new region, a lesson the organization fully recognized only after several years—and hundreds of millions of dollars in wasted investment. Digital project planning that includes intermediate milestones, targets, and agreed-upon expectations about incremental gains can help avoid such problems.

"Competitive response" or "buying optionality" is often used as justification for digital investments.

Just as there is a lack of linkage to economic drivers, digital investments tend to be driven by competitive response and the desire to experiment with technology that could go mainstream, rather than a clear linkage to an overarching strategy. Take the example of the ubiquitous robo-advisor offerings. Charles Schwab introduced its Intelligent Portfolios product in March 2015 and was quickly followed by E-Trade, Fidelity, UBS, and Wells Fargo Advisors, all of which announced partnerships or new products within a span of 12 to 18 months.[2] The time frame fits typical product development cycles at medium to large brokerages. While others were rushing to mimic the emerging players, Vanguard took a capabilities-backed approach that combines a human advisor with its automated investing platform. New customers complete the typical risk assessment and time horizon questionnaire but must also speak to a Vanguard advisor before the plan is set in motion.

The weight of incumbency has made financial institutions inflexible, and they are finding it hard to become client-centric.

Silicon Valley start-ups have raised customer expectations about experience and design. Mobile apps of banks and brokerages sit right next to the Uber and Postmates apps on customers' smartphones. Customers increasingly expect financial services providers to offer the same simplicity and convenience that they get from their ride-hailing and delivery services; however, the legacy business models, systems, and processes of financial services firms get in the way of providing such an experience. Financial institutions generally seem to model their digital initiatives based on current assets and capabilities rather than on client needs.

"Client-back" thinking is largely missing in digital strategy.

Building out digital initiatives based on current assets and capabilities implicitly limits possibilities. New entrants begin without such limits. Meanwhile, for financial institutions, understanding client needs and their ties to the digital journey is sometimes an afterthought. Goldman Sachs is a notable exception. The firm created its new Marcus by Goldman Sachs personal loan offering based on extensive research with more than 10,000 potential customers. Marcus was designed specifically to address customer pain points with existing products—up-front fees, customization of loan amounts, payback term and rate, and access to live, dedicated loan specialists.[3]

Legacy infrastructure is impeding the delivery of the desired client experience.

Start-ups are able to begin with the client experience and build an infrastructure uniquely designed to address it. Start-ups also benefit from having fewer product offerings, simplifying their infrastructure requirements. Incumbent financial institutions have built their

"BBVA is probably the first US bank in more than 15 years to thoroughly modernize their systems."

Robert Hunt, senior research director at CEB TowerGroup, as quoted in *Forbes* technology, distribution, and process infrastructure for multiple products, often retrofitting along the way. And industry consolidation has resulted in a patchwork of existing infrastructure from various organizations, further impeding the ability to deliver on the desired client experience.

Relatively few financial firms have committed to a front-to-back retooling in the context of digitization.

Though firms clearly understand the need to upgrade existing infrastructure, they often balk at the cost. Individual initiatives are unable to support the financial burden of significant upgrades, and firms do not have the processes in place to reasonably impose a "tax" that spreads the investment over a set of initiatives. Investing in front-to-back retooling can truly help differentiate a firm from the pack. In 2011, BBVA Compass invested in a complete overhaul of its core banking system at a cost of $360 million. As a result of the upgrade, transaction updates have gone from batch to real time. The new core banking back end has enabled real-time payments. BBVA now has a "360-degree customer view," with each customer having one file that is consistent across all his or her accounts.[4] By completely revamping the front-to-back office systems, BBVA consolidated and unified its legacy systems to deliver better customer value.

FRONT

▼

MIDDLE

▼

BACK

Investing in front-to-back retooling can help differentiate a firm.

The burden of regulatory compliance is overrated as a reason for not moving with clarity and speed.

The burden of regulatory compliance is real and ever increasing. However, financial incumbents are shying away from creatively solving for the regulatory requirements, often accepting the objections of their legal, risk, and compliance (LRC) people as gospel, resulting in a suboptimal client experience. Some financial institutions, however, have brought their LRC colleagues closer to the design process in order to better educate client experience teams on regulatory requirements. For example, Fidor Bank saw in regtech start-up IDnow an opportunity to rethink its "know-your-customer" and anti–money laundering processes, which require high-security verification of customer identity. The bank quickly overcame compliance hurdles by incorporating IDnow, which is compliant with the regulations in relevant jurisdictions, into its digital operations. Instead of having to verify their identity through faxes, "snail mail," or a trip to the bank, Fidor's customers can validate their identity entirely online via a video chat application on a smartphone or tablet.[5]

KEY FINDINGS

DIGITAL ORGANIZATION

Consumer financial institutions are challenged to adapt their talent strategy and culture to attract high-caliber digital talent at all levels.

For financial institutions, hiring the best digital talent is no simple feat. People equally fluent in business and technology are in short supply, and the competition for them is fierce. Financial institutions are competing against not only each other but also established technology companies and start-ups. Consequently, financial firms need to determine how best to modify their culture and strategy in a way that overcomes the structural hurdles that make the acquisition of digital talent so difficult.

Fintechs provide talented people more autonomy and greater opportunities to make an immediate and tangible impact.

Digitally focused employees at incumbent financial institutions are often several steps removed from the "action." To compete with fintechs and other technology companies for high-caliber digital talent, financial firms must make such talent feel that their work is meaningful and innovative. RBS, for example, partnered with Entrepreneurial Spark (ESpark) to launch an internal incubator named the Hatchery—a business accelerator for start-ups that can use space in RBS's Edinburgh headquarters to focus on their businesses. Next door is Open Experience—a technology solutions center where RBS employees come together with customers and entrepreneurs from the Hatchery to "work quickly in small, agile teams in immersive

"If you thought hot digital talent wouldn't want to work for a bank, you'd be wrong. Just ask our hires from eBay, Skype, Amazon, Asos, and Disney."

Gemma Williams, former head of people programs in Lloyds Banking Group's digital unit, as quoted on Finextra.com design sprints on a particular problem or opportunity," says Kristen Bennie, head of Open Experience.[6] Start-ups get the opportunity to test their business ideas with real-world customers, while RBS employees learn to adopt the start-up mind-set.

Financial institutions have not widely adopted start-up norms of dress, workplace mobility, trendy office space, and the like.

Digital talent has come to expect an informal, comfortable work environment of the kind often found at fintechs although rarely at financial firms. Marcus by Goldman Sachs is, again, an exception. Fashioned as a "start-up within the bank," the unit sports a separate, open floor plan in the company's New York headquarters with the requisite "living room" and popcorn machine.[7] Goldman Sachs believes that providing a separate, start-up-like environment will encourage digital talent to take a second look at a place traditionally known for its buttoned-up culture.

Top management at financial firms is not inclined to upset the status quo and self-disrupt.

Incumbent players tend to have clearly defined organizations and an understanding of hierarchy and scope within each function. This is in stark contrast to the flatter, more entrepreneurial work environment demanded by top digital talent. Evolving the structure risks upsetting the status quo. But some firms are bucking the trend and seeking ways to disrupt the established order. Citigroup recently launched Citi FinTech as a lean, flat, and integrated group tasked with building Citi's mobile app of the future. In less than a year, Citi FinTech designed, developed, and launched a new mobile experience for its premium Citigold customer segment and is now working to deliver expanded mobile functionality across all customer segments.[8]

Incumbent firms naturally attract low-risk-return seekers.

A certain DNA is needed to survive in a corporate setting and innovate within its constraints. This naturally limits the range of individuals who tend to be attracted to, or succeed at, incumbent firms. To better appeal to a wider, more risk-taking digital talent pool, financial institutions will need to evolve their incentive structures and internal cultures to reward innovation and creativity.

The business/technology divide is alive and well as the functional nature of digital teams creates tensions with lines of business.

The line between financial services products and digital products needs to be clearly defined. Further, accountability needs to be clarified between recently created digital roles such as chief digital officer, chief data officer, chief innovation officer, in addition to chief information officer and chief technology officer. Stand-alone versus embedded digital organizations empower the team, yet don't necessarily ensure role clarity across the enterprise.

Inconsistency in incorporating digital operations has created internal struggles among business leaders—and between business leaders and digital leaders.

Integrating digital operations can help create value by providing multichannel capabilities for customers or by helping divisions share data across the firm. However, each business unit in a firm may differ on how best to implement a digital strategy, resulting in tensions between the digital function and lines of business. Citi has helped resolve such tensions by decentralizing digital integration. The global bank created a groupwide center of excellence populated by digital specialists who advise individual business units, helping them build tools to digitally transform their businesses. Each division of Citi is allowed to make its own strategic decisions as to how to counter the challenge from fintechs and how much to spend to do so. Over time, the digital efforts are being gradually integrated with the units, but not until each individual business unit first notches a certain number of successes.

Accountability is unclear across a multitude of roles.

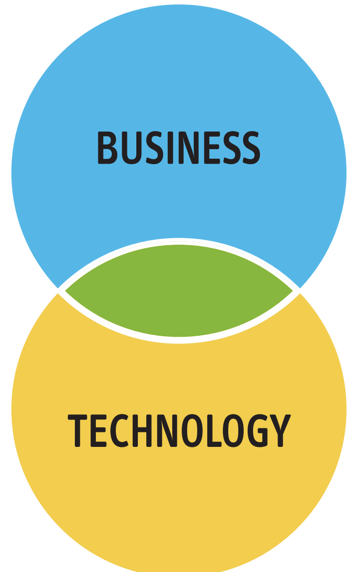
The rise of the role of the chief digital/data officer across the financial services sector indicates the growing importance of data management. Accordingly, many firms have created a CDO role with clear accountability for the information strategy and management of enterprise data and advanced analytical capabilities. The relatively recent hire of A. Charles Thomas as Wells Fargo's first ever chief data officer has already paid dividends for the bank.[9] Wells Fargo has now put in place many digital initiatives that have trained employees on technology usage, improved the customer digital experience, and established proper data governance.

"I sit as the leader of the enterprise data council. We manage finance and risk and collaborate to come up with policies and guidelines on data. The CDO owns the data governance of the enterprise."

A. Charles Thomas, chief data officer at Wells Fargo, as quoted on CIO.in

Given the limited pool of talent fluent in both business and technology, recruiting remains a major challenge.

Many financial institutions quietly admit that they cannot compete for the best and brightest digital talent because of a short supply of qualified candidates and the competitive offers made by technology companies and industry peers. Lloyds is successfully challenging that notion through its Graduate Leadership Program, launched in 2015. This innovative rotation program hires graduates from technical disciplines, such as software engineering, to learn and work in digital banking areas such as digital proposition development, e-commerce, fraud, and security.[10] Lloyds has also made significant investments in digital talent, including hiring a head of digital delivery in 2012 and then extending her scope to include the bank's innovation arm and its Digital Centre of Excellence. In 2016, Lloyds moved up to 63rd on the Guardian UK list of the 300 best companies to work for, surpassing Facebook (72nd) and McLaren (68th).[11] Lloyds was also the only bank on LinkedIn's top 25 list of best companies in the United Kingdom for attracting and keeping top talent.[12]



Finding combined business and technology talent is a challenge.

Business leaders are unwisely bypassing digital/ technology teams to directly engage with vendors and fintechs.

Business managers are often solicited directly by vendors and start-ups with the promise of fast results. This often leads to side projects that are not governed by the central digital team. Our interviews and experience suggest that financial services firms that successfully leverage their digital resources are able to strike better fintech partnerships and receive higher customer scores for their digital offerings than those who elect to ignore their own technology resources and capabilities.

KEY FINDINGS

DELIVERY APPROACH

Financial institutions are struggling to keep up with the pace set by fintechs and the advent of new technologies.

Agile as a delivery approach is evolving, and firms are experimenting with various interpretations of it to see which ones work. Further, the sheer scale of innovation in the space makes it hard for an organization to effectively vet the useful ideas and pick the ones that may be appropriate for their businesses. A wait-and-watch approach can be useful, except it puts the company at risk of being late to the party.

Financial incumbents are only now beginning to leverage agile development.

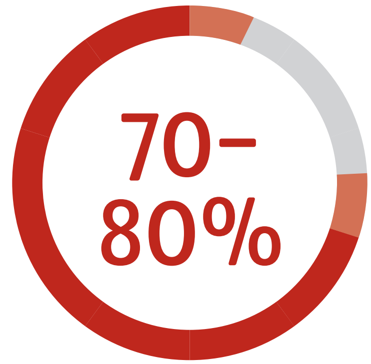
The ability of fintechs to focus on identified opportunities and rapidly go to market sharply differentiates them from financial incumbents. However, financial incumbents are beginning to turn to agile development to shorten delivery times and incorporate ongoing input from the market. In an agile environment, team members work in cross-functional "scrums" focused on customer-ready deliverables in "sprints" that take place on a scale of two to four weeks. Components of value are delivered as they are ready, rather than the traditional approach of releasing large chunks of functionality over a longer period of time. This also allows the sprints to quickly incorporate changes in direction. Over 50% of BBVA Compass's product development is now agile, with 150 agile scrums comprising more than 1,000 employees getting enhancements to market faster.[13] Too many financial institutions, however, still rely on the waterfall model of product development, which results in longer, less flexible development cycles.

"The most relevant reason [for agile] is we're producing more technology for our customers, and our customers have rapidly transforming demands."

Jose Olalla, head of business development at BBVA Compass, as quoted in *American Banker*

Newer approaches are seen as fit for bolt-on, front-end user experience (UX) changes, not for front-middle-back retooling.

A majority of digitization efforts are focused on improving the front-end customer experience. While this is an important area, and one in which incumbents lag, adding value for customers will require more than "UX-ing" an existing product. It demands a comprehensive rethinking of existing products and services to resolve intractable customer pain points. In order to drive sustainable changes to the customer experience, financial institutions would do well to take a front-middle-back view—automation of back-office processes, for example, that fulfill customer requests in the front office.



70–80% of start-ups fail.

Incentives are not designed to encourage iterative development or innovation.

Financial institutions have developed incentive structures that stifle innovation by imposing significant penalties on failure to deliver and sharing rewards only when risks pay off. To address this issue, some players in the space are creating innovation groups within the larger organization that break away from the general culture of risk aversion and operate with a start-up-like mentality.

The emerging technologies and fintech space is cluttered with start-ups that will fade away in a couple of years.

A 2011 Harvard Business School study found that 70–80% of start-ups fail.[14] The fintech space appears to be no exception. The hottest start-ups that seem the most poised to challenge financial incumbents one year can find themselves reconsidering their business models the next. Only 12% of start-ups made both the 2015 and the 2016 list of top 50 fintech innovators.[15] Emerging technologies can also fall out of favor as barriers to leveraging them in applications emerge. Every year, Gartner publishes its *Hype Cycle for Emerging Technologies* report to profile the most talked-about technology trends. In any given year, about 10 such technologies are at their height of media attention. (Current hot topics include drones, micro data centers, connected homes, blockchain, and machine learning.) Fewer than 10% of the technologies appearing on the 2013 list[16] have thus far made it into mainstream applications.

Partnerships with fintechs and new economy players are not living up to expectations.

With a growing number of start-ups seeking to disrupt the industry by bringing new technologies to bear, incumbents are facing increased pressure to partner with these nimble fintech players. However, despite the calls for incumbent-fintech partnerships reaching a fever pitch, the results of these partnerships have often proven to be a mixed bag.

Partnerships lack shared goals or mutual accountability.

Financial incumbents often see partnerships with fintechs as attractive options to fill a gap in technical expertise or to get to market faster. However, these arrangements tend to be structured as vendor relationships, without shared goals or mutual accountability. A true partnership requires a strong view on what synergies exist between the incumbent and the fintech with regard to goals, assets, and accountability and that the partnership be clearly linked to value drivers for both parties.

Partnerships ultimately lack longevity due to management changes, emerging conflicts of interest, and other factors.

As fintechs evolve, they clarify business models, bring in new management, and have their fair share of growing pains. Financial incumbents often place bets on partnerships that are hard to sustain as the partners' motivations evolve. Consider Fidelity Clearing & Custody's strategic alliance with Betterment Institutional, designed to refer Fidelity's Registered Investment Advisor (RIA) clients to Betterment for access to digital advice. Fidelity ended this yearlong partnership in part because Fidelity launched its own robo-advisor and concluded that RIA clients were better served by having a Fidelity robo-advisor platform that better integrated with the clearing and custody platform.[17]

"As a leading Indian bank, we are committed to driving industry change by investing in internal resources but also by partnering with determined, young fintech companies, making it a win-win proposition for all."

P.S. Jayakumar, CEO, Bank of Baroda, as quoted on Let's Talk Payments

Financial incumbents and fintechs are not equal partners.

With their deeper pockets, financial incumbents often tip the scales of the power-sharing relationship with their fintech partners. With the incumbent able to dictate the nature of the relationship, partnerships can begin to look one-sided. For instance, banks seem to use peer-to-peer (P2P) lenders as channels to assist in typical risk transformation rather than as genuine partners. When LendingClub encountered increased regulatory scrutiny over putative conflicts of interest in its investment decisions, bank "partners" quickly abandoned the relationship to limit reputational damage.[18]

Fintechs are pivoting from direct-delivery strategies to white-label arrangements.

After early successes, fintechs are finding it hard to go it alone. While top newcomers in the space are continuing to pursue a B2C strategy, other entrants are struggling with brand and client acquisition issues. Many are turning to "B2B2C" models. This does not mean, however, that their capabilities aren't useful to financial incumbents. For example, though SigFig had trouble competing with the better-known robo-advisor fintechs Wealthfront and Betterment, it has been rejuvenated by partnership agreements to develop robo-advising capabilities for UBS and Wells Fargo.[19]

"[Partnering with large institutions] puts us in a good position to reach a much larger audience."

Michael Sha, CEO of SigFig, as quoted in *InvestmentNews*

KEY FINDINGS

CAPABILITIES

The back office is viewed as a significant area of weakness yet still suffers relative neglect.

Firms recognize the need to look at the back office more comprehensively, but digital mandates are largely focused on the front office, with some integration layers or piecemeal renewal in the back. Ground-up redesign of capabilities that will enhance the client experience or enable new products is rare. Separately, efforts to build enterprisewide capabilities, versus business unit–specific capabilities, are hard to govern.

Firms are using an integration layer such as service-oriented architecture (SOA) as a crutch rather than retooling the back office.

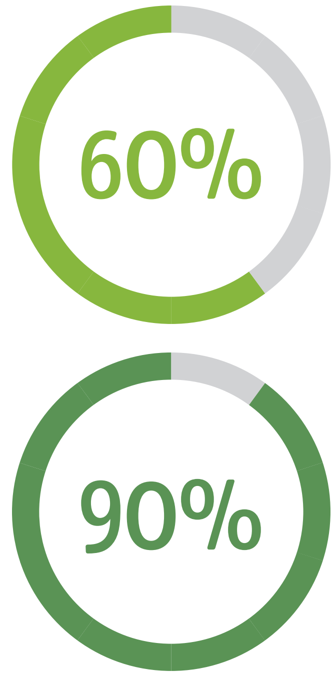
Back-office systems of incumbent financial institutions are largely built with decades-old infrastructure used for critical functions—payments, settlement, clearing, and so on. In fact, these systems are riddled with inefficiencies, driven in large part by manual processes, including pen-and-paper tracking. For many firms, back-office retooling often proves to be a daunting proposition. Not for Standard Chartered. It has set out to respond to changes in global supply chain ecosystems by using digital technologies to streamline back-office processes. Partnering with Ripple, Standard Chartered has implemented faster and more transparent cross-border payments using distributed ledger technology and is already showing improved transaction times.[20]

"There's a point where you're going to say, 'OK, no more workarounds. Let's get the job done.'"

Manolo Sánchez, former CEO of BBVA Compass, as quoted in *American Banker*

Back-office renewal is happening piecemeal, with efficiencies largely coming through cost savings from mainframe hardware improvements.

Restrictions on fee income, increased compliance requirements, and the consumer shift to digital have driven banks to retool the back office to find operational efficiencies. Departing from the norm, BBVA Compass invested heavily to migrate to an entirely new back-office system in order to improve customer targeting, curb wasteful spending, and improve the time for opening an account. The new BBVA core system now brings together 26 different customer information systems such that each customer has just one file for all his or her accounts.[21]



The source of 60% of customer dissatisfaction originates in the back office, but 90% of technology budgets are spent on maintaining legacy systems.

Digital teams are limited to working on the front end or with analytics rather than having end-to-end responsibilities.

Some firms have put their digital teams solely on projects involving the front office or data analytics, given their high visibility and customer-facing nature. According to a recent Capgemini study, 90% of technology budgets are expended on maintaining legacy systems, and 60% of the sources of customer dissatisfaction originate in the back office.[22] Firms should therefore consider rededicating their digital talent to the full spectrum of end-to-end digital needs in order to provide the best possible customer experience.

Firms are not seeking to add back-office functionalities with an eye toward transforming the customer experience.

Though improving the front-end user interface may offer quick wins for the digital team, firms can improve the customer experience mostly by improving back-end functionality. For instance, prospective borrowers find the mortgage process to be notoriously unfriendly. In response to the many aggravations of the mortgage process—cumbersome document management systems, opaque rate information, constant back-and-forth communications, and so on—Quicken Loans designed its Rocket Mortgage product to automate the entire back office for mortgage approval. The firm reduced time to approval from weeks to minutes, increasing transparency to the customer and enhancing the client experience through a seamless web/mobile interface.[23]

“Data as an asset” is still not ready for prime time.

Firms are generating and capturing more customer data than ever. Transactional, behavioral, demographic, predictive, and third-party data are readily available but continue to be disjointed and hard to use. Bolt-on solutions are being developed to generate answers for specific questions; however, the holy grail of the 360-degree view of the customer remains elusive. Further, most firms we spoke to are not using data to answer broader strategic questions—their orientation is generally “data first” in an attempt to put existing data to good use.

“If we have data, let’s look at data. If all we have are opinions, let’s go with mine.”

Attributed to Jim Barksdale, former CEO of Netscape Communications

Firms are investing heavily in deriving customer insights, but benefits have not been fully realized.

Though banks have poured resources into developing a complete view of their customers across platforms and services, few have succeeded in obtaining exhaustive client data. Recently, OneUnited Bank bucked this trend by embarking on a data-driven effort to increase sales, speed up decisions, and respond more efficiently to customer problems by creating a unified view of the customer. Using the Salesforce App Cloud, OneUnited created an application that consolidated individual silos of data such as call logs, online chat, and online web forms into a single profile. With a much broader view of the customer—including a better understanding of basic demographic, transaction, and interaction data—the bank can provide better service and improve its bottom line.[24]

Separate interfaces are being used for inquiry-only access to data and are not linked to transaction systems.

Incumbent financial institutions often struggle to efficiently connect customer data with transaction systems. By contrast, DenizBank developed its own powerful Teller Dashboard that merges customer relationship management (CRM) data with predictive analytics and data mining to better understand what customers and tellers need. The dashboard’s load-balancing capabilities enable customers to use the bank’s mobile app to select the branch with the shortest wait times. The dashboard has reduced operational efforts by 63%, increased annual sales 216%, decreased transaction times 58%, and increased overall employee and customer satisfaction.[25]

Data is still not widely or effectively used to answer broader strategic questions.

When assessing the creditworthiness of a potential customer, credit card issuers use 10 or more variables. Traditional lenders, however, are not effectively using enough data to assess a potential customer's credit risk. Brazil's Nubank is a striking exception. Its digital platform crunches 2,000 to 3,000 data points to get a more accurate view of an individual's credit risk. The platform also helps keep overhead costs low, enabling the bank to charge zero fees and monthly interest rates of 7.75%—about a third of the Brazilian national average.[26] Consequently, over 90% of Nubank's customers pay their balance in full each month.

A 360-degree view of the customer is elusive.

Suppliers of distinctive analytics solutions are numerous, yet the space is hard to navigate.

The supply for distinctive analytics tools for financial incumbents is substantial and growing as more players enter the market. Out of the top 100 fintech innovators identified by KPMG and H2 Ventures for 2016, 16% were identified as "data and analytics" or "regtech" companies.[27] The challenge for financial incumbents is to identify analytics partners that can significantly add value to their existing offerings or can help fill current capabilities gaps. For example, Digital Reasoning uses machine learning to monitor internal communications within firms in order to identify potential insider trading and other ethics violations.[28] By offering a real solution to an existing gap (the ability to identify illegal trading), Digital Reasoning is now seen as a partner of choice for many bulge-bracket financial firms and has helped prevent several illicit incidents.

CHARTING A PATH

BEGINNING THE JOURNEY

As our findings indicate, there is no single best approach to digital. Each firm will have to begin its journey based on where it stands now—in terms of culture, talent, resources, and institutional preferences. While there is no one best way to approach new technologies, maximizing return on investment in digital will require concerted action along all four dimensions: strategic intent, digital organization, delivery approach, and capabilities. Piecemeal approaches are likely to bring only incremental gains, while simply throwing all available resources at the challenge risks an organizational train wreck. Those firms that strike the right balance—of commitment and culture change, the institution and innovation, top-down direction and bottom-up empowerment of talent—will be best positioned to stay ahead in a race that has no finish line.

Charting a path to becoming a world-class digital firm.

There is no one right way to address strategic intent, digital organization, delivery approach, or underlying capabilities. Choices should be linked to a set of beliefs around what works best for your firm given its strategic aspirations and legacy, while recognizing that those choices could evolve over time.

The following figure outlines design choices and a continuum in each of the four critical areas we examined in this report: strategic intent, digital organization, delivery approach, and capabilities. You can use it to profile the current state of your organization's approach to digital and, over time, to help guide your design choices in light of their effectiveness in driving value through digital.

What is your firm's orientation toward these design choices for digital?

STRATEGIC INTENT

DIGITAL INVESTMENTS

Stand-alone	Portfolio
Makes stand-alone digital investments, without a vision for what technologies and business models will shape the organization now and in the future	Makes digital investments across the risk-return spectrum—in mature and emerging business models, using current and emerging technologies

INITIATIVE APPROACH

Technology-backed	Client-backed
Thinks "technology first" and designs digital initiatives to derive value from new technologies, without linkages to specific client pain points	Thinks "client first" and designs all front-middle-back digital initiatives to deliver clear benefits to clients, such as convenience, speed, and transparency

DIGITAL ORGANIZATION

TALENT POOL

Monolingual	Bilingual
Talent pool has technology-savvy and business-literate individuals but lacks a critical mass of bilinguals to drive technology-enabled change	Talent pool in the organization, especially within digital initiatives, is literate in both the business issues and the possibilities enabled by new technologies

TEAMS AND CULTURE

Separated	Connected
Digital initiative teams are not well coordinated with the business, with a subculture that feels separate from the core business	Digital initiative teams are well linked to the business, with a unified culture that fosters innovation, dialogue, and shared ownership of outcomes

DELIVERY APPROACH

TECHNOLOGY ADOPTION

Follower	Leader
Takes a wait-and-see stance and applies mature technologies, generally within the scope of the existing business model	Leads peer group in applying new technologies to not just drive client engagement and efficiencies but also rethink the business model

DELIVERY

Build	Partner
Prefers to build in-house or engage third parties in a vendor relationship; lacks the mind-set and experience of working with partners	Strings together best-of-breed partners to deliver digital solutions, applying company resources only to fill asset and capability gaps in the ecosystem

CAPABILITIES

CAPABILITIES SCOPE

Front office	Cross-functional
Builds digital capabilities in front-office user experience, often at the expense of applying new technologies in the middle and back office	Builds digital capabilities across the front, middle, and back office, operating across the full technology stack to assemble solutions

DATA AND ANALYTICS APPROACH

Tactical	Strategic
Uses data and analytics to inform operational decisions; bases analytical approaches on market hype, for example, big data analytics	Uses data and analytics to validate strategic hypotheses; tailors analytical approaches and tools to strategic questions being addressed

Best practices in the four key areas

STRATEGIC INTENT	**Investments in digital are generally happening in isolation and are not well linked to strategy—or economic value.**	Ensure that digital initiatives impact CEO-level metrics for the business Institute an approach for assessing digital impact linked to value "to" and "of" clients
	The weight of incumbency has made financial institutions inflexible, and they are finding it hard to become client-centric.	Adopt a customer-centric approach to driving digital strategy and capability building Take a cross-functional view of digitization, highlighting the need for transformative change over time
DIGITAL ORGANIZATION	**Consumer financial institutions are challenged to adapt their talent strategy and culture to attract high-caliber digital talent at all levels.**	Acknowledge the dichotomy of cultures—digital and traditional—but establish shared goals Encourage "intrapreneurs" and treat venture arms as natural extensions of the core business
	The business/technology divide is alive and well as the functional nature of digital teams creates tensions with lines of business.	Design incentive structures to encourage collaboration and shared P&L responsibility Establish a minimum bar of literacy on business and technology at all levels through cross-training
DELIVERY APPROACH	**Financial institutions are struggling to keep up with the pace set by fintechs and the advent of new technologies.**	Ensure training for a baseline understanding of new approaches at all levels Propagate "test and learn" approaches to mainstream business applications
	Partnerships with fintechs and new economy players are not living up to expectations.	Adopt a framework and strict criteria for evaluating and working with fintech partners Ensure sustainable economics linked to partners' contributions to value creation
CAPABILITIES	**The back office is viewed as a significant area of weakness yet still suffers relative neglect.**	Automate as a precursor to a broader back-office application renewal Ensure that there is an individual who is accountable for end-to-end digital capabilities
	"Data as an asset" is still not ready for prime time.	Ensure a data strategy that links critical strategy questions to analytical decision making Explore ways to combine transaction data with customer data in real time

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