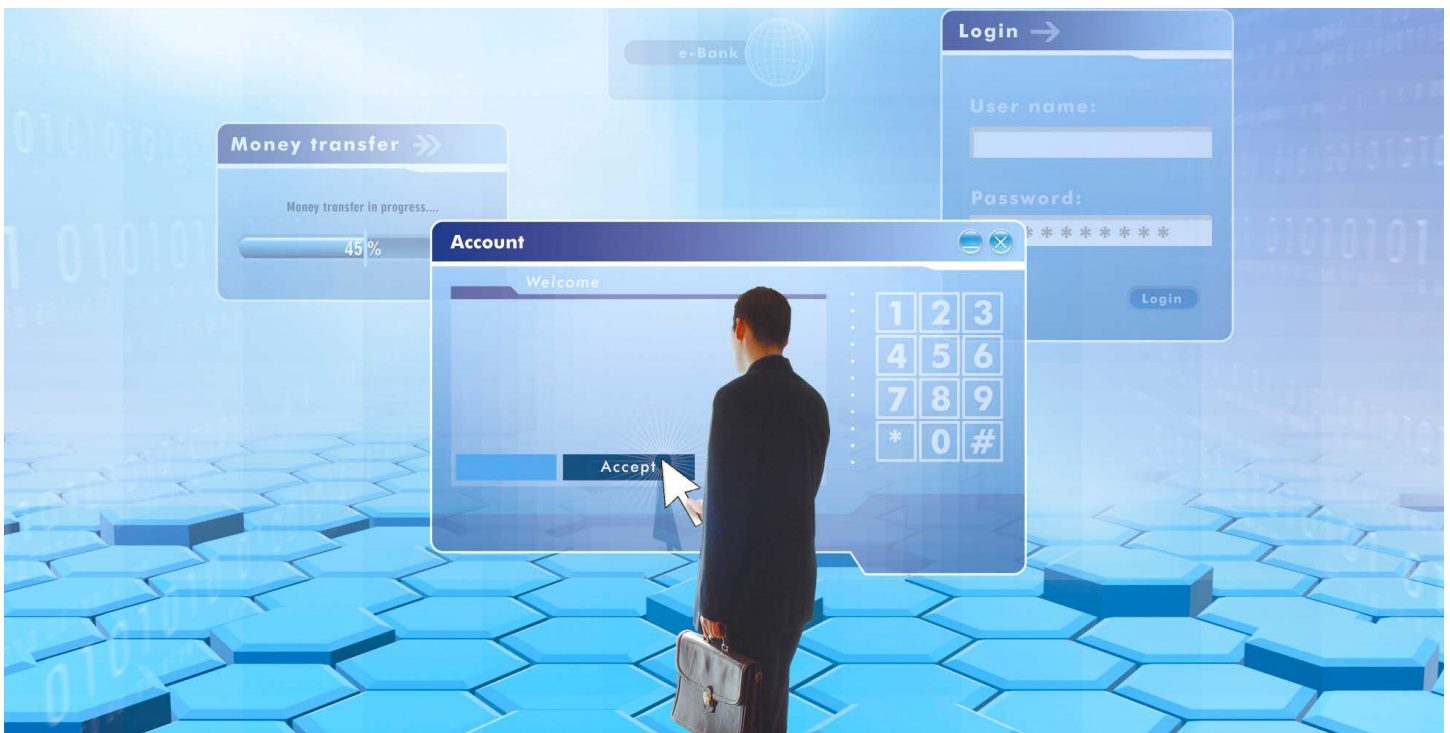




GENERATING BANKING & FINANCIAL SERVICES IMPACT

Banks reimagine the operating model of the future



There is no longer any doubt that the banking industry is facing the threat of significant disruption. Now, the critical questions are which areas, to what degree, and, most importantly, what needs to be done. Although much has been written about new models for customer engagement, in particular those championed by new, technology-focused entrants, the so-called middle and back offices with their legacy systems and processes have only just begun to come into focus.



Executive Summary

The convergence of three **digital megatrends**—mobility, software-defined enterprise, and the Internet of Things—is changing the nature of business. This convergence is creating innovation and disruption opportunities in many industries and their ecosystems, and **banking is at the epicenter**. In an industry where size has often mattered more than all else, the **investment in legacy infrastructure** is tremendous. However, with the emergence of digital technologies, many of the industry's economic tenets have changed, and the infrastructure that once served as a barrier to entry into the banking sector is now a handicap. Dozens of new, digitally enabled competitors are now selectively attacking areas of the banking sector and proving that bigger isn't always better, at least when it comes to operations that serve the client's journey. Therefore, the discussion is shifting from "How do we compete with our current competitors?" to "**How do we set ourselves to stay competitive in the age of digital banking?**"

In addition to navigating the digital revolution, banks are also trying to regain their footing under a new

regulatory regime. As a wide variety of new rules and regulations go into effect, banks must find new ways of doing business without using one of the industry's preferred methods for driving growth: leverage. The challenge laid out by Main Street to the banking industry is clear: **manage risks better** while still delivering on **customer expectations**. Banks that are reluctant to rise to the challenge are finding that their customer bases are more open to disruption from competitors that are better able to focus on end customer needs while implementing a **more proactive and agile regulatory response**.

However, despite these significant headwinds, banking industry incumbents have an opportunity to succeed by supporting their remarkable **brands, talent, capital base, and client relationships**, as well as possibly their ability to comply with regulations at scale, with a more effective, digitally enabled operating model. However, to do so, banks must be willing to **reimagine their processes across front, middle, and back office** operations in order to reap the benefits of a digital business model.

TABLE OF CONTENT

- Part 1: Why banks need advanced operating models? 4**
 - **The rise of digital technologies4**
 - Leveraging the new cost-to-serve..... 7
 - The ROI challenge.....8
 - **The new regulatory regime..... 9**
 - The effects of scale in a dynamic regulatory environment 11
- Part 2: The scope for advanced operations 14**
 - **The front office 14**
 - Technology and the customer 15
 - **The middle and back offices..... 17**
 - What are “Core” operations? The definition is changing for banks 21
 - Technology in the middle and back offices22
 - Taking process operations to the next level26
 - Organizational models27
 - **The Operating architecture of the future.....29**
- Part 3: What impact can be achieved 30**
 - **What are banks transforming?33**
 - Wealth management.....33
 - Retail banking35
 - Commercial lending and leasing..... 36
 - Finance and accounting (F&A) 38
 - Risk management..... 39
- Conclusion 41**

Part 1

Why banks need advanced operating models?

The banking industry is at an inflection point that has been brought on by two significant forces: **the rise of digital technologies** and the **new era of compliance**. Although both forces are affecting banks in different ways and for different reasons, the combined effect will have a dramatic impact on the way banks operate in the future.

The rise of digital technologies

Competition is intensifying as outsiders empowered by digital technologies seek to enter the market while incumbents race to upgrade systems and operations to meet customer demands and to cut costs.

The traditional bank business model is under attack from all angles. It seems as though every day a new entrant declares war on the banking incumbents as new technology erodes the industry's barriers to entry at an alarming pace. The sheer number of digital disruptors entering the banking sector has made it difficult to determine which firms will provide the greatest competition in the future. One thing is clear—these new entrants with their vastly different business models and cost structures are forcing incumbents to reimagine their operations.

By 2025, banks could lose 60% of their profits in consumer finance, 34% in payments and small business lending, 30% in wealth management and 20% in mortgages.

—McKinsey

It has been estimated that digital disruptors may capture up to a quarter of total enterprise revenue by 2025. Although the current impact of banking industry disruptors is small, there is precedent for this type of transformation in other industries, such as retail, regarding the speed and severity at which traditional players can be overtaken.

In the banking industry, the key to disruption can be found in the **unbundling strategy** that new competitors are following when taking on the incumbents. Banks are defending a sole-provider model and finding that the complexity of their current operations is severely limiting their ability to innovate to meet changing customer demands.

Broadly, banks can classify the bulk of their services into five main categories: payments, lending and deposits, market data, capital raising, and wealth management. Quickly examining the ever-changing market landscape illustrates the wide variety of disruptors currently vying to gain market share in each category (see Figure 1).

Examples such as the rise of PayPal in the payments landscape and the rapid shift to mobile technology led by firms such as Facebook and Apple illustrate massive opportunities not previously addressed by the traditional banking business model. In addition, the introduction of cryptocurrencies, such as bitcoin, as well as the underlying ledger blockchain, is proving to be a disruptive force unto itself. If the source of trust in payments is wrung away from the traditional banking system, the results will be

historical. This would possibly be the first time in centuries that the financial component of many business transactions doesn't require a bank as an intermediary. The payments sector has been one of the first services disrupted due to its relationship to technology and regulation. Technology is fundamental to the payments processing function. For retail banks, technology is critical to deliver the **mobile** functionality their customers desire, while commercial banks are relying on technology to offer the **enhanced security options** their customers demand. On the regulatory side, the payments space also presents

an opportunity as new entrants design a fresh compliance response from the ground up that is tailored to specific focus areas.

However, not just **where** banks create revenue but **how** they conduct their operations is exposing the industry to disruption. In many cases, disruptors have leveraged digital technologies to **circumvent the challenges of legacy systems** and operations. The result is **dramatically improved efficiency ratios** that even the best incumbents can't match under their current operating models (see Figure 2).



Figure 1: Some of the digitally enabled challengers entering the industry

Examples of digital impact

Digital-native enterprises built on these principles run at unprecedented levels of efficiency and effectiveness. The best digital retail lending institutions have efficiency ratios ranging between 20% and 35%, compared to the top banks' 55%-60%. Emerging market disruptors, like China's WEBank and marketplace lender Lending Club, exhibit even more polarized economics through models that are less capital intensive, something an entity such as Facebook can also demonstrate. Disruptors such as these can reimagine operational processes and eliminate many of the constraints of traditional players' legacy operations. These disruptors

can also build a clean set of data structures that can help reconcile data between chief financial officers (CFOs) and chief risk officers, for less cumbersome fulfillment of regulatory duties. The latter point is particularly important because many financial services executives initially discounted the ability of new players to scale in the face of regulatory and risk scrutiny that large banks attract. This scrutiny forces large financial institutions to devote significant resources to reconciling and modeling data just to comply with the rules. It is highly likely that emerging competitors will reach the critical mass that attracts regulators' attention soon, but competitors will address those challenges in a leaner manner.¹

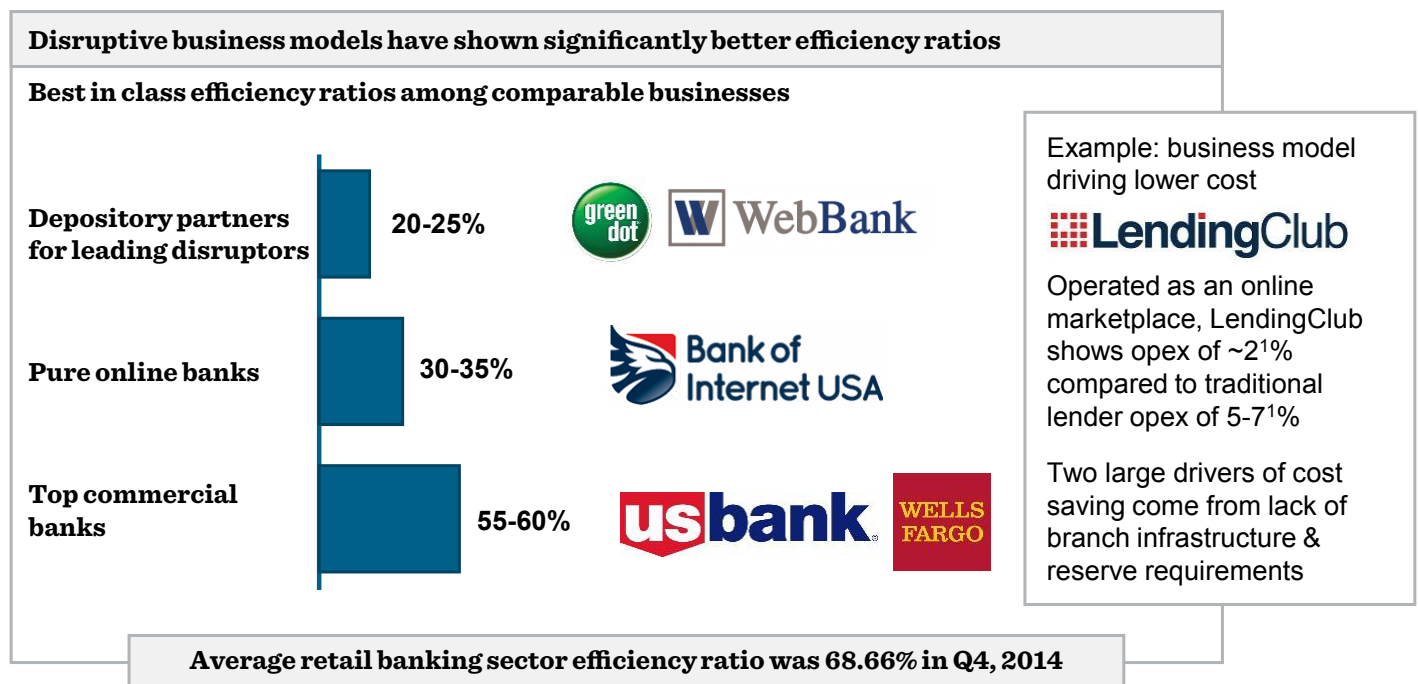


Figure 2: Digital business models are showing a significant shift in operating costs

Leveraging the new cost-to-serve

The movement to digital banking, and in particular the operational cost benefits it can provide, presents a significant opportunity for industry incumbents. JPMorgan estimates that the **cost of serving a fully digital account is 70% less than a traditional account**, while retention rates for mobile banking are 33% higher than non-mobile banking. In the cards business, the improved metrics are also significant at 30% and 35%, respectively.² In the mortgages space, estimates indicate that a digital approach across the front and back offices could potentially reduce mortgage origination costs by more than two thirds. Even simpler transactions are estimated to have significant cost advantages when delivered digitally. One such estimate pegs the **average cost of a mobile transaction** at 10 cents compared to 20 cents for online banking and \$1.25 for ATM transactions.³ A similar study reveals that mobile transactions typically cost less than 2% of the per-transaction cost associated with branch transactions.⁴

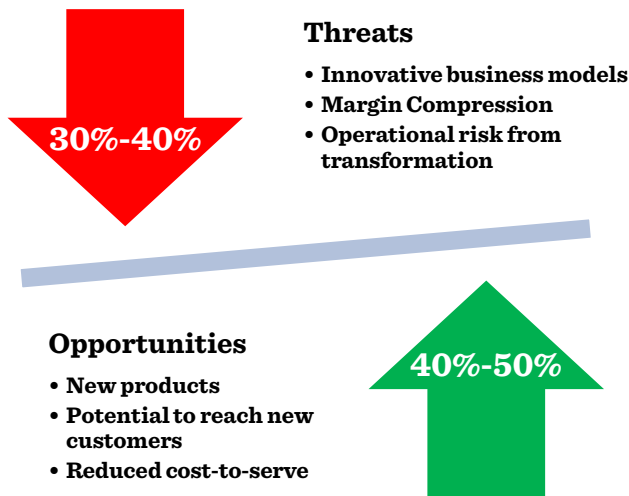


Figure 3: Banks can increase net profit as a result of digital, but business models will see significant changes

However, banks are still conflicted, in part because consumer preferences are still varied when it comes to channels.⁵ Although most customers gravitate toward digital channels such as web and mobile, a significant number of customers still prefer branch-based interactions. Part of the problem is that for many customers, certain types of high-touch

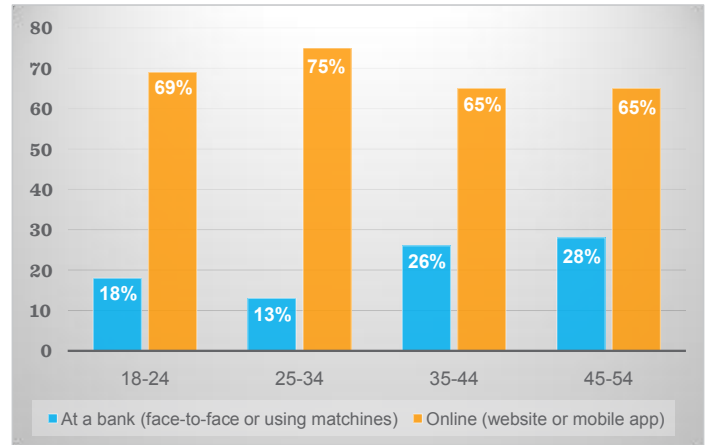


Figure 4: Most preferred method of banking by age group

Digitizing broken operations: A classic conundrum

Most customers prefer to communicate with their banks via the web than by other means, and younger customers prefer mobile, a channel that didn't exist 10 years ago. Yet despite the sleek user interface they are likely to encounter, people buying financial products or conducting more significant bank transactions are often surprised how uninformed their banks are about them.

The typical cause is the morass of legacy systems across the middle and back offices that are tasked with keeping records and managing risk but were built over decades in silos. Recently, these operations have grown more complicated by adding new layers of regulatory reporting and compliance. Collecting and combining purchase patterns, risk profiles, interaction preferences, and other data to enhance the customer experience can quickly turn into a massive (and expensive) change management exercise. The process frequently gets stranded on database conversion, privacy, and other technical or process issues. Such challenges aren't solvable by simply layering advanced digital tools on top of an existing business process landscape.

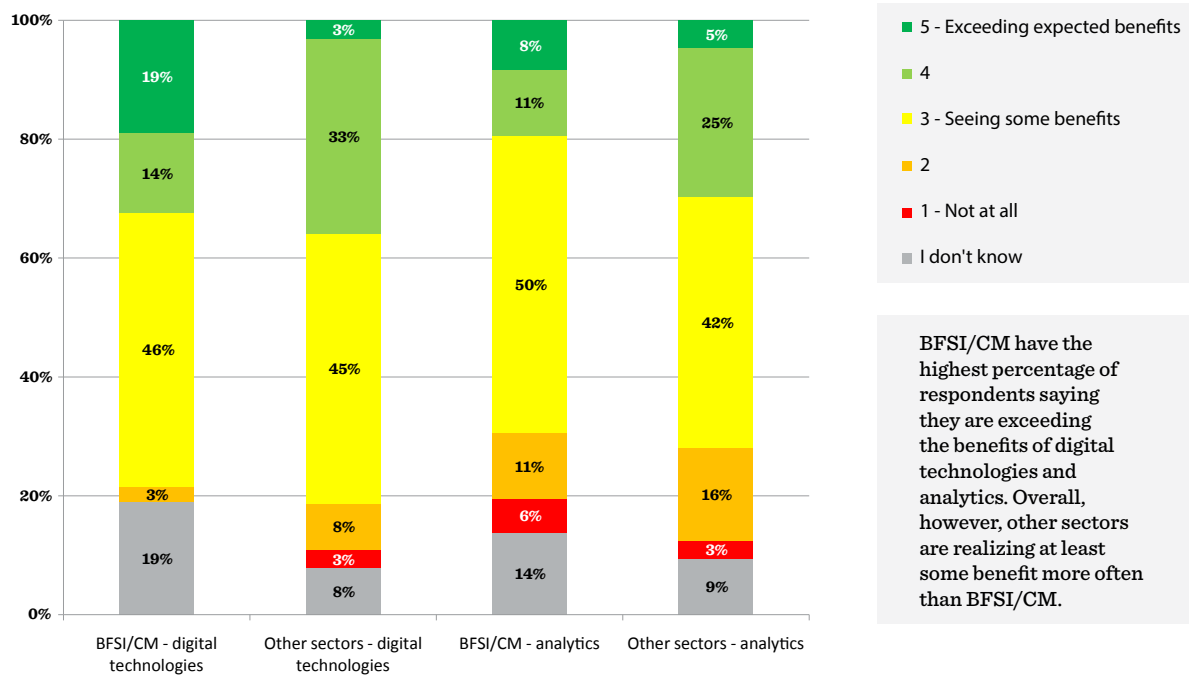


Figure 5: Is your organization realizing the expected business outcomes from digital technologies? BFSI/CM vs other sectors

transactions may be better suited to the branch. For example, many banks estimate that more than two thirds of customers visit one of their branches on—at least—a quarterly basis. In some situations, the branch may in fact be the optimal channel for the customer to have their needs met and for the bank to create a cross-selling opportunity. However, the **branch is no longer a viable delivery mechanism for daily, transactional services** that are better suited for digital channels. The key is how a bank sets up its branches of the future. Branches must be focused on high-touch activities that not only provide consumers with an excellent experience but also enable the bank to benefit from spending time directly with their customers. The critical point is that customers don't want technology inserted into the customer experience just because it is available; the technology must provide a tangible benefit.

The ROI challenge

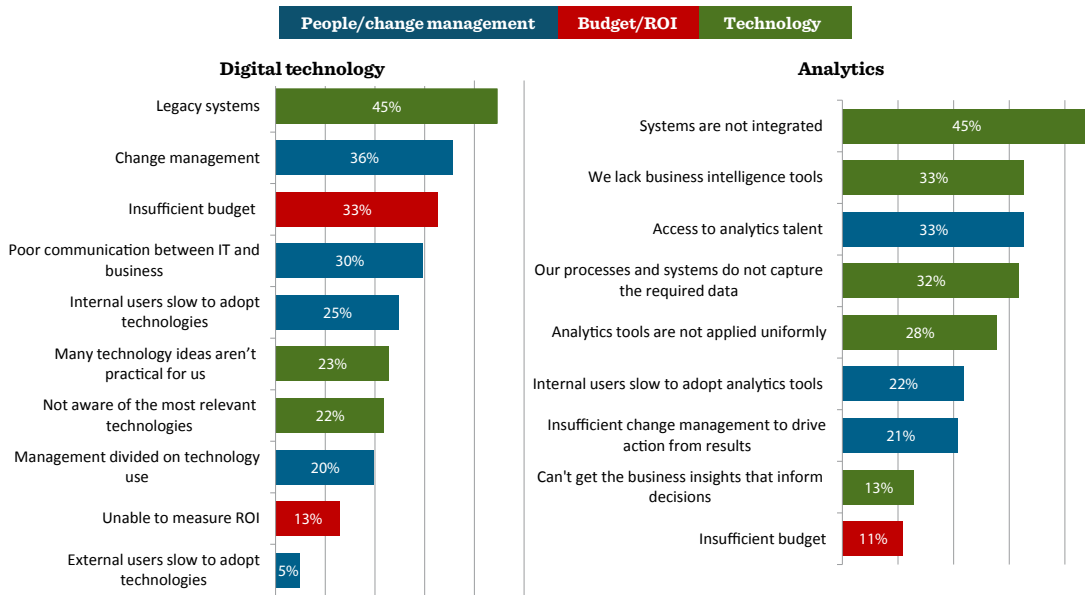
For banks, just investing in digital technologies is not enough to realize the expected benefits to the business. Genpact estimates that across all industries, all current digital efforts worldwide cost about \$593

billion yearly, and **as much as two thirds** of that spend delivers an insufficient ROI.⁶ Although this figure is an approximation, it should give banking leaders pause—and the figure doesn't even include the opportunity cost of business benefits that will not accrue to enterprises because of those less-than-effective efforts.

A recent Genpact poll of operations executives across industries indicates that more than half of decision makers see, at best, only “some benefits” from digital technologies implemented until this point.⁷ For the banking, financial services, and capital markets sectors, the response suggests that a subset of executives, approximately the top quartile, is seeing their digital initiatives outperform expectations, but **the bulk of respondents are seeing only some benefit** or aren't able to determine the benefit of their investments. This indicates that some banks have begun to crack the code on how to maximize the return on their digital investments. However, for the industry as a whole to improve digital ROI, banks must be able to recognize where they are struggling the most. When asked, here is what operations executives say (Figure 6):

Clearly, **legacy system integration** is a challenge for digital technology and analytics initiatives, which comes as no great surprise. However, **change management** and **budgeting** are also causing significant struggles for digital technologies while limited access to talent is holding back analytics initiatives. Another issue is that many banks are not properly **aligning technology and analytics initiatives with their business outcomes** in order

to maximize their return on investment. When Genpact asked about alignment of technology and analytics initiatives to business outcomes, only 30% of respondents indicated they were doing it well or extremely well. In the absence of properly aligning technology or analytics decisions to business outcomes, banks greatly reduce their ability to fully capture the benefits of their digital investments.



Genpact surveyed over 100 senior executives responsible for business operations. 71% of companies participating have annual revenues of over \$1billion.

Figure 6: Where does your organization struggle most?

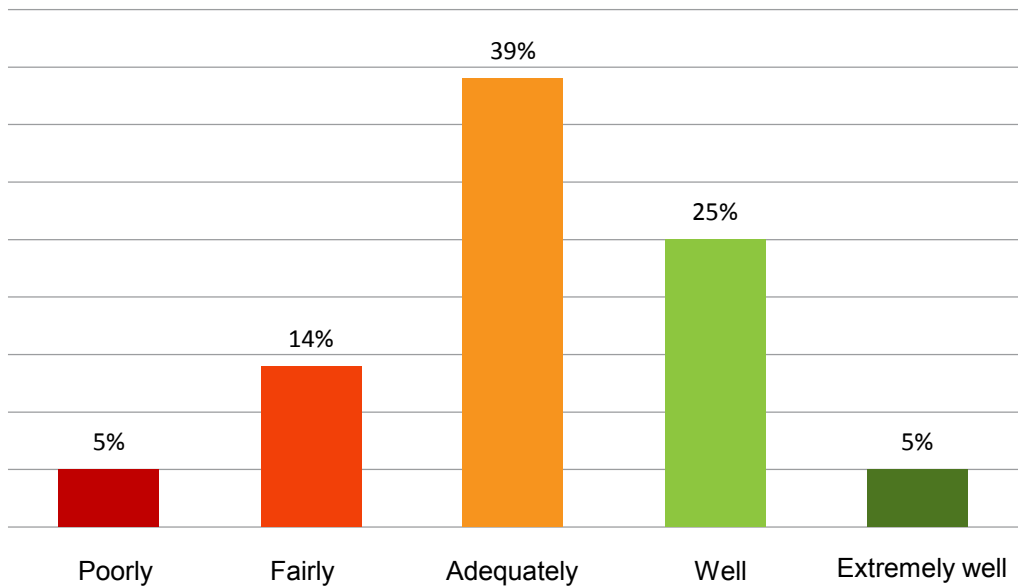


Figure 7: How well does your company align technology and analytics to business outcomes to maximize ROI?

Compliance and risk come into focus

To gain insights into the focus of bank C-level executives (CXOs), Genpact polled 201 respondents who provide retail banking services and 206 involved in commercial services.

The top challenges were generally consistent across retail and commercial banks and across functions, including operations, finance, and risk, with compliance and risk management listed as the top challenges. The results showed the following:

- Ensuring compliance with regulations was cited most often, pointed out by 72% of banking executives as one of their top three challenges
- Managing risk ranked close behind, at 71%, followed by increasing customer satisfaction at 58%
- Operations executives in retail and commercial banks faced similar challenges as their

counterparts in other functions such as finance and risk

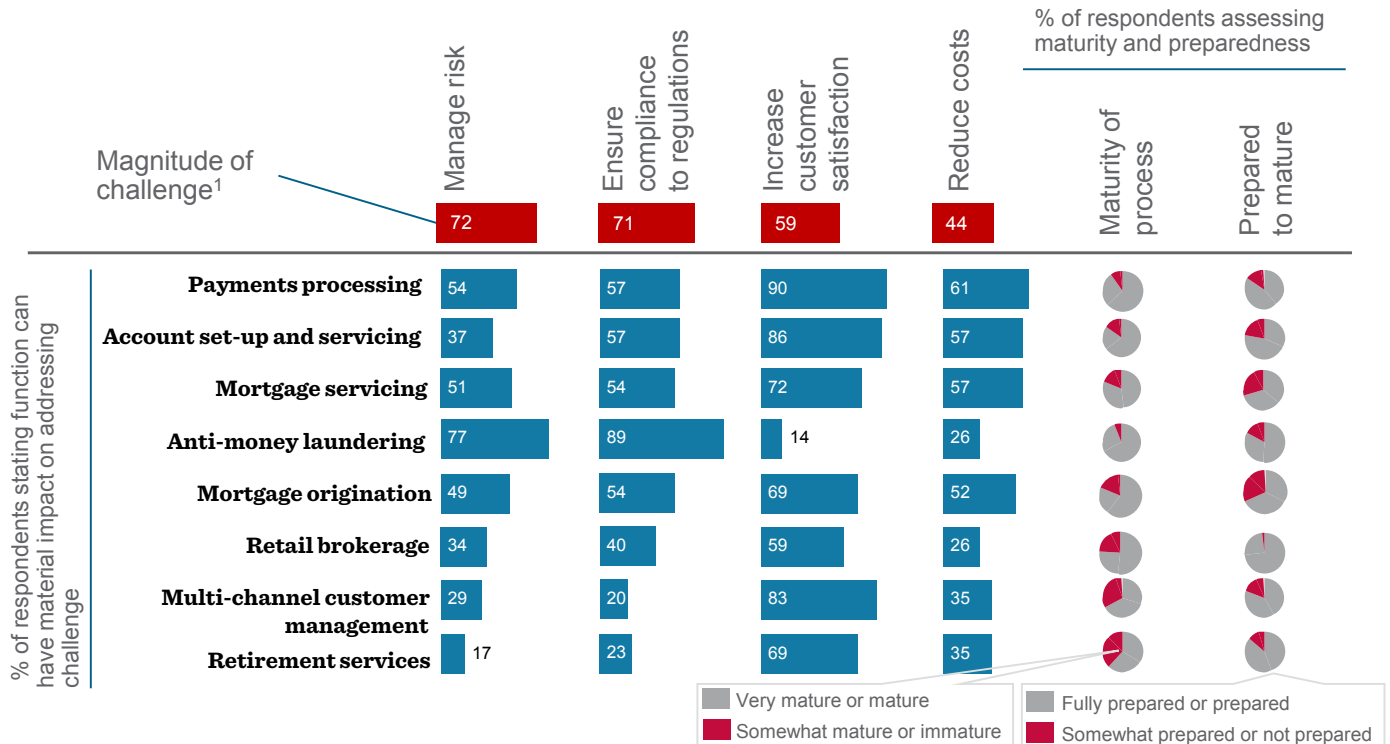
The ability to deliver future impact in each banking function depends in part on the existing level of maturity but also on the preparedness to further evolve each function. Banking operations executives were asked for their opinions about each function's maturity and preparedness to mature further. In retail banking, for instance, anti-money laundering and payment-processing functions were seen as most mature, with 94% and 90% of respondents, respectively, rating these functions as mature or very mature. This contrasts with retirement services, which only 61% of retail banking executives rated as mature or very mature. Similarly, 98% of operational executives said that anti-money laundering is well positioned to continue maturing, and 86% saw the same potential in the payment-processing function.⁸



Figure 8: Compliance and risk are the most important challenges across retail banking functions, client satisfaction ranks third



DIRECTIONAL



¹ % of respondents from retail only as well as commercial/retail across all functions (n=201) stating it is one of the top 3 challenges in their company

n=48 retail banking operations executives from a survey conducted by an independent research firm commissioned by Genpact

Figure 9: AML most mature and prepared to evolve, while retirement services is an opportunity to mature for retail banking

The new regulatory regime

Compliance is creating new costs and changing the business model for banks as they exit certain business lines and double down on others all while trying to navigate a new regulatory regime.

Reducing leverage and redirecting revenue streams are critical tasks being undertaken across the industry. As businesses such as proprietary trading give way to other areas that require different operational capabilities such as wealth management, banks must also gear up their operations to face off with smaller, more agile competitors. Incumbents must learn to operate with **reduced leverage** as major regulations take effect aimed at **increasing capital**

requirements through more stringent asset to equity and debt to equity ratios. In addition, new, stricter requirements for anti-money laundering (AML) and know-your-customer (KYC) checks have led to **significant fines** and **exploding compliance costs**. As the world's banks are still struggling to react to these new rules, new entrants are entering with more agile operations and a more proactive regulatory stance in the most attractive businesses. Although digital disruption is aiding these disruptors, their lean footprints are enabling them to sidestep the areas with the most stringent regulations. This is a benefit that new entrants, including the technology giants, will continue to leverage and even defend as evidenced by heightened lobbying efforts, such as

Financial Innovation Now, a lobbying group based in Washington, DC, supported by Apple, Amazon, Google, Intuit, and PayPal.

Although the banking industry is also no stranger to political lobbying, one thing that is clear is the traditional retail and commercial banks are spending significantly more time focusing on compliance and risk management; see **Compliance and risk come into focus** on page 10. The focus on compliance is critical; however, the result is that banks are leaving the door open for disruptors that are focused almost exclusively on the customer experience.

The effects of scale in a dynamic regulatory environment

The impact of the new regulatory regime is being felt differently depending on the scale of the players.

In the US market, for example, the designation of systematically important financial institutions (SIFIs) has had a dramatic effect on the financial services landscape. Some of the seemingly most entrenched incumbents are making difficult decisions about the viability of their business models under the new regulatory regime, and, in some cases, are exiting

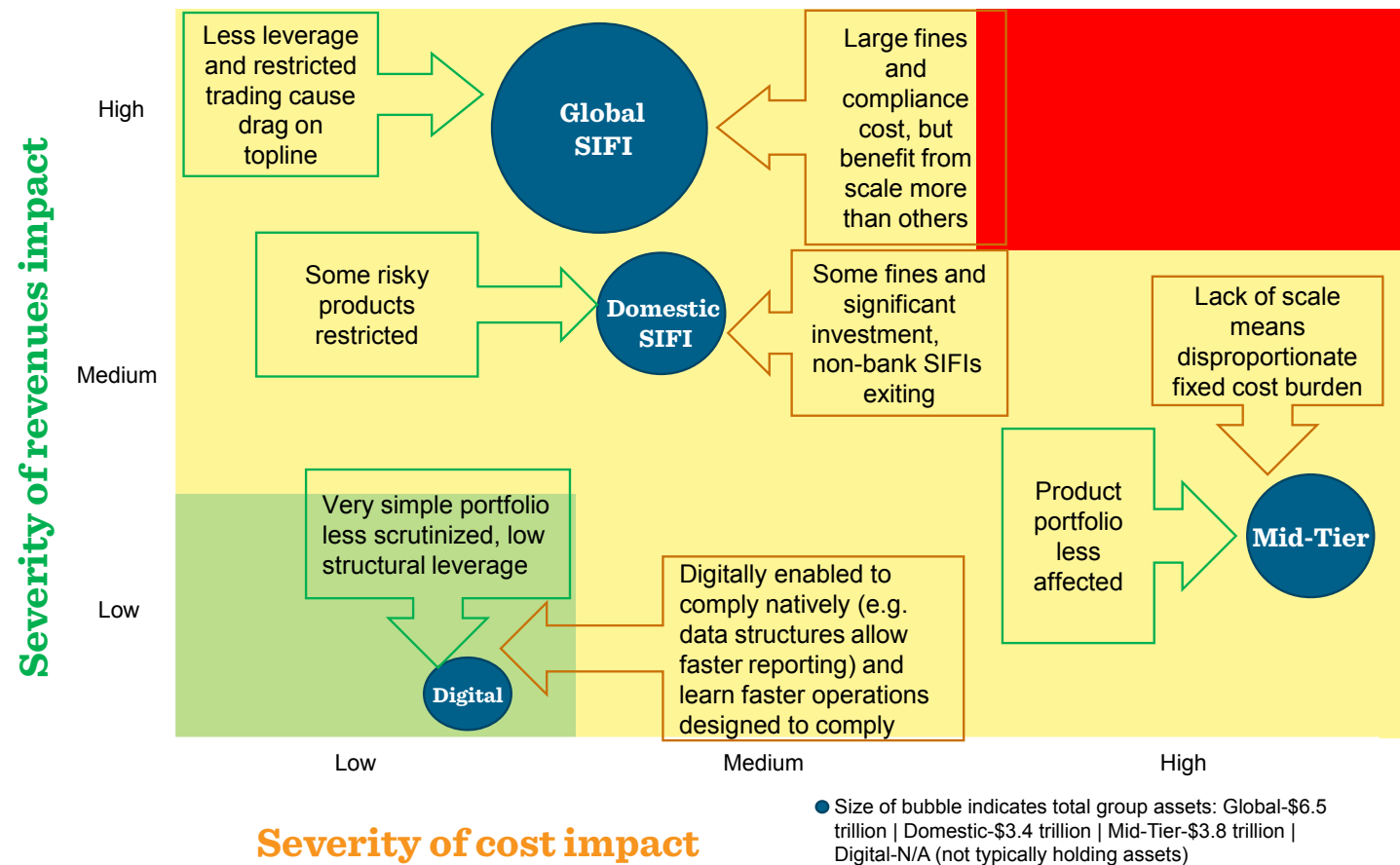


Figure 10: Both business models and operating models are changing, lenders that can best adapt their core businesses and operating models will prosper

business lines entirely. Even those that have avoided the extra regulatory burden that comes with being a SIFI are still under intense pressure, as their own asset bases aren't large enough to cope with the host of other regulations that have been introduced over the last several years. An analysis across the major categories of scale shows that:

- **Global SIFIs** are most affected by the loss of higher risk/return businesses and their ability to add leverage that has most noticeably caused a **decline in ROE**. Many have focused on other fee-based activities (such as wealth management) as a result. On the cost side, these banks have the **greatest ability to scale** in order to cope with additional compliance costs, but their operations are complex. In addition, the barriers to entry to becoming a universal bank are now significantly higher, and the existing universal banks control the lion's share of assets.
- **Domestic SIFIs** in the North American market have also been restricted from certain risky activities, causing a drag on the top line, but many of these activities (such as proprietary trading) were less important to the banks' business models. **Costs** are significant, but most banks have found the ability to scale, while **non-banks are now exiting** in part due to the added cost burden. In the North American market, about two dozen domestic SIFIs control approximately \$4 trillion in assets.
- **Mid-tier banks**, ranging from \$300 million to \$100 billion in assets, are least affected on the top line since much of their revenues were not derived from now-restricted activities, but the costs are a challenge. Many mid-tier banks (and

some smaller domestic SIFIs) are still attempting to have certain rules changed in order to better bear the **cost burden**.

- **Digital disruptors**, which broadly include the payment services and P2P lenders, among others, have been able to **quickly move into select areas** of the market as incumbents have turned their focus from the customer to the regulator. The disruptors have also felt fewer burdens of compliance as they design their operations specifically based on the new rules or avoid the most heavily regulated business lines entirely.

Digital disruptors are at an advantage as they are able to capture new revenue opportunities by designing their offerings for the new business environment and don't have the same cost of compliance burden that traditional competitors do as a result of their legacy systems and operations. However, this is not an excuse for banks to avoid taking a more proactive stance on their regulatory initiatives. As the disruptors grow, so will their regulatory burden, and incumbent banks that have smartly upgraded their middle and back offices to meet current and future regulatory demands will have a significant advantage.

Although the **digital** and **regulatory** forces are having different effects on the banking industry, they are similar in that they put many incumbents at an initial disadvantage while making the industry especially susceptible to rapid disruption. As a result, **the bank of the future** will be the one that most effectively harnesses digital technologies to meet customer demands in the front office, while ensuring their middle and back offices are more effective and can better manage costs, risks, and regulations while also supporting growth.

Part 2

The scope for advanced operations

Although the banking industry is at a crossroads due to significant technological and regulatory megatrends, there is clearly an opportunity to adapt and thrive. Banks must look across the front, middle, and back offices in order to create an optimal operating model that relies on **three key pillars**: technology, process, and organization. This may seem obvious; however, we have observed that most efforts are focused on the front office, don't solve end to end from front to back, or narrow the scope of intervention to either technology, process, or organization—but don't effectively use those three levers jointly.

Over many years supporting banking transformations, we have been studying this theme in detail. Banks are clearly prioritizing **process standardization** followed by **consolidation** through advanced operating models that will enable easier implementation of new processes and technologies to better connect with customers, apply advanced analytics, and gain the flexibility to scale operations based on business demands. Regarding the challenges involving technology, new regulatory requirements, changing customer preferences (such as multi-channel retail banking), and the lack of standardized and consolidated operations are making the implementation of new technologies too cumbersome. As for talent, the nearly universal focus on big data and analytics across all industries has left commercial and retail lenders, especially those operating at the regional level, unable to acquire and retain the right staff.

Given the concerns over more stringent regulations, macroeconomic factors (such as softening labor markets and low interest rates), and the need for

better technologies and talent, there can be little doubt that more mature shared services and, in some cases, offshoring are appealing as cost-cutting initiatives. However, the industry needs **a more holistic solution beyond simple cost-cutting and labor arbitrage**. The pressure on firms to move to a more variable cost model may be a catalyst for a greater focus on moving some core functions to a shared services environment going forward. For example, when asked specifically which industry-specific functions could benefit from new operating models, banking respondents indicated areas such as **transaction processing** as well as servicing of **loan, mortgage, and cards** products were all in scope.⁹

The front office

Looking at the front office over the next few years, the business lines most likely to be impacted in the banking sector include **payments, lending and deposits, market data, capital markets, and wealth management**. These areas can accommodate business models that are platform-based and data-intensive and don't require huge amounts of capital. Incumbents must choose how to measure their response and may partner with, or even acquire, disruptors when appropriate.

The global financial technology revolution is being driven by **end consumers**, many of whom have grown to **expect the benefits of digital offerings** that are virtually universally accepted in other industries. In addition, the burgeoning Internet of Things is further pushing banks to consider how they can leverage data to better serve their customers.¹⁰

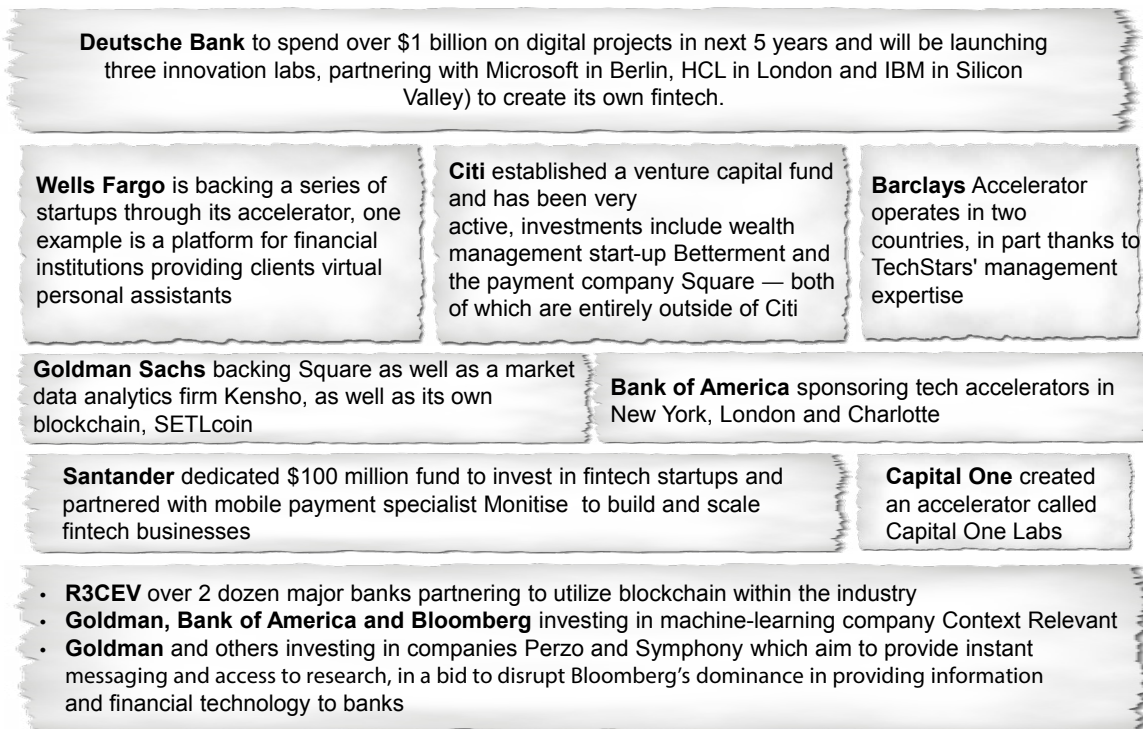


Figure 11: Ripped from the headlines: Banks are aggressively investing or co-creating with industry disruptors to move into the digital age

In many cases, banks realize they have no choice but to **innovate or partner** in order to more effectively profile their customers based on demographics, spend, transactions, and social behavior, so they can offer customized products relevant for a particular segment, instead of applying a “one size fits all” approach. Banks are also working to identify which channels are appropriate to reach out to different segments and provide a seamless and integrated experience across channels. Experience shows that a **well-designed omni-channel system**, integrated across the front, middle, and back offices, can reduce operating costs by 10%–15%, reduce contacts requiring human intervention by 20%, improve first contact resolution 15%–20%, and reduce average representative interaction time 30%–40%. However, in a siloed structure, none of this is possible, and a more holistic approach is required to profile and segment customers through data analytics. For example, building a unified enterprise-wide analytics center of excellence and heavy lifting “factory” designed to leverage the three pillars of technology, process, and organizational models can assist banks in decision-making and provide better integrated solutions to customers.¹¹

Technology and the customer

In many ways, technology in the front office is getting the most attention from both disruptors and incumbents. This is for good reason, as it is now clear that front-end technology is what wins the hearts and minds of end customers. This is the area where banks have thus far been most aggressively investing in or co-creating with startups in order to deliver the digitized customer experience that consumers experience in other segments such as entertainment, hospitality, and transportation.

One of the most critical areas of focus for bank technology is **mobility**. There is a correlation between mobile banking and customer retention. In addition, with a clear cost advantage over traditional channels, plus the growing demand from customers for mobile services, the potential for an excellent return on investment for banks investing in the technology required to deliver mobile services is high. In fact, a recent study by Forrester indicates that the ROI on mobile banking could be greater than 15%.¹² This estimate takes into account the reduced cost to serve through the mobile channel, potential cross-selling opportunities, and customer service.

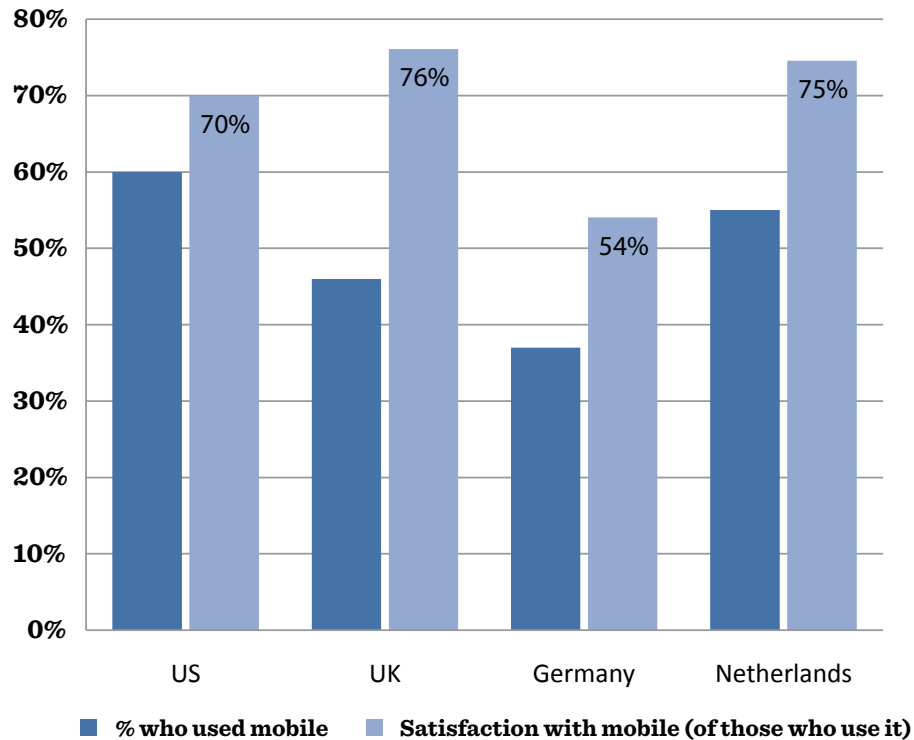


Figure 12: Customer satisfaction rates of mobile banking customers

The Genpact Research Institute's studies of the habits of retail banking customers around the world support the idea that mobility as a channel, while still not as commonly used as traditional channels, does not negatively impact customer satisfaction. A recent survey of 7,152 retail bank customers across the United States, the United Kingdom (UK), Australia and Europe indicated that about half of the respondents had significant interactions with their primary banking institution through the mobile channel. In some regions, the percentage of mobile users across the general population was significantly higher, such as in the United States (60%), as opposed to others like Germany (37%), indicating that **mobility as a channel is still far from ubiquitous**, and thus has room to grow. Of the respondents who were users of the mobile channels, 71% indicated that they were either very satisfied or satisfied with their mobile banking interactions. This satisfaction rate was in line with other channels, including branch, telephone, and web.¹³ Given the significant cost advantages of mobile over traditional channels such as the branch, it is clear that banks must continue

digitizing their customer channels as part of an **overall omni-channel strategy**. For many banks, this will mean closing branches, an expensive endeavor given the amount of investment they represent and customers' desire to have access to them, even if only on a limited basis. For the branch networks that remain, banks will also need to digitize them so that even if customers arrive for transactional activities, they are served via digital methods.

"We're piloting smart branches: building new branches that are, in many cases, just 700 square feet, no counters, a couple of automated cash machines, lending machines. I fully expect over time that we're going to continue to see, as an industry, a reduction in terms of physical-branch footprint."

—Michael Corbat, CEO, Citigroup

The Digitized Bank

Retail banks are among the biggest potential beneficiaries of digital transformation thanks to the inherently digital nature of their services. They now have the ability to orient client traffic toward the most effective client channels based on the client preference insight derived from interactions with similar clients. By doing so, retail banks can optimize the customer experience and the cost of the transaction at scale in a way that would have been impossible for the traditional front end and even for digital

user interfaces in the absence of deliberate cross-channel orchestration. Commercial lenders' front-end sales forces can approve new clients' capital equipment leases in record time by obtaining a small set of key data points from the client during a person-to-person interaction using agile workflows that globally connect experts (the middle office) who can sanction that approval swiftly.

This is particularly important when the sale aims at dislodging an incumbent competitor at lease renewal.¹⁴

However, to deliver on rising customer expectations, banks need more than just technology. For example, retail banks offering an omni-channel experience must have **optimized processes** in place to ensure that the customer experience is uninterrupted. Banks must also ensure that they choose the best **organizational models** to deliver optimal service to their customers. In some cases, that may mean joint ventures with digital disruptors that own the front-end customer relationship but require the banks' infrastructure. In other cases, banks will need to **realign their staff** so that those who are most likely to interact with customers, such as branch personnel in the case of a retail bank, focus on high-value, non-transactional activities. For all other customer interactions, other more efficient models that leverage **a combination of technology and shared services** or third-party outsourcing should be utilized. However, regardless of how a particular bank is digitizing the front office, it is impossible to deliver an effective digital service to the customer without close coordination in the middle and back offices.

The middle and back offices

While bank executives will continue to have their hands full with digital disruptors vying to capture the customer relationship, a different battle will continue to escalate in the middle and back offices.

The battle will most likely be **fought among licensed banks**, since they control the capital and banking infrastructure that all front-end offerings, including those from the digital disruptors, utilize. However, as is happening in the front office, if banks don't act quickly to holistically reimagine their middle and back offices to support a **superior customer journey**, new competitors will eventually find a way to enter the market and overcome the infrastructure advantage currently held by traditional banks. These digital disruptor/bank hybrids, complete with a banking license, could potentially not only offer a digitized front office to consumers but also maintain the banking infrastructure that digital disruptors rely on today. If the incumbents themselves don't change their operations to meet this threat, they will be unable to compete in the marketplace.

"With financial leverage gone, the only thing you've got is old-fashioned operating leverage, automating things, workflow efficiencies."

—Martin Chavez, CIO, Goldman Sachs

However, despite the clear need to do so, the path to upgrading the middle and back offices to keep pace with the advances in the front office is difficult. Genpact estimates that **the banking sector has been no more effective than any other sector in achieving an acceptable ROI** when it comes to digital initiatives. With banks spending between 15% and 25% of their overall IT budgets on digital initiatives, possibly as much as \$120 billion in 2015, there is certainly no shortage of capital to make this upgrade.¹⁵ However, results are mixed at best, with a strong possibility that much of this investment may be wasted. The lack of results is even more startling when compared to estimates that put total fintech investments at 10% to 20% of the total digital spend by the industry during the same time period.

A uniform and practical approach to digital enablement not only can productively harness digital technologies and analytics but also help the industry construct advanced organizational models and leverage them to deliver a more rapidly attainable, yet scalable and cost-effective, business process platform

Example: retail financial product

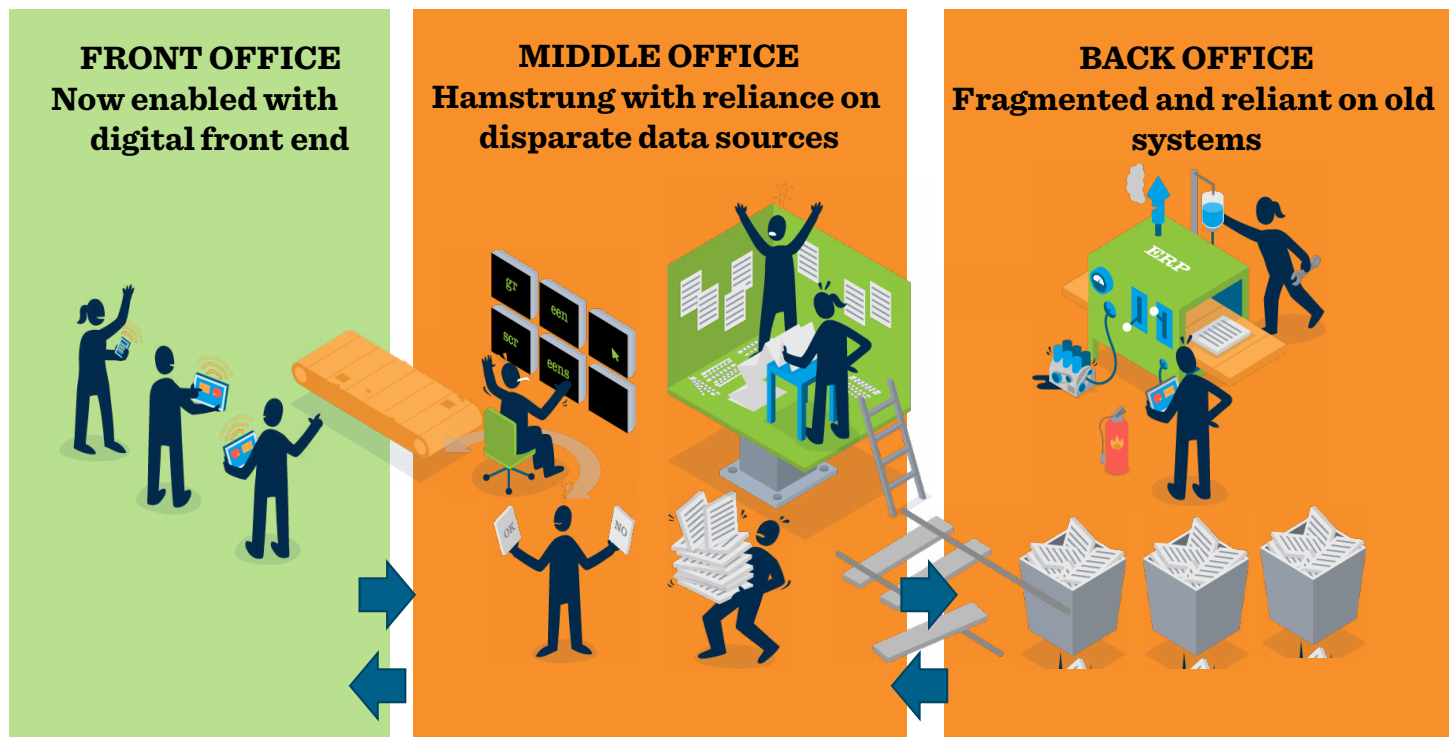


Figure 13: The root of many suboptimal digital efforts: lack of attention to middle and back office, no end to end solution

The primary reason for this waste is that many banks don't take a truly end-to-end view from the front to the back office. Disparate and fragmented data sources and operating systems are causing digital investments in the back end to deliver poor ROI, which, in turn, makes banks less likely to invest in future projects, **creating a vicious circle**. In order to avoid this, banks must adopt a different mentality to digital investment, one that is leaner and more in line with that of a startup that is forced to invest efficiently or perish.

By using a combination of **Lean principles, advanced digital technologies, and design thinking** across the middle and back offices, banks can more effectively harness the power of the digital revolution and

capture the benefits of operating as a Lean digital enterprise. This approach can help banks do what the Lean startup movement has done for fast-growing challengers: harness digital's revolutionary power in an agile way. It will also help **prevent the digitization of broken processes**, can **simplify interventions**, and can discourage the bias towards small, tactical improvements that some Lean management practitioners have. Perhaps most important, these methods harness digital's power to completely reimagine the middle and back offices, thus unlocking disproportionate client value. Ultimately, the emergence of Lean digital practices can help many generate material impact through the latest technology, faster.¹⁶

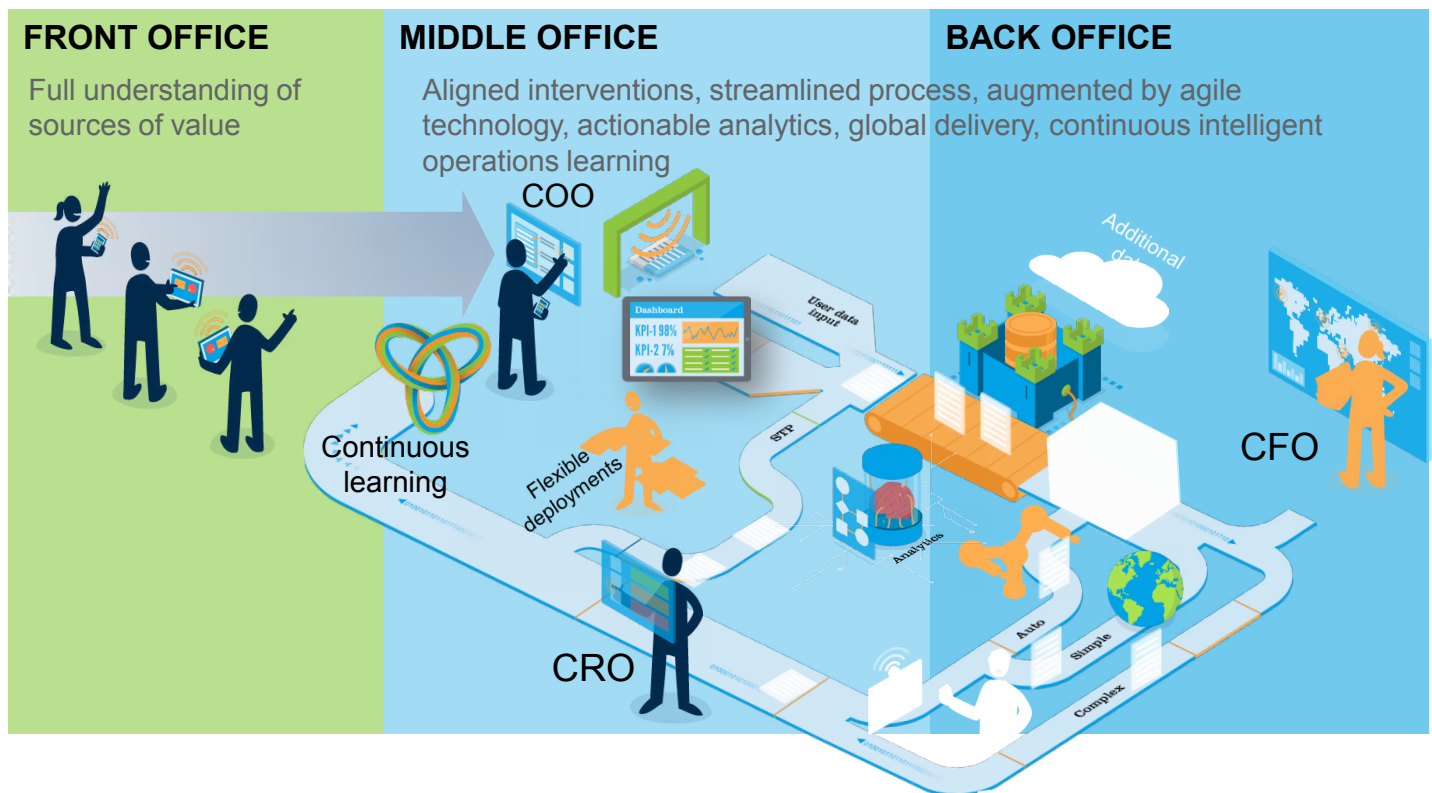


Figure 14: A Lean Digital enterprise: Reimagining the middle and back office through Lean principles, advanced digital technology, and design thinking

Where are banks focusing on operational improvements?

Genpact commissioned an independent survey to examine the potential of advanced operating models—including radically improved uses of technology—to address strategic enterprise challenges across the banking and financial services sector. As part of this research, interviews were conducted with more than 200 senior executives.

Although digital technology will profoundly change how businesses operate in the future, our research indicates that key enterprise priorities at every step in that evolution will continue to be very much focused on today’s challenges—e.g., managing risk, ensuring compliance, and optimizing cost structure—while at the

same time preparing for future uncertainty by ensuring revenue growth, customer satisfaction, innovation, and agility.

The research makes clear that indiscriminate application of new technology is not the answer, as many respondents did not rate technology but instead cited advanced organizational structures as the key material lever for improving critical functional areas. The responses indicated the enterprises’ ability to reimagine how processes are run at scale matters most to banks today. A holistic architecture that harnesses technology, process redesign, and advanced organizational structures, such as outsourcing and shared services, and caters to process-specific differences will ultimately determine whether new technology enables banks to achieve strategic enterprise goals.

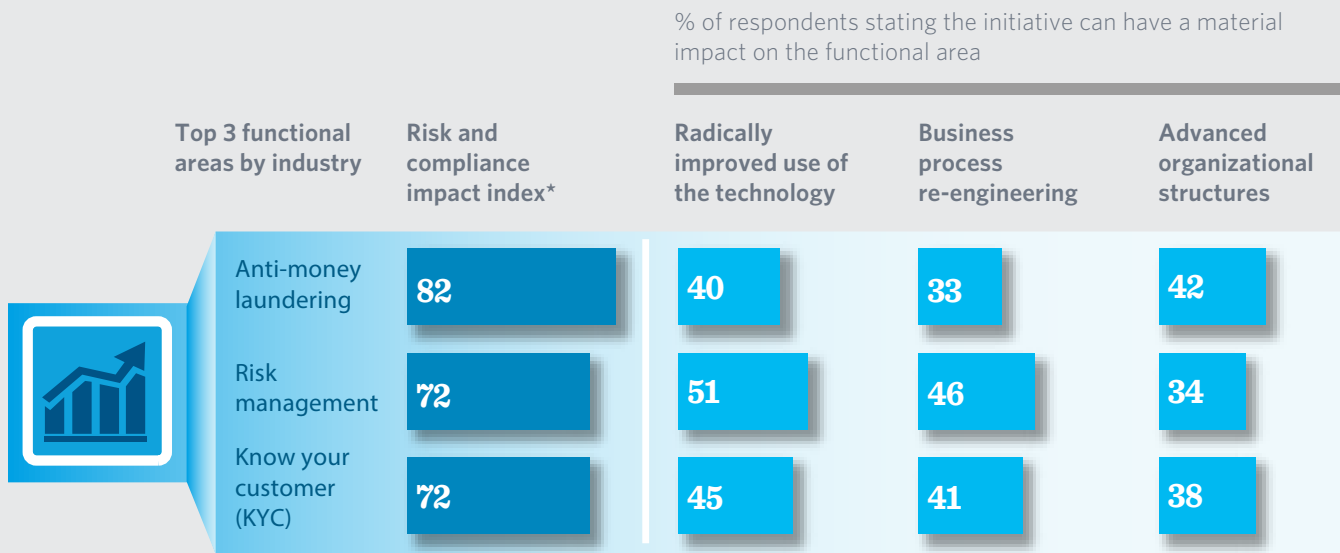


Figure 15

What are “core” operations? The definition is changing for banks

Banks must spend their time and capital on transforming their channels, products, and customer view, while also optimizing their back office and support operations. Are these requirements fundamentally irreconcilable? The answer lies with a bank's ability to effectively allocate their management resources across the business model while at the same time partnering to pursue a more **industrialized target operating model**. Even in an industry such as banking that has already widely adopted captive and outsource-based models, **more than \$60 billion** is still spent annually on operations that have not achieved their optimal operating model.¹⁷ Thus, the critical question for banks is, what are the **true “core” processes** that will require a Lean digital approach?

The first step in identifying the functions that are most likely to benefit from better technology, process, and organization is to map them based on their current level of commoditization versus their

strategic importance. The accompanying chart is a non-exhaustive example of the types of **processes banks should be reconsidering** in terms of how they approach operational execution.

In most cases, banks have already streamlined the most commoditized and less strategic functions across the middle and back offices. Although continuing investment to further digitize these traditional candidates is important, the potential impact is muted by the fact that these functions already leverage better technology, processes, and organizational structures. The greater potential lies in the **emerging candidates**. These functions, due to their lack of standardization, their high strategic importance, or a combination of the two, have often not been tapped as candidates for digital transformation. Although not every function in this list of emerging candidates should be transformed at every bank, an analysis should be conducted as to how advanced technology, process, and organizational levers may deliver a positive benefit.

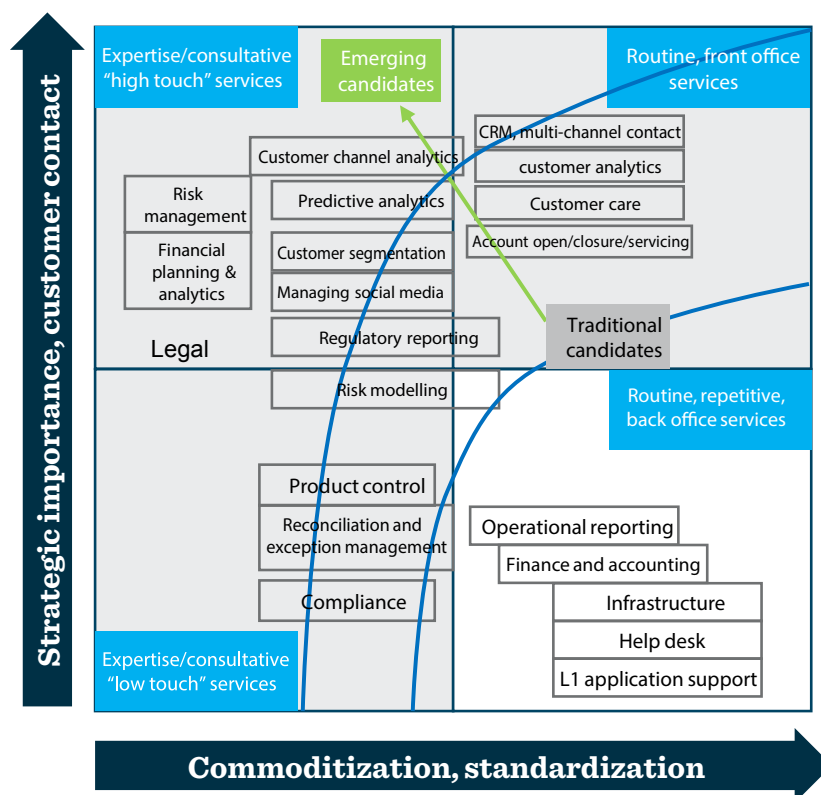


Figure 16: Banks increase the efficiency of existing shared service centers by adding more business processes

Technology in the middle and back offices

Risk management and analytics have been the focus of technology-driven transformations over the last several years, and for good reason. The amount of data available to banks may be their greatest asset, as long as they are able to leverage it effectively. In some cases, a few leading banks have already started redesigning their operations based on services such as customer-channel analytics, customer segmentation, retention offer analytics, and managing social media. However, the use of **prescriptive analytics** to make bank operations smarter is still in its early stages. The more commonly used **descriptive** and **predictive analytics** has been used to great effect by banks for some time now, but the true power of business analytics for banks will lie in its **ability to direct decisions across the organization**.

Moreover, advanced digital technologies, such as cognitive computing, natural language processing, machine learning, intelligent augmentation, and distributed ledgers (blockchain), all have the potential to dramatically improve operations across the middle and back offices.

The introductions of cryptocurrencies, such as bitcoin, as well as the underlying distributed ledgers such as blockchain, are proving to be disruptive forces as well. For example, if the source of trust in payments is wrung away from the traditional banking system, it could be the first time in centuries that the financial component of many business transactions doesn't require a bank as an intermediary

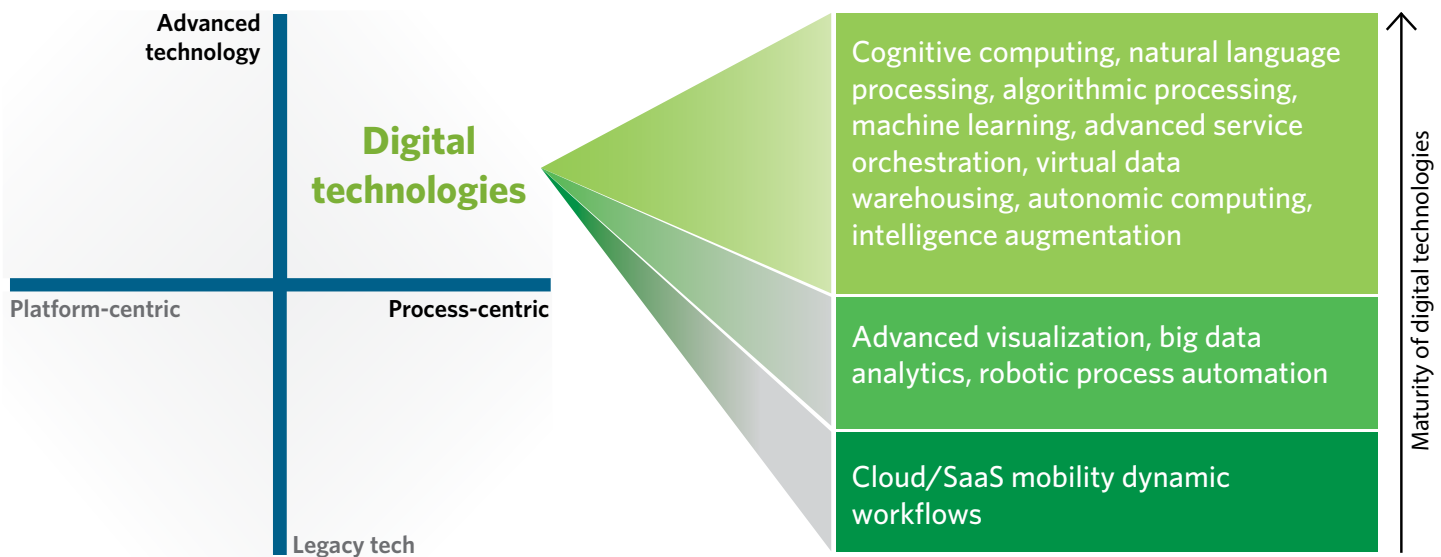


Figure 17: The maturation of digital technologies

Blockchain and the back office

While major disruptive technologies focused on mobility and payments have dominated the front office, the rise of distributed ledgers (or blockchain) has the potential to make an equally momentous impact on the back office. The benefits of distributed ledgers are numerous. They are cheaper, reduce settlement times, remove the need for post-trade reconciliation, reduce operational risk, and offer a powerful countermeasure to cyberattacks.

The Challenges: For many industry incumbents, the move from a centralized model to a decentralized one will require a significant effort. For example, for distributed ledgers to become truly effective, terminologies, transaction models, protocol interaction, infrastructure, identity management, and wallet infrastructure for cryptographic (crypto) keys must be standardized. An industry initiative may be the best way to speed the process as opposed to individual efforts by industry participants.

The Use Cases: The list of use cases continues to grow to include areas such as currency exchange, trading and clearing, payments, data storage, authentication (including AML and KYC), asset registries, and regulatory reporting. Some specific examples include the following:

Retail and commercial banking

- Leasing and lending – agreements and collateral that is digitized can be tracked and managed
- Trade finance – a document registry with traceability, plus a smart LOC, provenance, release of funds on delivery, and escrow services

- New credit scoring models based on transactions that are made visible on the blockchain
- Cross-border payments

Capital markets

- Document registries, identity management as part of the KYC process
- Improving audit functions by capturing information from multiple sources in a strong, immutable audit trail that shows a point in time snapshot of these sources and digitizes them
- Simplifying back-office operations by encoding structured notes and other derivative contracts as bilateral smart contracts
- Improve the efficiency of settlement processes across non-standardized asset classes

The Impact on Operations: Many processes will be compressed as the friction of interaction between parties can be minimized with shared contracts and ledgers. Operations will focus on transaction execution and not the peripheral activities involved with intermediation. For capital markets participants, reconciliation processes will contract significantly if there is a single replicated version of truth. Industry efforts will focus on operational control and retooling audit functions, and regulatory filings may require fewer resources if regulators can directly access a transparent distributed ledger. In addition, banks' cyber security programs will benefit from the more secure nature of distributed ledgers.

While some banks are just beginning to scratch the surface when it comes to the usage of digital technology and others are farther along on the journey, it is helpful to look at a few examples of how specific retail banking functions can benefit from a very tightly connected, holistic front to back office operation.

Customer service

1. When customers call, chances are they are reaching some form of interactive voice response (IVR). The immediate step for banks is to implement an effective **IVR optimization** process. For banks further along in the process, there should be some form of **auto-authentication** and, for the most advanced, a movement toward a **visual IVR** system
2. After the customer reaches an agent, a bank should immediately employ **speech analytics** to improve customer service, identify cross-sell opportunities, and reduce attrition. After that, banks should focus on ensuring the call goes through an omni-channel customer service platform
3. Once the agent understands the nature of the query, **express scripts** should be available to speed time to resolution
4. After resolution, banks should utilize **breakage analytics** to understand the root causes of the issue. Throughout the process, banks should also be listening to social media and, for the more advanced, utilizing an omni-channel customer experience platform, as well as a **process insights engine** that delivers prescriptive analytics to improve the entire process

Collections

1. Similarly to the customer service process, banks should utilize IVR optimization, auto-authentication, and, finally, visual IVR

2. Then, after receiving a call on a unified omni-channel platform with speech analytics, the agent can proceed to establish right party contact (RPC)
3. **Express scripts** can once again be used to make collection in order to decrease time to closure. Throughout the entire process, digitally advanced banks can use an omni-channel customer experience platform as well as a process insights engine, as well as a more intelligent **digitally enabled collection** tool to improve the overall process

Fraud early warning

1. Social media listening can be used to detect suspicious activity
2. Then, if an exception is raised with the customer, an **unblocking mechanism** can be made available directly to the customer
3. However, if the customer calls and reaches an agent through IVR, the same **omni-channel** platform with speech analytics can be utilized followed by express scripts once the customer's identity is confirmed
4. Agents can then utilize digital **fraud analytics** tools to perform a risk assessment and take the appropriate action. Like the previous two examples, this process will also benefit from an omni-channel customer experience platform, as well as a process insights engine

Experience dictates that digital tools and technologies such as these can best enable banks to streamline and transform their paper-based manual processes, connecting multiple, discrete silos of data sources and legacy systems by using a thin, agile digital layer to provide a **system of engagement**. By doing so, banks can ensure that their operations across the front, middle, and back offices work together as one customer-centric banking operation. Doing so **drives transformation more efficiently** and can lower the cost of operations for certain processes by 30% to 40%.

Using operation network analytics to change the Bank

A major APAC bank with a complex portfolio of brands and business units, as well as a history of M&As, had initiated numerous critical transformation initiatives. However, management lacked visibility into how effectively teams collaborated among themselves and with customers and partners. This had a significant impact on organizational productivity and made the diagnosis of problems very complex, thus potentially jeopardizing the success of the greater transformation effort.

By implementing operational network analytics (ONA), the bank combined proprietary data sets related to performance and effectiveness with social network analytics (SNA) metrics developed at MIT's Center for Collective Intelligence. ONA leverages interaction traces (typically email, excluding email body for privacy but also possibly other sources such as calendars and other communication tools). This was applied within the client organization to help answer several key questions. Who are the key influencers in the network, and how do they behave? Do they contribute to the discussions or filter them? Do they regiment work or assume a collegial/creative work style? Do they respond quickly, and what is the sentiment of their conversations?

Ultimately, the goal was to determine if the actual behaviors and structures in place are appropriate for what the operations are trying to achieve.

Communication matrices were constructed across multiple entities to identify and analyze key influencers and their respective behaviors. SNA metrics were calculated for individuals and groups across key parameters such as frequency of interaction, creativity, responsiveness, contribution, and overall sentiment.

Business impact delivered

The results shed light on otherwise invisible communication behavior within the client organization that transcended the fixed workflow. The analysis revealed patterns between different units at a steady state, as opposed to those in transformations. It helped senior management drive operational transformation by providing insights into the following:

- How different groups in the network operate and how effectively they are interconnected
- The extent to which different entities in the network exercise leadership and use the organizational network to foster innovation
- The ease of information flow and accessibility of knowledge across key people

This enabled the bank to address targeted coaching needs for individuals and groups as well as design communication environments for greater change management collaboration. The bank also eliminated unnecessary touch points and simplified operations leading to more proactive and effective governance of globally distributed teams across organizational boundaries.

Taking process operations to the next level

Process operations can be the cornerstone of a superior and economically viable customer engagement model.

Although banks have come a long way in terms of how they perceive and streamline processes, there is still room for improvement. At the root of agile and Lean startup methods is a comparatively classic set of concepts derived from manufacturing practices pioneered by Toyota and General Electric (GE). That is, **Lean manufacturing—or simply Lean**. Lean initially proved itself in complex manufacturing environments and then in equally complex service delivery organizations. Part of the system's effectiveness stems from its relentless attempts to simplify and weed out unnecessary work. Lean does so by focusing teams, across functions, on what really matters to achieve a pre-established, finite set of

goals aimed toward customer impact. This situation doesn't occur in large projects: For instance, in a recent poll, only 30% of executives across industries declared their companies could successfully align digital interventions with business outcomes. The core Lean principle is (a) maximizing customer value while (b) minimizing, not eliminating, waste. Both are particularly useful for large enterprises such as global banks. An example of the common operations archetype for continuous improvements in an area such as **collections** can be seen in **the accompanying chart**.

By **realigning processes to focus on customer value**, banks can illuminate the true north often lost in the maze of organizational layers and the overly complex and idiosyncratic end-to-end processes that result. Seeking the minimization of waste provides a practical lens to **reduce the displacement** of existing legacy processes and systems.¹⁸



Figure 18: Common operations archetype (collections example)

Organizational models—all the way to industry utilities

As the banking sector changes with the dynamic macroeconomic, regulatory, and digital environment, the standard banking organizational models also must change in order to better leverage advances in **robotic automation, analytics, and risk management**. In a recent survey, more than a quarter of the banking and capital markets respondents indicated the need to “increase offshoring/nearshoring” was one of their top three priorities. Given the cost concerns over more stringent regulations, increased competition, and the need for better technologies and talent, there can be little doubt that more mature offshoring is appealing as a cost-cutting initiative. However, other process- and technology-focused initiatives were more frequently cited, indicating that the industry is looking at a more holistic solution beyond simple cost-cutting and labor arbitrage.¹⁹ Although banks will continue to look to organizational models that utilize global delivery, pure labor arbitrage won’t be the driving force in where banks choose to set up their operations. Decisions will be made increasingly about measures such as **access to expertise** and

technology. In addition, banks will continue using **advanced operating models** in order to counter a dynamic and disrupted business environment.

Banks can organize their operations in multiple ways. Some banks may use a more **federated** model that promotes silos along product or geographic lines. Other banks may have **outsourced** or offshored certain processes so some are **shared across business units**. Still others may have moved to a full-fledged **internal shared services model** that leverages onshore and offshore delivery and dedicated centers of excellence. **Industry utilities**, although not as common in the banking sector, involve the pooling of resources across banks with a central service managing the processes for all participants.

Federated. A bank in this stage typically uses a siloed approach that opens up the organization as a whole to the possibility of redundant processes and infrastructure as well as a lack of information-sharing across regions and business units. Although cost by business unit may appear to be efficient, **process and technology redundancies** lead to the inefficient use of resources across the bank.

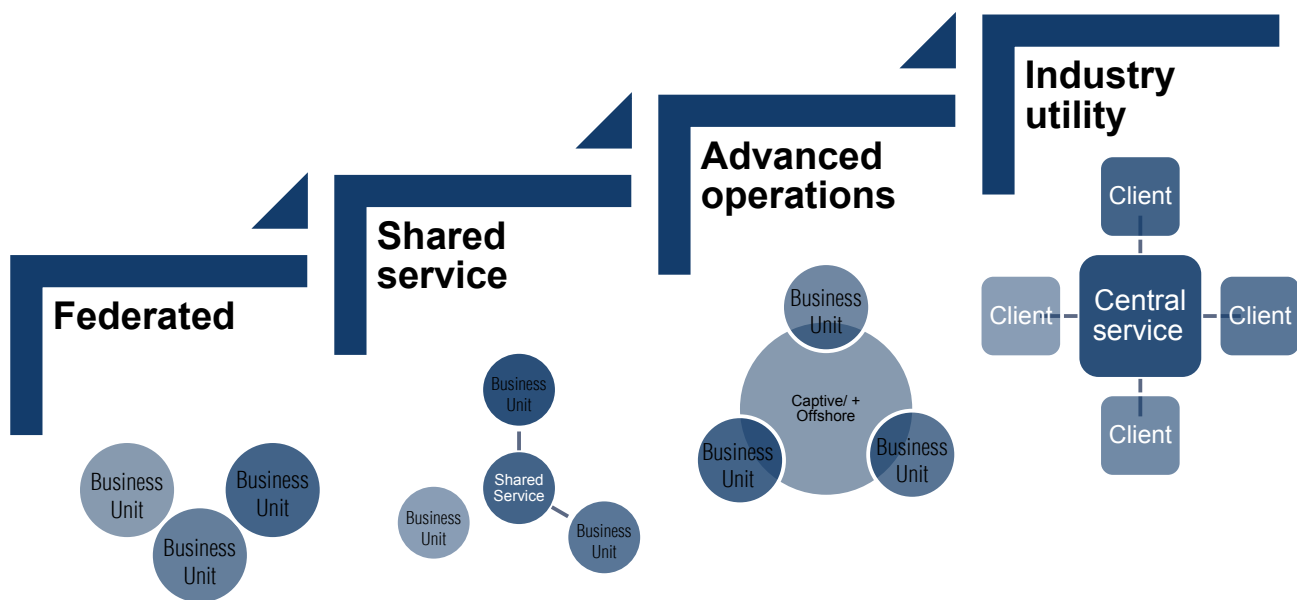


Figure 19: Multiple ways of banking operation

Shared service. Many firms that have offshored or outsourced part of their technology and operations find themselves in between an entirely federated model and a more advanced shared operating model. These firms see value in **combining certain back-office functions, leveraging low-cost geographies,** and realizing some level of **standardization.** Although the ownership of the function may continue to exist by business unit or geography, portions have been centralized. However, data duplication and multi-point client outreach issues remain along with a limited ability to further standardize processes and policies.

Advanced operations. These banks use outsourcing and data vendors on a large scale and may have built centers in near-shore or offshore locations to oversee certain banking functions. These banks are typically in the **early stages of global policies and data standards.** The delivery of these operations typically occurs through a bank-owned captive, a service provider-owned center of excellence, or a joint venture between the two.

Industry utilities. Many banking functions in the middle and back offices are rapidly becoming

Utilities as a way forward for bank client onboarding

At what point does the cost of onboarding a client outweigh the benefits? As the requirements for people, data, and technology needed to on-board and conduct institutional know-your-customer (KYC) due diligence continue to grow each year, and margins continue to compress, banks must implement a more agile and cost-effective industry-level service.

KYC and client onboarding

Different banks and their business units request, process, and store the same information from the same clients over and over each year leading to higher costs and lower customer satisfaction levels. In addition, the complex, rigid, and non-standardized processes and structures currently in place impede the reduction of operating, credit, and regulatory risk.

The challenge

The benefits of an industry-level service are clear; however, achieving that goal requires that certain hurdles be addressed, including satisfying the needs of regulators and internal

policy owners, creating the right kind of client impact, enacting change management across business, operations, technology, and compliance functions, and gauging the true cost and potential risks associated with adopting a new KYC process. Many banks are currently conducting their KYC process through varied operating models with some approaching KYC at the business unit level while others move toward an internal shared service. The key is to implement a solution that is not only robust but also flexible enough to make sense for any bank regardless of where they are in their KYC evolution.

The Journey ahead

Today, there are concrete options for banks to pursue in order to arrive at a long-term solution to KYC and client onboarding without saddling the organization with additional complexity and cost. The optimal solution rests on capitalizing the collective industry experience of those most familiar with KYC processes and combining that experience with better processes, technologies, and an optimal operating model that shares redundant activities across the industry in order to enable a cost-effective and practical solution.

commoditized, and now, banks compete primarily on the cost of providing these services, not on their quality. Traditional cost-efficiency levers such as process optimization, traditional outsourcing, and application simplification may not provide the best possible solution. A utility can be formed when a group of banks comes together to **share the cost of operations** using a common technology platform, by joining forces in a true shared services program run by a neutral non-bank partner. This **reduces the average cost to operate** in stable conditions but, more importantly, helps banks cope with increases in volatility. For example, by linking the cost of services received to transaction volumes, an industry utility could enable banks to make their fixed cost base more variable.

The operating architecture of the future

Investing to address digital and regulatory disruption entails a certain level of risk for banks. Looking back at attempts at transformation paints a less-than-rosy picture as efforts at large-scale enterprise resource planning (ERP) engagement have often delivered a disappointing ROI. Bank executives are, and should continue to be, wary of making significant financial investments in new technology, processes, and operating models.

However, experience shows that, in many cases, the **root cause** of poor returns on digital investments was attempting to fit new technologies into old processes or adding a layer onto legacy systems. These issues are amplified when solutions do not take into account the effects across the front, middle, and back offices. To ensure a greater ROI delivered in transformational investments, banks have to ensure that they are implementing solutions in tandem with each other in a business context, instead of in isolation. To improve customer experience and business service transformation through these newer technologies, banks must consider a holistic solution that balances the needs of the customer, the regulator, and the bank itself.

In many cases, banks undergoing digital transformations today will benefit, thanks to better process design and transformation practices, as well as from more agile technologies coming from the fintech movement. **The challenge then becomes how in practice banks can most effectively use their existing budgets to make the best digital investments.** By capturing the value delivered by digital solutions, banks can open up new avenues of growth, transform customer interactions, and more effectively provide innovative new offerings tailor-made for customers of the digital age.

Part 3

What impact can be achieved?

In many ways, the bank of the future is not something that is limited to a certain set of activities or timelines. Banks will continue to evolve amid the digital and regulatory backdrop, and in many cases, that evolution has already begun. **Key business areas** such as wealth management, retail banking, mortgages, and commercial lending and leasing,

as well as support functions such as Finance and Accounting (F&A), are all undergoing transformative changes. Figure 20 offers just a sampling of some of the digitally-enabled solutions that banks and financial services firms are implementing today, as well as their corresponding impacts.

	Wealth management	Retail banking	Mortgages	Commercial lending & leasing	F&A	Insurance
Solutions	All-in-one wealth management platform	Integrated multi-channel customer management solution	Mortgage loan originations platform	Commercial lending and leasing originations platform	Cloud based solution for F&A Stat. and Reg. reporting	Rapid automation solution Rule based workflow solution
Impact	Automated front to back office solution Goal oriented strategies for customers Simplified key operational tasks	Integrated solution of technology, analytics and operations Consistent customer experience Reduced cost of operations	Differentiated workflow and transaction automation Process standardization Productivity gain	Unique lending processes that support diversified lending products End-to-end, real time technology platforms	Business process best practices Cloud computing Simplified deployment approach	Productivity gains Reduced cost of claims Improved throughput

Figure 20: Typical solutions integrated across service lines

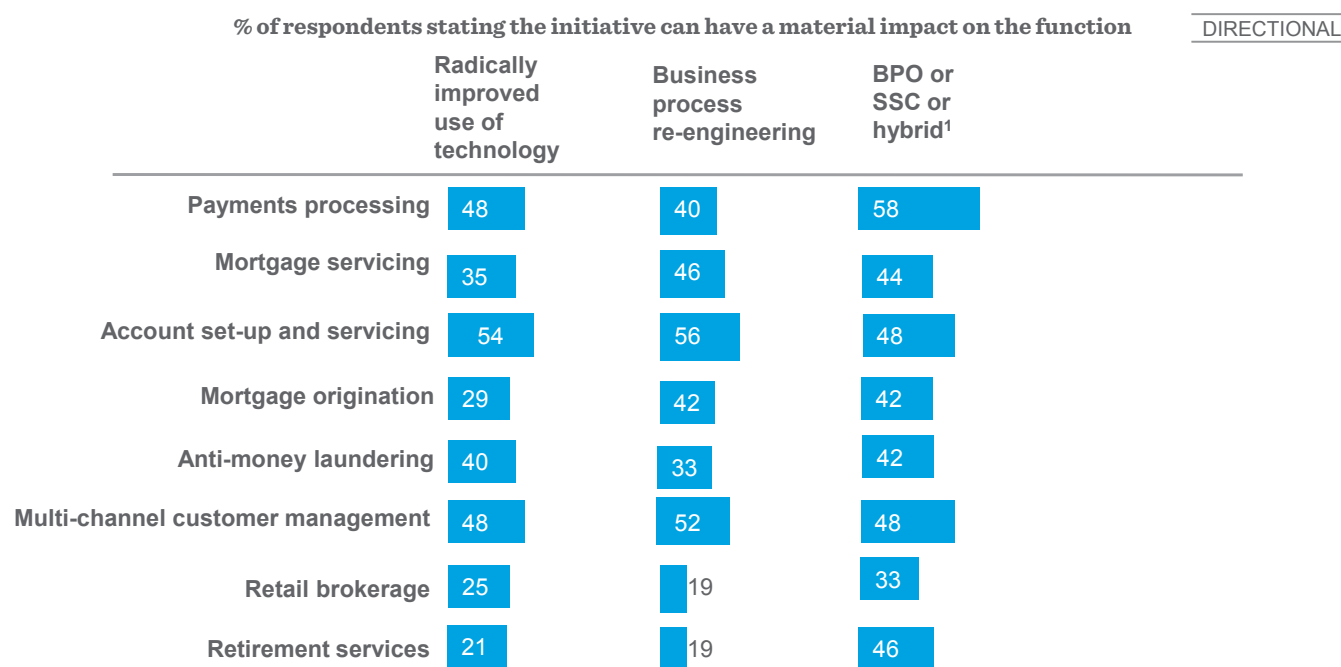
Regardless of which area a bank is focusing its digital efforts, almost all banks are facing common drivers to some degree, including complex legacy systems and processes, skillgaps, fragmented efforts, and unclear prioritization. In short, banks don't always know where to start. However, there is a pattern in the changes occurring across their operations. A uniform and **practical approach to digital enablement** not only can productively harness digital technologies and analytics but also can help banks construct advanced organizational models and leverage them to deliver enterprise-wide impact. The resulting **intelligent operations** constitute a more rapidly attainable, yet

scalable and cost-effective, business process platform that lets banks more easily adapt.

To gain further insight into how banks are leveraging more intelligent operating models, Genpact polled 201 respondents who provide retail banking services and 206 involved in commercial services (see Figures 22 and 23). The results clearly indicate that operations can be materially improved through the improved use of technology, process reengineering, and outsourcing or shared services. However, not all functions will experience the same benefits, which makes the question of **prioritization, or WHAT banks transform first, even more critical.**

FROM: Traditional operations	TO: Intelligent operations
Heuristics, Descriptive	Analytics predictions, prescribes
Accounting, experience	Statistics, domain
Resources under one roof	Flexible resourcing
Largely fixed cost	Variable cost
ERP, SOP, long development, 5-7 years ROI	Agile, workflows, cloud, APIs, mobile, 1-2 years ROI
Analog	Digital
IT or org dev or analytics	Integrated IT / org dev / analytics
Fragmented	End to end
Last	Adapt

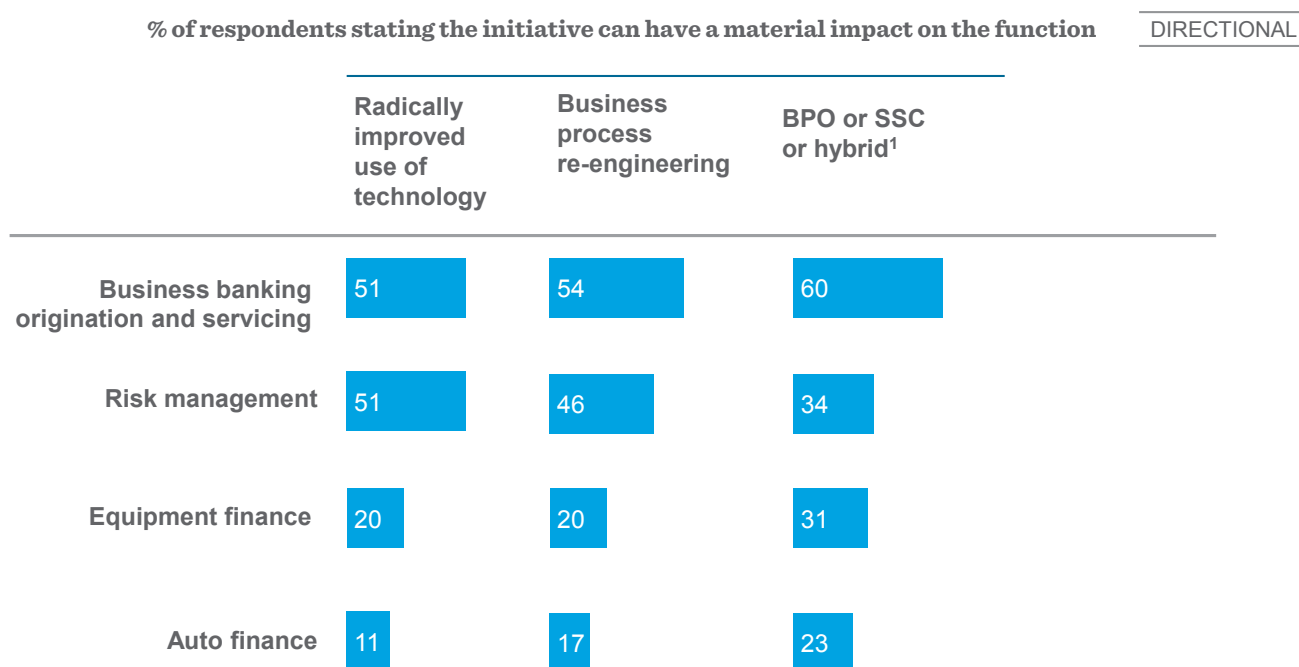
Figure 21: Intelligent operations are built differently



* Function Impact Index combining stated importance of challenges and stated ability of a function to address them

¹ BPO –Business Process Outsourcing, SSC –Shared Services

Figure 22: Advanced organizational models have material impact, but the perception varies across functions



* Function Impact Index combining stated importance of challenges and stated ability of a function to address them

¹ BPO –Business Process Outsourcing, SSC –Shared Services

Figure 23: Many commercial bankers believe advanced organizational structures have impact across functions

What are banks transforming?

Banks are transforming front-office offerings and middle and back office support functions in a substantial way. These transformations across areas such as wealth management, retail banking, mortgages, commercial lending and leasing, F&A, and risk management are enabling banks to evolve their overarching business models for success in the future.

Wealth management

Growing profitably with outdated technology and increased client expectations is a challenge for all wealth managers.

Next-generation investors are embracing the digital age, while their parents still look for traditional channels. This creates a complex situation, especially when factoring in the digital upstarts, such as robo advisors, attempting to disrupt the traditional advisor/client relationship. Technology, applied as part of a digitally enabled operating model, is helping banks and wealth managers deliver revenue opportunities and reduce costs while improving the client experience.

Growing profitably without sacrificing client experience

Increasingly sophisticated clients are driving the demand for new products and features, such as house-holding, tax-loss harvesting, and account aggregation. Wealth managers need to meet these demands, but must do so against a backdrop of more competition and the emergence of robo advisors, which have driven fees down. Legacy systems are too inefficient to meet the dual challenge of rising digital expectations and tighter cost controls, which is why banks are moving to **centralized and consolidated systems** that can scale without disrupting day-to-day business. For example, when a bank implemented a managed account platform that provided advisors the ability to manage the entire investor lifecycle, advisor productivity increased, and the bank grew assets under management (AUM) with a five-year compound annual growth rate (CAGR) of 76%. The streamlined operations also enhanced risk management and alerts-based compliance monitoring across all advisor activities.

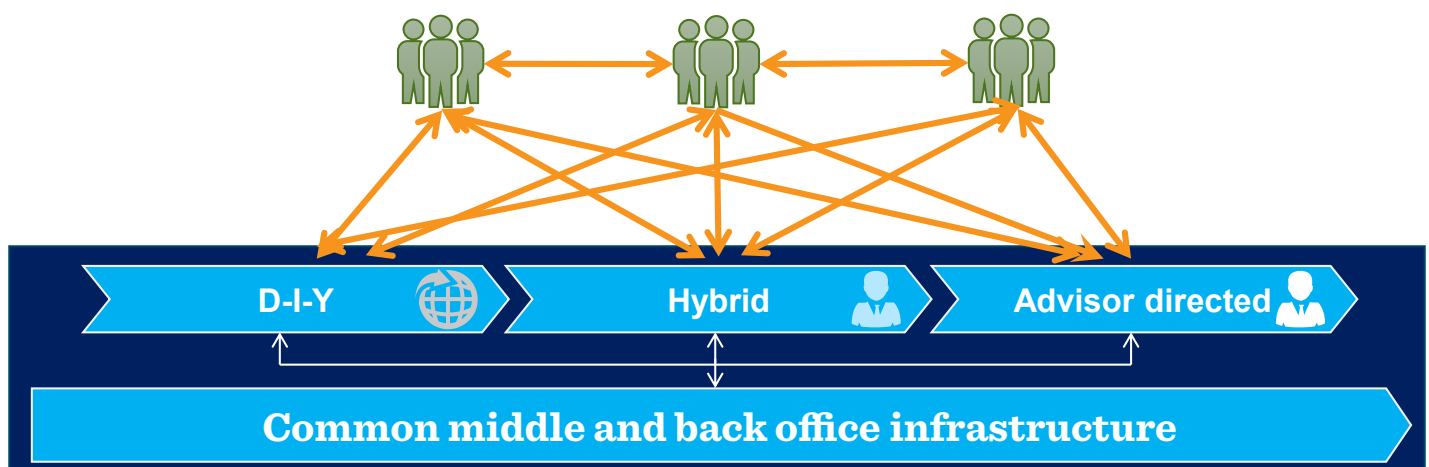


Figure 24: Individual investors or household relationship

Moving beyond legacy systems

Fragmented legacy platforms create highly inefficient operating environments and limit top-line capacity. After **decades of bolted-on solutions**, disparate systems cannot provide a streamlined customer experience, are difficult to use, and are costly to run. In some cases, disparate systems can even hinder talent recruitment and retention. When faced with these issues, a rapidly expanding wealth manager moved its retail and institutional programs to a **single platform** and standardized processes across geographies, practices, and products. As a result, the firm lowered its total operating costs while also improving its staff on-boarding processes. With more advisors onboard, the firm’s AUM doubled within the first year of the operational transformation.

Avoiding being replaced by automated solutions such as robo advisors

Integrating physical and digital channels to provide full service to customers is key for wealth managers, but it requires reframing the approach to advanced

digital technologies so that they **empower advisors**, as opposed to replacing them. For example, when an established wealth manager leveraged a common infrastructure, the firm offered a balance of physical and digital advice. The firm’s customers benefit from account aggregation while seamlessly accessing advice at the level that best suits their needs.

Putting it together

The critical changes for banks and wealth managers is that they are now utilizing design thinking to integrate technology, process reimagination, and organizational models to increase scale and reduce costs at the same time. A well-designed end-to-end operation also reduces manual activities by advisors and allows them to focus more on the client experience (see Figure 25).

Retail banking

Retail banks must deliver a superior omni-channel experience and cut costs. Customers now interact with banks in all kinds of ways. These different channels will only increase as advanced digital technology becomes more widespread.

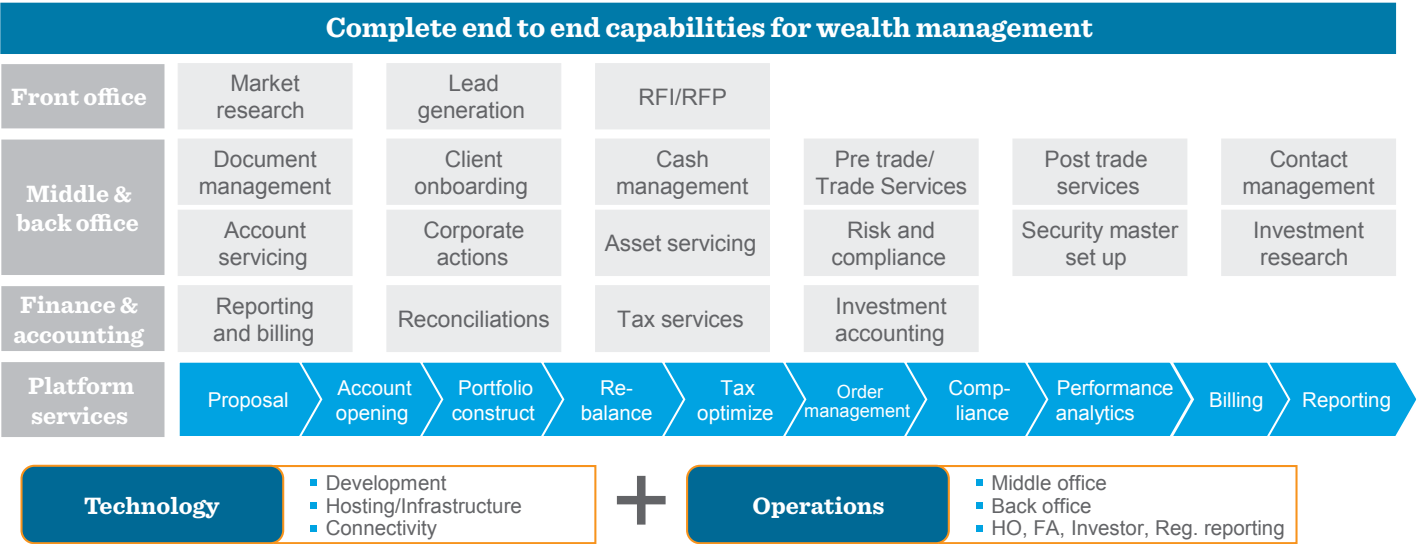


Figure 25

The key to building **cost-effective channel-agnostic** services is to use design thinking and Lean principles to **minimize ongoing investment in legacy systems**. Intelligent customer analytics, process transformation, and embedded agile technology are critical for maximizing value in omni-channel banking services, while minimizing costs.

Design for the customer, not the bank

Whether it's researching and applying for a loan, opening an account, or disputing a credit card transaction, customers often initiate a process in one channel only to continue or conclude the process in another. They expect banks to know exactly where they are in this journey regardless of the touch point they are using, which means the way a process is designed must be channel-agnostic and navigated seamlessly, based on preference and suitability.

In practice, a leading bank decided to migrate to a new customer relationship management (CRM) platform in order to integrate chat and social media into its support services. The bank started by putting the right technology into place and cross-training associates so they could support and drive simple and complex processes across channels. The resultant impact was a 20% reduction in calls and a 37% reduction in average handle time, and first-call resolution rates improved to 69%.

Migrate to self-service without impacting service levels

Genpact's own research into the habits of retail bank customers indicates that 71% of customers who use lower-cost digital channels, such as mobile banking, are satisfied, which is in line with other non-digital channels, such as the branch. However, in some regions, up to 60% indicate they have not used their banks' existing digital channels.²⁰ Many transactions, such as balance inquiries, are still handled in costly human-assisted channels. Banks must **migrate these transactions** to more efficient channels without unsettling their customers. A global bank did so by reducing its internal transfers, optimizing call routing,

and shifting calls to alternative channels. As a result, the bank experienced a one-time \$9 million cost reduction and an ongoing 30% reduction in call center operating costs.

Creating channel-agnostic capabilities and architecture

Channel processes and technologies still exist in silos today, with each channel having a siloed organization, process hierarchy, and application stack. This makes it difficult—and sometimes impossible—to deliver experiences that **span channels**. Silos also create significant cost inefficiencies due to a lack of standardization and the duplication of channel business logic, such as transaction messaging. To overcome these issues, a bank decided to centralize its widget-based framework and introduce generalized reusable components and modules. The bank also adopted a user interface (UI) that was more responsive and adaptive through touch-enabled technology. This resulted in a unified end-user experience that allowed customers to access all relevant information on a **single screen**. It also introduced developer and client integration support, along with advanced cache management and error management modules. As a result, the bank saw improvements in customer productivity, unified multiple devices across the customer experience, and improved error notification and response times.

Commercial lending and leasing

Commercial banks are not immune to digitization

Commercial lenders and equipment financiers must balance growth and operational streamlining. Finding the optimal balance lies in a target operating model: one that blends customer service, risk management, and collections processes while remaining a scalable and agile process. Smarter operating models, intelligent customer analytics, process transformation, and agile technology can help add value, mitigate pressure on margins, and drive growth through diversification.

Wringing out customer service costs without sacrificing service

The challenge

A leading global financial institution needed to improve operational efficiency within its customer service organization across multiple business lines. The bank also lacked visibility into the performance of its contact center and technology usage and was unable to identify and implement an optimized solution due to a lack of a business case with concrete ROI.

Solution

Using a proof of concept that demonstrated how analytics would transform the customer service organization, the bank moved the project forward. More than 55 measures were developed to map and baseline processes. This allowed the bank to reduce costs and improve operational efficiency. A data hub for customer service operations provided actionable analytics, giving the bank a better mechanism to make ongoing decisions across business lines.

Business impact

Enhanced performance and working capital management led to reductions in agent handling times, inbound contacts, and total operating costs.

Leveraging technology

Over time, the operating environments across many commercial lenders have devolved into a morass of **disconnected legacy systems**, leading to inefficient credit decisions and slow loan management processes. This sub-par environment with an inordinate amount of manual work causes poor customer satisfaction, cost overruns, reduced productivity, and inaccurate compliance reporting. For one leading commercial lender, the solution began with a thorough analysis of the end-to-end processes. With the primary focus on customer satisfaction and audit compliance capabilities, the bank analyzed its disparate systems, security and data compliance processes, business process workflows, manual hand-offs, paper-driven dependencies, and efficiency leakage points. The bank then moved its operations to a fully integrated, straight-through, end-to-end loan processing model by implementing a **cloud-based commercial loan origination platform**. This enabled the bank to assimilate front- and middle-office functions, such as lead generation, credit analysis, credit decision, exposure management, pricing configuration, document management, and advanced reporting, on one platform and center of excellence. The platform transformed the financial services firm's small business loan process, reducing the turnaround time by 88% (from nine days to one day) and significantly enhancing customer experience.

Standardization improves margins

Competition is increasing as bigger lessors, banks, and more agile local players fight for market share. Combined with a growing regulatory burden, this competition is stressing corporate structures and cost models to the breaking point. Responses to this challenge focus on **standardizing technology platforms, transforming process, and redefining operating models**. For a leading equipment financier that was receiving more than half of its payments as checks, the solution was greater automation. By using process improvement techniques to yield higher auto cash application rates, the firm reduced rejection rates and costs through automated cash processing of \$96 million in payments annually.

Differentiate in a fiercely competitive market

Commercial banks are pursuing growth through a diversified product mix. They are also optimizing originations and credit processes, and introducing technology that engages customers in account management and invoice generation. New disruptive players are reframing services and employing smarter technology while alternate lending models, such as peer-to-peer, are gaining ground. A global bank realized it had inefficiencies in its origination process, leading to deal attrition and higher costs. After the bank standardized its processes across the end-to-end originations cycle through an integrated operating model, the deal conversion rate improved by 15%, and the firm saw a \$100 million increase in originations.

Standardizing a commercial financier's operations improves originations, servicing, and collections metrics while cutting annual costs by \$60 million

The challenge

Acquisitions across the commercial finance division of a bank led to a complicated network of systems and locations with no standardized performance metrics. The goal was to reduce the number of legacy systems, consolidate operations into a single delivery center, and improve booking accuracy in order to decrease rework and mitigate the risk of downstream losses.

Solution

The bank redesigned the technologies used by each business line and consolidated the processes into a unified operating model. Existing platforms were migrated to a single commercial banking system

Scalable operations: Grow with the customer

In the equipment leasing industry, original equipment manufacturers (OEMs) are growing by accessing customers in new geographies, and commercial lenders are following suit. Lessors are also finding opportunities in the move toward more **usage-based, pay-as-you-go models**. In one example, the financial arm of a leading equipment manufacturer wanted to quickly deploy new cost-effective, end-to-end leasing operations to accommodate growing demand. A holistic operating model created a globally scalable leasing operation that was 50% cheaper to implement than non-end-to-end solutions.

while a centralized operating model was implemented for clear and transparent process metrics.

Business impact

The consolidated commercial finance operations enabled the group to be more competitive through significant process improvements and a \$60 million reduction in annual costs. In addition, the key functions achieved the following:

- Origination- Cash and booking accuracy rose above 95% through clear workflows, simplified documentation, and a strong audit mechanism
- Servicing- Unapplied cash was reduced by more than \$80 million using specialized research tools and a time-bound resolution matrix
- Collections- Greater than 30-day delinquencies dropped to less than 2% through collection analytics that enabled the team to transform the collections process

Finance and Accounting (F&A)

Regulatory compliance, risk management, and cost reduction are the biggest worries confronting banking CFOs

Timely and accurate reporting of data is no longer enough; now, the expectation is that finance groups will **improve business performance**. For most financial institutions, this means transforming operations to deliver actionable business intelligence derived from data in order to gain insight into the business and the market.

Bank CFOs and other senior finance executives believe that the finance function has a key role to play in the future of banking. However, the function’s ability to impact these challenges depends on the levels of maturity and preparedness, which vary widely across the industry. Experience dictates that a better finance

function can lead to a 30% increase in transactional productivity and a 20% reduction in F&A operating costs and closing and reporting cycle times. Bank CFOs also have the ability to **unlock capacity** and resources to support the business in **strategic decision-making** and lead the continuing integration between finance and risk groups across the bank.

Improvements in FP&A and MDM are critical

Financial Planning and Analysis (FP&A) and master data management (MDM) have emerged as two key areas to watch. In a survey of 157 global finance executives, FP&A (64%) and MDM (49%) were far more frequently cited as having a material impact on risk management than any of the other finance sub-functions. Although FP&A has the most impact, MDM deserves special attention because it is less mature and not all companies are well-prepared to make it evolve (see Figure 26).

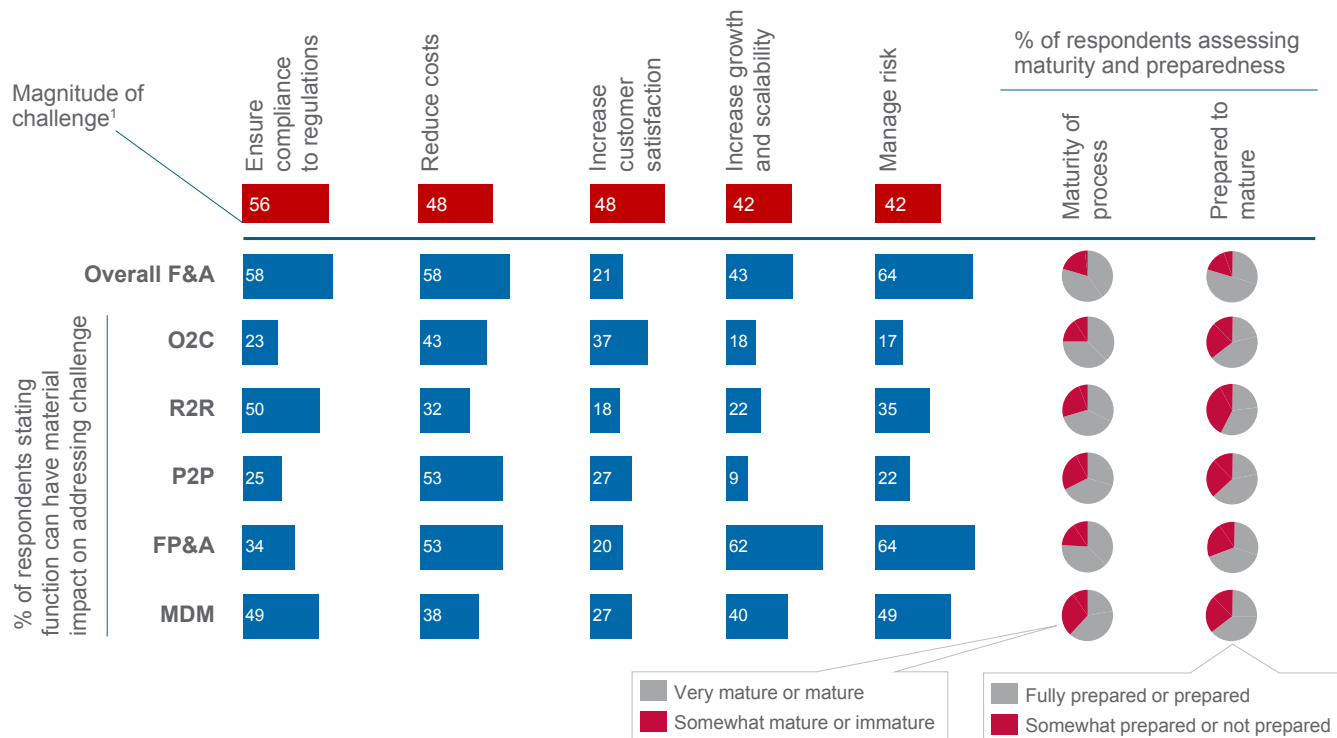


Figure 26: Importance of the challenge (% of respondent in specific functions across industries stating that the challenge is among the 'Top 3' for their company)

Radically improved use of technology is expected to generate the largest monetary impact

The research also showed that (when applicable) the improved use of technology is believed to provide the **greatest monetary impact on F&A processes**, especially for mature organizations. Leveraging now-mature “system of engagement” technologies that complement “system of record” technologies is the first step forward for banking finance functions. For the controllers’ reconciliation group at a large bank, this translated into the implementation of an industry-leading technology solution to improve accuracy and reduced timelines for more than 5,000 balance sheet reconciliation processes for each of the bank’s primary businesses.

Advanced organizational structures have the greatest impact in mature F&A sub-functions

For every F&A sub-function, the proportion of financial executives who rate advanced organizational structures as having material impact is significantly higher among organizations with mature functions. This contrasts with radically improved use of technology and business process reengineering in which there is little difference in impact among firms with mature and immature sub-functions. When a leading APAC bank determined that **many F&A processes were fragmented and sub-optimal**, the bank decided to redesign and transform its finance business services to create a true shared model. By reengineering all of the finance processes in multiple phases, the bank achieved a 30% increase in transactional productivity, simplified the structure of its shared services center, and freed up capacity to focus on continuous improvements. In addition, an automated reporting tool and scheduler rationalized the number of reports by 70% and reduced time spent data gathering by 40%. In another case, a global bank holding company redesigned its end-to-end reporting process and took advantage of increased offshore delivery. The resulting impact was a reduction in the earnings release date by seven working days.

Risk management

Driving integrated and proactive risk management

In a new age of compliance, banks are balancing current risk management priorities against the need to embrace increased digitization in the future. With varying levels of maturity across risk operations, banks must optimize and scale their risk management processes in order to meet business and regulatory demands.

Meeting current compliance needs while preparing for the future

Banks need to focus on five key imperatives for their risk management programs:

1. Ongoing emphasis on changing regulations
2. Balancing cost with time to compliance
3. Integration of finance and risk functions
4. Building an enhanced data governance and risk reporting culture
5. Building strong model management capabilities, driven by technology, partner ecosystem, and in-house teams

Layering technology on legacy systems, a lack of risk talent, and delayed returns from digital investments all blunt the usefulness of risk management programs. New tools and industrialized operations can deliver a more intelligent risk management function but can’t be implemented at the expense of current operations. When a global bank with \$1 trillion in assets faced a similar challenge, the bank leveraged a **global risk talent pool** along with an **end-to-end regulatory solution** in order to keep its model risk management functions validated across its consumer, commercial, and traded books. The process covered models for Comprehensive Capital Analysis and Review (CCAR), Basel, and Allowance for Loan and Lease Losses (ALLL).

Using data analytics

All global banks recognize the value of accurate, centralized data in improving portfolio control and reporting, optimizing decision-making, and enabling a **comprehensive risk data governance program**. Successful models usually combine a well-documented and fully functional data dictionary, data quality engine, data governance infrastructure, and data security system. This was the case for a top US bank looking to improve data governance. By implementing a Basel-compliant metadata program, data repository, data lineage, data quality, and mitigation function, along with a reporting and monitoring dashboard, the bank improved compliance and realized efficiencies across its BCBS 239 risk controls.

Expanding capacity in alert remediation and transaction monitoring functions

Know Your Customer (KYC) and Anti-Money Laundering (AML) regulations are changing to address new rules for legal entity identifier, risk-based screening and due diligence, comprehensive documentation, and additional screening needs. For banks, transforming these processes creates challenges such as too many false positives, limited and non-standardized efforts, and manually intensive processes. A large US bank overcame these challenges by implementing a center of excellence (COE) organizational model for AML alert

remediation in its cards, auto finance, and banking portfolios. The COE was set up within eight weeks and now manages multiple **sanction screening, alert remediation, and transaction monitoring** functions. The bank realized a 20% boost in productivity and best-in-class 97% adherence to service levels along with a reduction in customer onboarding time.

Using financial spreading to predict probability of default and manage portfolio credit risk

Changing regulations necessitate standardized processes to ensure accurate and consistent probability of default assessment across a bank's portfolio. **Spreading of borrower financials** provides key outputs for risk analysis, borrower risk ratings, loss estimation, and capital planning. Historically, financial spreading has faced challenges regarding multiple templates, non-standardized operating definitions, and inconsistent treatment of line items and exceptions. Accurate, standardized, and consistent spreading of borrower financials is a critical component of the overall credit risk function. For a large global financial institution, the financial spreading function needed to be centralized and standardized. After a well-documented and thorough transition with appropriate oversight and governance, the new model delivered a 40% up-front cost reduction and a 10% gain in productivity year on year. In addition, the overall processing time was reduced by 40%.

Conclusion

Over the past two decades, the banking industry has been able to successfully navigate digital innovation starting with the emergence of e-banking, followed by multi-channel and now omni-channel engagement models. Now banks are being pushed to take the next step in the **digital journey** towards things like artificial intelligence and the Internet of Things without ever having been able to truly reset their systems and operations from the last evolution. The exponential advances in technology resulting from the digital revolution, coupled with the loss of financial leverage brought about by a new regulatory regime, have left the industry in a state of flux. As banks have scrambled to keep up with the more rapid changes in their business environment, the result has been an industry with a **digitized business model supported by an analog operating model**. As a result, banks are missing opportunities to delight their customers and the industry is more open to disruption than ever before. While capturing the hearts and minds of customers is no easy task, that is exactly what new

entrants have set out to do, and in some cases with great success. However, delivering on the promise of the next generation of digitally enabled customer engagement will hinge on how new-comers and incumbents alike approach their middle and back office operations.

As the barriers to entry into the financial system continue to come down, the banking industry must start getting serious about improving its **operating leverage**. Banks, and those seeking to disrupt them, will continue to experiment, fail, and invest across products and channels. Much of this will happen in the halls of agile start-ups, experience (and capital) laden bank innovation centers, or as a result of partnerships between the two. However, regardless of where the next big ideas for digital banking come from, it will be those that reimagine how the business executes across the front, middle, and back offices that will realize the greatest returns on their investment and become true innovators in the industry.

- ¹ Putting Digital to Work: The Lean Digital Way, <http://www.genpact.com/leandigital/>
- ² JPMorgan Form 8-K, <http://investor.shareholder.com/jpmorganchase/secfiling.cfm?filingID=19617-13-223>
- ³ Lenders Place Their Bets on Mobile Banking, <http://www.wsj.com/articles/SB10001424052702303847804579481811781070456>
- ⁴ A New Era of Branch Wars at Nation's Big Banks, <http://www.cnbc.com/id/100627815>
- ⁵ Results from a Genpact survey of 2,241 adults who have a current account with a bank.
- ⁶ Based on the triangulation of two data sets: first, the size of IT spend globally (around US\$4 billion in 2015 dollars according to Gartner), of which 28% is related to new projects (as opposed to pure maintenance projects, according to Forrester). We assumed that digital (collaboration, social, cloud, mobile, analytics tools, and technologies) represented a similar proportion of the total IT spend, given that (a) most of the new projects have digital components and (b) some maintenance has digital components (e.g., new cybersecurity, infrastructure); second, recent research from the Everest Research Institute, "North American Digital Adoption Survey."
- ⁷ Results shared by 110 executives of shared service operations across industries, polled Q2 2015.
- ⁸ Transforming Banking Operations through Advanced Operating Models, <http://www.genpact.com/insight/transforming-banking-operations-through-advanced-operating-models>
- ⁹ Advancing Operating Models in the Banking and Capital Markets Industries, <http://www.genpact.com/insight/advancing-operating-models-in-the-banking-and-capital-markets-industries>
- ¹⁰ The World Economic Forum, The Future of Financial Services: How Disruptive Innovations Are Reshaping the Way Financial Services Are Structured, Provisioned and Consumed
- ¹¹ Industrialized Operations for Retail Banking: The Foundation for Defense and Offense in Volatile Market Conditions, <http://www.genpact.com/insight/industrialized-operations-for-retail-banking-the-foundation-for-defense-and-offense-in-volatile-market-conditions>
- ¹² What's the ROI of Mobile Banking? 15.7%, Forrester Says, <http://www.americanbanker.com/bulletins/-1037534-1.html>
- ¹³ Based on a Genpact survey of 7,152 retail banking customers in the US, UK, Germany, Australia, and the Netherlands.
- ¹⁴ Putting Digital to Work: The Lean Digital Way, <http://www.genpact.com/leandigital/>
- ¹⁵ Based on the amount of global banking IT spend (around \$486 billion in 2015 according to Gartner), of which Genpact research shows that 15–25% is related to digital investments (collaboration, social, cloud, mobile, analytics tools, and technologies).
- ¹⁶ Putting Digital to Work: The Lean Digital Way, <http://www.genpact.com/docs/default-source/resource-putting-digital-to-work-the-lean-digital-way>
- ¹⁷ Industrialized Operations for Retail Banking: The Foundation for Defense and Offense in Volatile Market Conditions, <http://www.genpact.com/insight/industrialized-operations-for-retail-banking-the-foundation-for-defense-and-offense-in-volatile-market-conditions>
- ¹⁸ Putting Digital to Work: The Lean Digital Way, <http://www.genpact.com/leandigital/>
- ¹⁹ Advancing Operating Models in the Banking and Capital Markets Industries, <http://www.genpact.com/insight/advancing-operating-models-in-the-banking-and-capital-markets-industries>
- ²⁰ Based on a Genpact survey of 7,152 retail banking customers in the US, UK, Germany, Australia, and the Netherlands.

About Genpact

Genpact (NYSE: G) stands for “**generating business impact.**” We are a global leader in digitally-powered business process management and services. Our **Lean DigitalSM** approach and patented Smart Enterprise ProcessesSM framework reimagine our clients’ operating models end-to-end, including the middle and back offices – to deliver growth, efficiency, and business agility. First as a part of GE and later as an independent company, we have been passionately serving strategic client relationships including approximately one-fifth of the Fortune Global 500, and have grown to over 70,000 people. The resulting domain expertise and experience running complex operations are unique and help us drive choices across technology, analytics, and organizational design.

For additional information, contact, banking.solutions@genpact.com and visit, www.genpact.com/home/industries/banking-financial-services

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