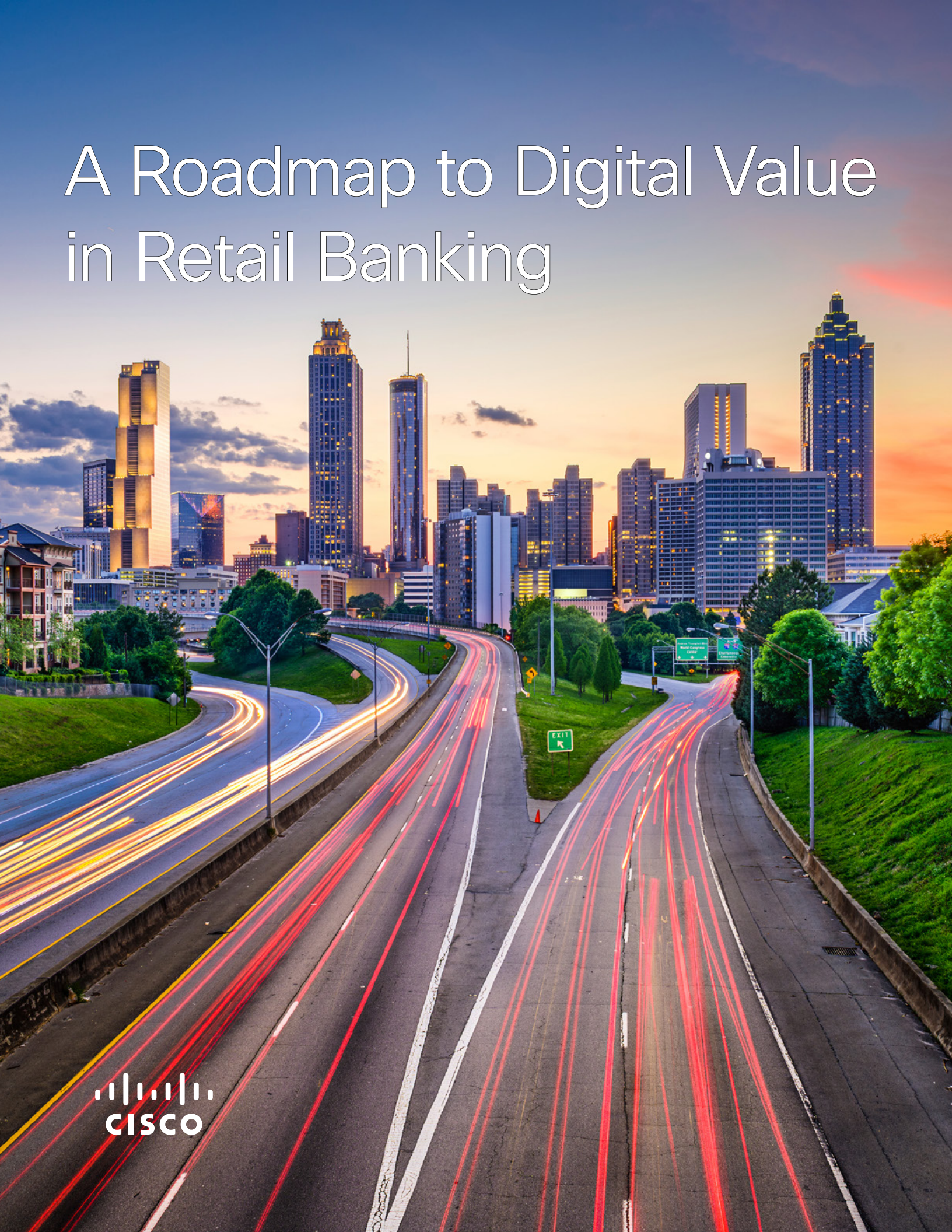
A Roadmap to Digital Value in Retail Banking



cisco

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This paper details specific digital use cases that can help banks differentiate with innovative new offerings and business models.

Key Insights

- Retail banks have a tremendous opportunity to **capture new value** and drive their own disruption.
- With the right technology investments, they can **streamline operations** and compliance, while offering customers the **real-time financial advice** and convenience they increasingly expect.
- Cisco's comprehensive economic analysis estimates that digital innovation in retail banking will drive **$405 billion** in Digital Value at Stake from 2015 to 2017.
- This paper explores the **digital use cases** that drive the most digital value for banks, including sales and services transformation, next-generation workers, video-based advisors, mobile payments, connected ads, and cybersecurity. By assessing, adopting, and, especially, combining the right digital uses cases for their needs, banks will capture their share of this opportunity and be in position to:
  - **Enable** IT agility and operational effectiveness
  - **Differentiate** their business strategies from those of competitors
  - **Define** disruptive new digitally enabled business processes
- Banks face a wide array of challenges, including disruptive new market entrants, fast-changing customer demands, and complex compliance pressures. Banks that fail to digitize more fully will surrender Value at Stake to new digital competitors or traditional banks that innovate faster.
- Financial services as a sector is already more digitized than most other industries, and many banks are in a good position to gain new digital capabilities. However, financial services still captured only 29 percent of the potential Value at Stake in 2015.
- A recent global survey of retail banking executives predicted that four of the top 10 incumbents will be displaced by digital disruption in the next three years.
- To meet these challenges, each bank will need its own roadmap, unique to its needs and current state of **digital transformation**. This requires assessing specific use cases that deliver the biggest near- and medium-term returns.
- By **combining multiple use cases**, banks have an opportunity to drive **disruptive new business models**.
- Incumbent banks that add digital agility to their traditional strengths—such as brand equity, access to capital, risk-management practices, financial expertise, and large customer bases—will **capture new value** and drive their own disruption.

"Change is changing; it's changing faster than it's ever changed before and that's because of technology."

– Ray Davis, CEO, Umpqua Bank

Retail Banks: Driving Their Own Disruption

Imagine a banking experience so compelling that customers simply can't look away. A bank with personalized interactions and advice available anywhere, anytime on mobile devices. Branches that blend video, interactive touchscreens, and data-empowered bank associates for a new dimension in convenience and service. And financial advice that is so timely and appropriate that customers act on it immediately.

A bank that is secure and agile enough to streamline its operations and compliance. With a workforce that is constantly innovating, bringing new products and experiences to market.

This bank would drive its own disruption.

With the right technology investments, *your* bank can do all of this and a lot more, while capturing your share of a massive opportunity created through digitization.

Given the pace of industry upheaval, this is a critical opportunity. Retail banking has had no shortage of challenges in recent years—everything from agile, digital-native disruptors and fast-changing customer demands to rising compliance pressures and increasing costs for branches and operations.

According to a 2015 study by the Global Center for Digital Business Transformation (DBT Center), an IMD Business School and Cisco initiative, financial services ranked fourth out of 12 industries in its potential for competitive disruption within five years as a result of digital technologies and new business models. Four out of 10 retail banking incumbents were seen to be at risk of displacement by digital disruption in the next three years.[1] (See "Digital Vortex: Financial Services at Risk for Disruption," below.)

With rising pressure from agile digital competitors—whether "fintech" startups such as Wealthfront and Moven, or larger entrants like Apple, Microsoft, and Google—every financial services organization must think like a tech company. As Chris Skinner, author of *Digital Bank*, told Cisco, "If banks aren't digital, they're going to be dead in the water." Beyond just being digital, Skinner stresses that banks must focus on humanizing the digital relationship, not digitizing the human relationship.

To that end, Cisco has identified specific digital use cases that can help banks differentiate and drive innovative, customer-centric offerings and, potentially, new business models. This economic analysis projects that digital capabilities will drive $405 billion in Digital Value at Stake for the industry between 2015 and 2017 (see Figure 1 and "Digital Value at Stake Defined," next page).

Financial services is already more digitally advanced than many industries. Most retail banks have taken important steps in omnichannel and other digital capabilities. However, in such a competitive climate, success may well be determined by who wins the race to fully integrate analytics, video, personalized anywhere-anytime advice, and other digital capabilities—and to use those technologies to empower their workers and provide great service to customers.

Digital Vortex: Financial Services at Risk for Disruption

The impact of digital disruption can best be understood through the construct of a vortex. A vortex exerts a rotational force that draws everything that surrounds it into its center. The Digital Vortex is the inevitable movement of industries toward a "digital center" in which business models, offerings, and value chains are digitized to the maximum extent possible. As industries move toward the center of the Digital Vortex, physical components that inhibit competitive advantage (such as manual, paper-based processes) are shed. Whatever can be digitized is digitized. The components of digital value can then be readily combined as disruptive business models. These models knit together different types of capabilities and deliver customer value in new ways. The most successful disruptors employ "combinatorial disruption," in which multiple sources of value—cost, experience, and platform—are fused to create disruptive new business models and exponential gains.

Digital Vortex: How Digital Disruption Is Redefining Industries

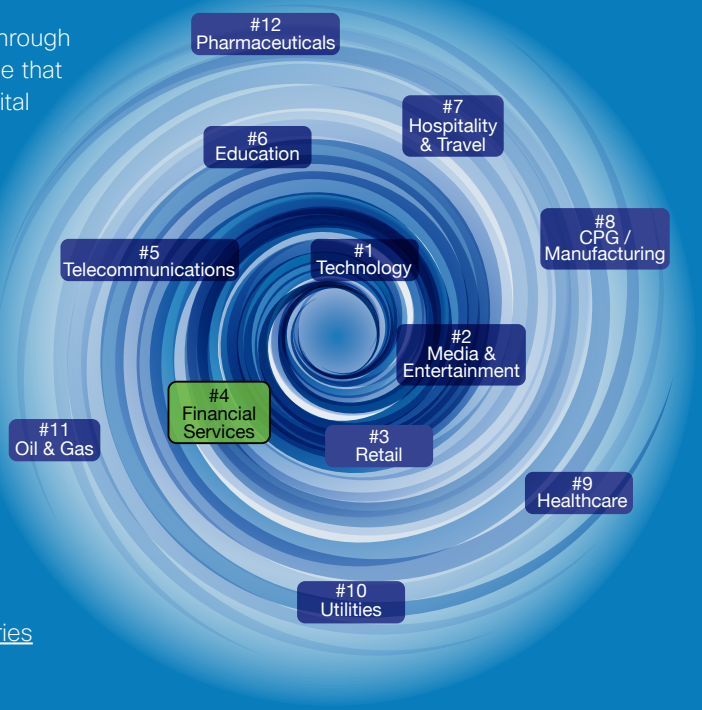


Figure 1 Key digital value drivers, use cases, and business outcomes for retail banking.
Source: Cisco, 2016

Digital Value at Stake Defined

Cisco defines "Value at Stake" as the potential bottom-line value (higher revenues and lower costs) derived from: 1) *entirely new sources of value* emanating from digital investments and innovations, and 2) *value shifting among companies and industries* based on their ability (or inability) to harness digital capabilities (in essence, value moving from "losers" to "winners").

The financial services industry secured just 29 percent of its potential Digital Value at Stake for the year 2015. This represented the highest percentage of any industry analyzed, but it still speaks to the tremendous opportunity that remains untapped. As we examine in this paper, a number of established banks are evolving into agile, innovative *digital* players and positioning themselves to capture more of this value. Banks that fail to digitize fully will miss out.

Moreover, many banks are not being proactive enough. According to a DBT Center study of 941 business leaders in 13 countries, including 165 in financial services:

- Thirty-three percent of financial services respondents (compared to 43 percent overall) either do not acknowledge the risk of digital disruption, or have not addressed it sufficiently.
- Forty-one percent are taking a "follower" approach in hopes of emulating successful competitors.
- Twenty-seven percent describe their approach to digital disruption as proactive—willing to disrupt themselves in order to compete.[2]

The time to act is now. McKinsey & Company estimates that incumbent banks have three to five years in which to digitize more fully, while laggards could see 35 percent of their net profits eroded.[3] Indeed, the very processes that made them successful in the first place can slow incumbents. Cisco economic analysis estimates that by not digitizing more fully, incumbent retail banks missed out on $144 billion globally from 2011 to 2015.[4]

The threat from new market entrants is formidable, if still nascent. Agile fintechs are targeting the most profitable areas within retail banking by "unbundling" banking services. Often they focus on just one product or solution. Because they typically avoid the core business of retail banks—taking deposits—they also face fewer regulatory hurdles.[5] Nor are they slowed by the legacy IT investments that can hinder agility and innovation in incumbent banks.[6]

Even so, using digitization to create an advantage isn't limited to digital natives. Incumbent banks can adopt digital capabilities—as many are already doing—to change the way they operate and the kinds of services they offer. Combining digital agility with traditional strengths—including brand equity, access to capital, risk-management practices, large customer bases, and expertise in financial advice—offers the potential for great success.

Banks with the vision to adopt the right digital use cases stand to capture their share of this massive opportunity. These use cases may include video advice, sales and services transformation, mobile payments, virtual tellers, and others. When combined and recombined, such use cases can drive powerful customer experiences that add convenience and efficiency—and, ultimately, lead to competitive new business models.[7]

For more insights, please visit
http://cs.co/RetailBankingA

A Customer 'Value Gap' Demands Digitization

Retail banking is the segment of the financial services industry with the most potential Digital Value at Stake (53 percent). However, customers don't believe they are getting the value from banks that they expect, particularly in the area of financial advice. Banks simply aren't providing the relevant and convenient interactions that digitally savvy customers now demand through all channels.

According to a recent Cisco survey, 28 percent of bank customers globally do not trust banks to represent their best interests. What's more, nearly one in four intends to choose another provider (not their primary bank) for their next financial product or service.

However, they were highly receptive to five core digital delivery concepts. These solutions focused on ways to deliver better advice (virtual financial advice, virtual mortgage advice, automated investment advice) and more valuable mobile services (mobile interactions in the branch, mobile payments).[8]

If they are to offer such services successfully—and continue to evolve and compete—all banks will need to digitize, starting with three

foundational digital capabilities (see "Three Interconnected Capabilities of a Digital Retail Bank," below).

The foundation for these capabilities is a network with speed, agility, and "extensibility"—that is, the capacity to grow and evolve. With such a network, one digital solution will never be an end in itself, but will support the next innovation. Pervasive security must underlie every aspect of the network to further enable this evolution and growth.

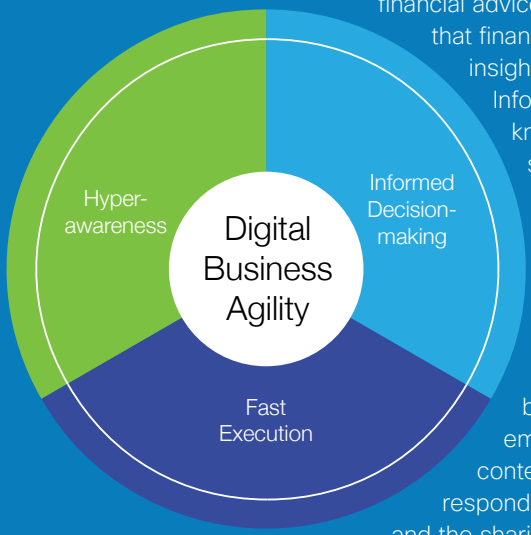
With digital capabilities in place, retail banks will have the business agility required to create relevant and compelling products and services. That will also require organizational change. Banks will need to leverage a wealth of new information to make instant and highly accurate decisions with customers (for example, pertaining to wealth management and, internally, for risk management) and create a culture of innovation.

As we have seen around the globe, financial services is vulnerable to disruption, whether from traditional competitors that digitize or from new entrants. China's Alibaba is one such example. It captured $100 billion in assets in only the second year of its wealth-management platform.[10] Since the financial services sector is already more digitized than most other industries, many banks are in a good position to gain new digital capabilities. These can drive differentiation and capture Digital Value at Stake.

Three Interconnected Capabilities of a Digital Retail Bank

Hyperawareness enables banks to recognize real-time insights and future trends. A critical component of hyperawareness is the ability to see firsthand how products and services are being used in practice (for example, by a bank customer generating data while accessing services, whether in the branch or on a mobile device). Or it can provide wealth-management specialists with up-to-date information on financial markets, fusing multiple data sources and providing a critical competitive edge. To attain hyperawareness, digital tools—including social networks, connected devices, and analytics—must act in concert to constantly monitor and share critical information.

Informed decision-making empowers banks to actively analyze real-time information, and to ensure that it reaches the people or machines needing it most (for example, bank associates or algorithm-based services dispensing financial advice). Few industries depend upon fluid decision-making to the extent that financial services does. Data insights provide employees with customer insights and second-by-second market developments for every interaction. Informed decision-making requires a technology foundation that includes knowledge-management systems to organize insights, collaboration systems to facilitate multimodal conversations, analytics systems to deliver evidence-based insights, and dashboards to display relevant information.



Fast execution turns decisions into action. Banks must respond rapidly to ever-changing market conditions and customer demands. This capability depends on analytics and digital connections. It also demands organizational change management to ensure consistent strategy, and to break down silos and rigid hierarchies. In short, the company culture must embrace an inclusive, action-oriented approach. In a financial services context, that can mean empowering a much greater number of employees to respond to real-time customer needs—supported by the automation of workflows and the sharing of real-time data insights.[9]

Building these capabilities at a time when budgets are flat can appear daunting. Digital transformation—and the associated technology investments—requires a self-funding strategy. It is important to focus initially on use cases that will deliver the quickest value. These gains can then help fund longer-term digital strategies with the potential to drive even greater value. The nice thing about developing digital capabilities is that they often do not require entirely new investments. Often, digital investments made to achieve one business outcome can be repurposed to drive other digital initiatives.

When it comes to digital transformation, the real cost lies in not digitizing. The 71 percent of financial services value that was left on the table in 2015 will be captured—by fintechs, by large technology companies, or by retail banks that innovate the fastest.

Digitization can be defined as the movement of operations, processes, and business functions onto a single, re-engineered digital operating model. What exactly does digitization look like for a typical bank? That will vary depending on the needs and digital maturity of each organization. In this paper we explore a number of specific digital use cases. When adopted thoughtfully—aligning them with business outcomes and integrating them with both technology and organizational change—these digital use cases unlock key opportunities to capture Digital Value at Stake. The challenge is understanding how to prioritize and where to start.

"...disruption is forcing [banks] to change...it puts them back into the game if they can find a way to invest, and strategize, and think ahead to truly change their relationship with the consumer..."

Mark Schwanhausser, Director of Omnichannel Financial Services, Javelin Strategy and Research

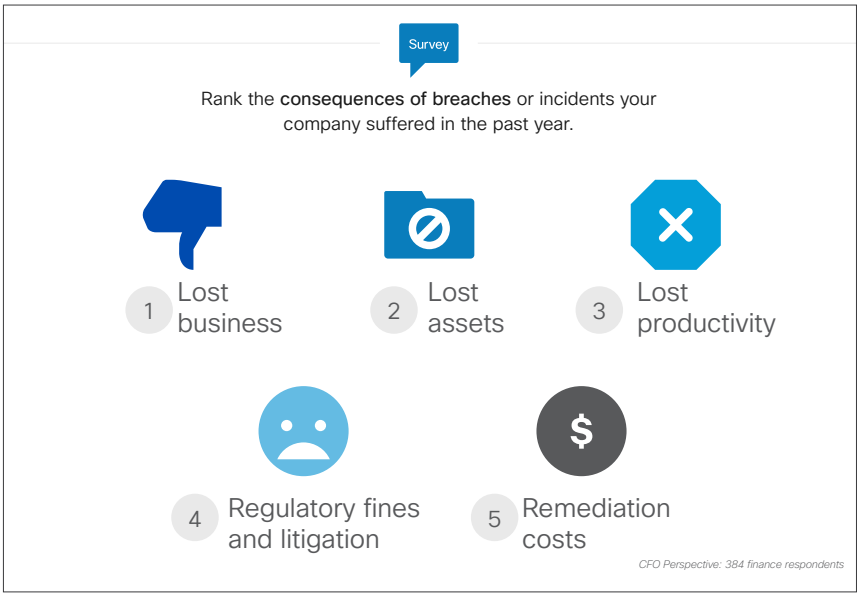
Cybersecurity: Key to Innovation, Customer Trust, and Growth

Any discussion of digital use cases in retail banking must begin with cybersecurity. It is the critical foundation of all of the other use cases, and a key to customer trust.

In addition, confidence in cybersecurity enables companies to drive critical digital initiatives. These initiatives will be essential differentiators in an increasingly competitive economy. Without that trust and confidence, growth suffers.

Recently, Cisco surveyed 1014 senior finance and line-of-business executives globally for its study, "Cybersecurity as a Growth Advantage." According to the financial executives surveyed here, lost business stemming from the erosion of consumer trust was the most feared consequence (see Figure 2) of a potential breach. In this scenario, customers avoid doing business

Figure 2
The consequences of breaches are far-reaching and devastating
Source: Cisco, 2016



with a bank because they fear their accounts could be vulnerable to cyber threats, jeopardizing millions in revenue.

Financial institutions are built on customer trust. In particular, a use case such as mobile payments depends entirely upon consumer confidence. Firms must be able to prevent security breaches—and detect and remedy them quickly if they occur. Mobile-payment security breaches can result in downtime, lost revenue, retribution costs to remedy the damage, and loss of financial data. The intangible effects can be even more harmful, eroding brand equity and hindering bold innovation.

"...there is still trust in a bank. You go out and ask the general consumer, they say 'yes.' They might not like their bank, but they trust that they will do the right thing."

Ray Davis, CEO, Umpqua Bank

As we have seen, value shifting from a digital laggard to a more technologically savvy firm is a prime component of Digital Value at Stake. If one bank does not inspire confidence in security, customers will switch to another. This was underscored by a Unisys security survey, in which nearly 60 percent of Americans said that a security breach involving their data would make them less likely to do business at a bank.[11]

To ensure that cybersecurity is a true differentiator that supports agility, innovation, and growth, firms need to begin viewing it differently—beyond its traditional "defensive" role.

In the previously mentioned cybersecurity study, across all industries:

- Seventy-one percent of respondents agreed that cybersecurity risks and threats hindered innovation in their organizations.
- Another 39 percent stated that they had halted a mission-critical initiative due to cybersecurity fears.
- Sixty percent indicated that their organizations are reluctant to innovate in areas such as digital products and services because of the perceived cybersecurity risks.
- On the other hand, 31 percent view the primary purpose of cybersecurity as "growth enablement," while 44 percent consider cybersecurity a competitive advantage for their organization.[12]

The key to turning cybersecurity into a growth advantage for your bank is building in holistic and pervasive security throughout the network, along with the necessary culture change. Cybersecurity must be perceived as—and become—a strength rather than a source of uncertainty. It must be a foundational element of any digitization effort.

In order to innovate new customer solutions and create deeper operational efficiencies, retail banks must be confident in the security of their analytics, Internet of Things, and cloud solutions. However, only 38 percent of financial services respondents believe their institutions have highly mature cybersecurity solutions.[13]

One problem is that long-held tenets of security, such as the firewall or a walled-garden approach, are no longer relevant. Perimeter-based defenses are irrelevant at a time when the very idea of a perimeter—with mobile devices, partner organizations, and third-party vendors—is outmoded. Security limited to, for example, a central switch in a bank's data center will not ensure protection. Security must reach throughout the network and into the field, including local branch routers, security cameras, mobile devices, automated tellers, kiosks, and so forth.

In Cisco's "Cybersecurity as a Growth Advantage" study, more than a quarter of respondents are pursuing digitization with particular urgency—partly because they understand that *digitization can improve their cybersecurity*.

This market segment, the "Secure Digitizers," is strongly committed to growth through digital business models and offerings, with cybersecurity as a critical foundation. As a result, Secure Digitizers tend to manage cybersecurity more proactively than other respondents. They also have higher confidence in the security of three key digital capabilities: Big Data/analytics, cloud, and the Internet of Things. This confidence makes them more willing to pursue digital offerings, thereby accelerating innovation and time to market.[14]

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Key Digital Use Cases that Will Close the Value Gap

To build a roadmap for digitization, you need a clear sense of the potential value of specific investments that create digital business capabilities. To this end, Cisco recently conducted the industry's most comprehensive economic analysis to calculate the Digital Value at Stake for private sector organizations across 16 industries, including financial services. The analysis is rooted in customer engagements and evaluation of 350 private sector digital use cases, including 30 for financial services.[15]

To capture value, banks should develop digital capabilities to analyze vast customer data and use those real-time insights to clearly understand and serve the particular needs of specific customer groups. With the right technology foundation in place, organizations can offer an array of profitable new services and customer experiences. Moreover, they can do this on a scale never before possible, reaching new customer segments such as the "underbanked," who have long found it difficult to obtain quality financial advice and other high-value services.

To help banks build a digital business roadmap, we've identified the use cases that will deliver the most significant business outcomes. These use cases are based on more than three years of in-depth

engagements with Cisco banking customers and reflect the best and fastest ways to drive value from digitizing a business.

To meet the demands of increasingly digital and mobile customers, banks must transition from providing "transactions" to facilitating "interactions" that offer real-time advice and greater convenience. These can combine both human expertise and analytics. Banks can combine video-based collaboration and analytics to draw insights from high volumes of generated data. By also empowering and transforming the workforce with new digital tools and greater access to data insights, banks can create a seamless customer experience across channels and improve branch efficiency. The branch can blend the best of the digital *and* physical worlds.

> "...retail banks are already being disrupted.... It's here and it's happening right now, and they're actually being disrupted on all fronts so every part of the value chain is being attacked."
>
> Alyson Clarke, Principal Analyst, Forrester Research

Digital innovation in retail banking is estimated to have a potential impact of $405 billion from 2015 to 2017.

Next, we will discuss some of the most significant digital use cases, which drive more than 90 percent of the potential Value at Stake for retail banks (see Figure 3, next page). While these use cases have been ranked from highest to lowest in Digital Value at Stake, this doesn't necessarily reflect the order in which they should be prioritized or implemented. Each bank will need to assess which use cases will have the greatest impact on its unique stage of digital evolution.

Every Channel as Compelling as the Next: Sales and Services Transformation

Banks must re-establish their close relationship with customers. Digitization creates many opportunities to transform sales and services in retail banking. This includes everything from shortening queues to offering timely insights and anywhere, anytime advice. The new bank-customer relationship can be built on personalized assistance through a variety of channels, along with products that reflect a deep understanding of consumer behaviors.

Mexico's Banamex offers an example of what is possible when banks reach customers across multiple channels centered on a convenient location. Starting in 2013, the bank began opening its Banamex Smart Banking Kiosks in shopping malls across the country. The size of a small retail store, the digital branch is open 24/7 and integrates ATMs, tablets, touchscreens, video walls, teleconferencing, and a virtual advisor. The result is a high-speed, cost-efficient digital banking experience that performs 80 percent of a regular branch's transactions, with higher satisfaction levels.[16]

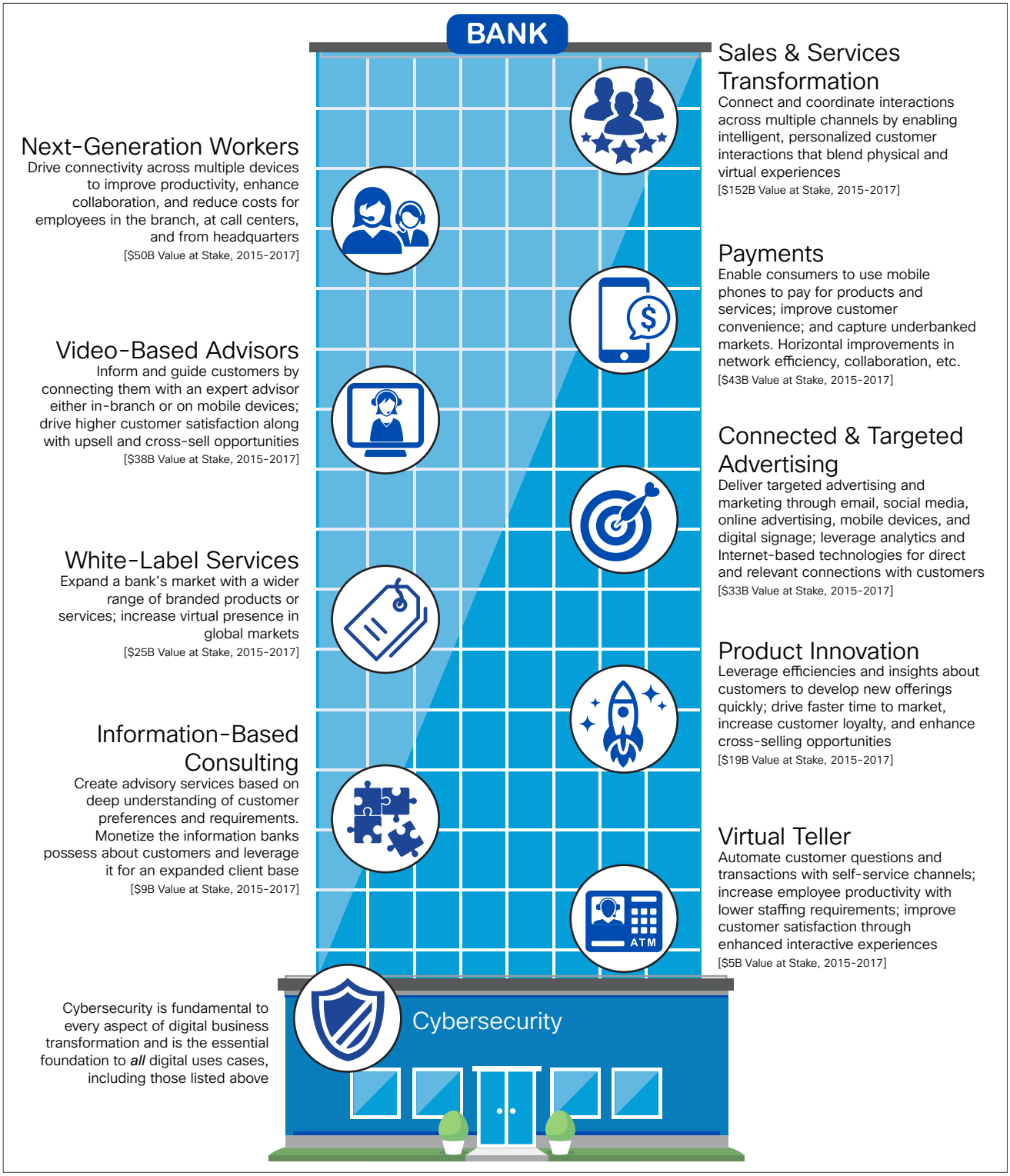

Figure 3
These key digital use cases will drive the majority of Digital Value at Stake (2015-2017)
Source: Cisco, 2016

In Poland, mBank sought to create the "branch of the future" by merging the best of its physical and online offerings. Its smaller Light Branches are located in areas of high customer traffic, such as malls, and combine interactive touchscreens with video and digital signage sharing promotional materials. All devices and interactive content are integrated through a secure central network. Video cameras and video analytics even gauge the age, gender, and gestures of customers to better tailor the services to their individual needs. Customers can then receive instant and personalized insights via analytics on a touchscreen or connect with a remote expert in a private video room. As of 2015, the Light Branches were capturing three times the sales of traditional branches, with up to 200 visitors a day.[17]

"What's happening with the adoption of digital touchpoints and digital channels is that customers are interacting on more channels. It's 'and' not 'or.' They're not substituting one or the other."

Alyson Clarke, Principal Analyst, Forrester Research

In India, the average age of citizens will be 29 in 2020. As a result, State Bank of India is concerned with reaching its increasingly young and digitally savvy customer base. The bank created SBIInTouch, a new type of digital-banking branch, mostly located in urban areas, to help connect with these younger customers. The small branches enable consumers to interact through online kiosks, with remote experts on video and interactive displays. As a result, customers can open accounts and receive debit cards in 10 minutes; obtain instant approval for home, auto, or education loans; meet "face to face" with virtual advisors in another location; and learn about financial planning by navigating interactive touchscreens.[18]

Banco Bradesco, one of Brazil's largest banks, is also bringing digitization to the branch. Its Bradesco Next branch in São Paulo offers interactive touchscreens, biometric-login ATMs, and digital avatars that dispense personalized financial advice.[19]

China Construction Bank Corporation has sought seamless integration and convenience for both its online and branch services. For example, its smart branches enable customers to open an account in less than two minutes, verifying through a combination of facial recognition, ID photo check, and fingerprint authentication technologies.[20]

With such innovative offerings in sales and services, these banks illustrate a key element of digitization: the *combination* of multiple use cases, with a laser focus on the customer experience. The banks are merging virtual teller, digital signage, video advisor, analytics, and other use cases to create competitive new ways of delivering services and information. As we will see, such blending of use cases will play an important role for banks looking to drive their own differentiation and disruption.

Empower a Bank's Most Important Asset: Next-Generation Workers

In many ways, retail banking is a professional services industry, and the "people" element is critical to success with customers. So, it is no surprise that one of the biggest areas of digital value is using technology to change the way the workforce collaborates, meets, and shares information. Indeed, digitization is not complete without organizational change and workforce transformation. Ultimately, it is people who must benefit from hyperawareness, informed decision-making, and fast execution. Once empowered, the workforce is in a position to drive new innovation, customer engagement, and value (as employees also gain in work satisfaction and talent retention).[21]

The reality is that automation—including digital branches and "roboadvisors"—will eliminate some jobs.[22] However, the human element will remain critical to success, and banks will need to ensure that their remaining workers have all they need to be competitive and innovative.

> "One of the biggest competitive advantages that traditional banks have is their people, and in an era of disruption … what's really important is weaving human and digital together."
>
> Alyson Clarke, Principal Analyst, Forrester Research

Digital tools that combine mobility, social, video, and other technologies offer much greater visibility and agility for the workforce. These can create improved visibility into workforces' satisfaction and efficiency, empower more employees than ever with data insights, and enable organizations to allocate talent in the best possible ways. In addition, policy changes such as "bring your own device" (BYOD) and telecommuting reduce costs and increase employee productivity. These solutions impact every aspect of a bank, from the back office to frontline customer interactions, while eliminating silos that sometimes hamper sharing real-time insights that can help the customer.

Bank of America (BofA) uses smart badges from a company called Humanyze to understand the relationship between productivity and social engagement in its call centers. By making changes to the way it schedules teams (and even by rescheduling lunch breaks to encourage greater interaction), the bank increased productivity by 10 percent and reduced staff turnover by 70 percent. Participating employees receive personalized feedback reports that provide details on their work and communication patterns, enabling them to benchmark themselves anonymously (privacy is ensured throughout the process).[23]

Bank of East Asia (BEA), based in Hong Kong, is known for innovations around customer experience, including capturing the feedback of customers. Recently, the bank has applied some of those principles

to its workforce. To solicit ideas and drive creative thinking, BEA is capturing suggestions from its nearly 6000 employees in Hong Kong. The best ideas win a generous cash prize.[24]

Allied Irish Bank is a full-service institution with a network of 300 branches across Ireland and the United Kingdom. However, isolated systems in its contact center were making it difficult for the staff to share calls, collaborate, or report on metrics. This was hurting the customer experience and increasing operational costs. As part of a wider digitization effort, the bank unified communications across multiple channels. Today the bank can easily route inbound calls based on customer need, while streamlining customer analytics, customer profile creation, and sales lead development. By queuing calls across multiple sites, the bank manages peaks in call traffic. Sales calls are also easier to make, manage, and track, and can be conducted via real-time video.[25]

Raiffeisen Bank is a leader in the Bosnia and Herzegovina market. In recent years, it transformed its customer-facing activities and call center with new collaboration tools, unified communications, and automation. As a result, customer-facing teams are more efficient: self-service options have eliminated 15,000 incoming calls a month, while 80 percent of calls are now answered within 20 seconds.[26]

Compliance has been increasingly important—and challenging—since the financial crisis of 2008. Changing regulations have led to higher costs, and meeting those requirements has put enormous strains on banks' systems and workforces alike. Clear messaging and training around risk consideration and repercussions are sometimes lacking, and reporting processes remain cumbersome.[27] Automation, analytics, and collaboration tools can play a key role in streamlining cost-based reporting, freeing the workforce from manual, time-consuming tasks, while increasing accuracy and lessening risk. Moreover, by streamlining compliance, retail banks are in a better positions to compete head-on with their fintech challengers, who face fewer regulatory hurdles.

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Seamless Transactions—Anywhere, Anytime: Mobile Payments[28]

Mobile payments enable customers to use a mobile phone to pay for products and services, adding new dimensions of convenience and efficiency to transactions. With their own mobile payment apps, banks are entering a crowded space already dominated by players such as Apple, Samsung Pay, and PayPal. However, banks have an opportunity to link their mobile apps to a customer's complete financial portfolio—or to expert financial advice—in ways that their competitors can't match.

In addition, mobile payments open new possibilities for many who have lacked the most basic financial services (for example, in the developing world), opening new markets while also generating a trove of previously untapped customer data. As Bill Gates said: "When somebody has a mobile phone in Africa, you can see their whole transaction history. Would you rather have that, or an economy based on untraceable dollar bills?"[29]

Morgan Stanley predicts that global mobile payments could increase from $175 billion to $250 billion in coming years. This will include $45 billion in developed markets and $30 billion in emerging markets, especially considering the ongoing penetration of increasingly less-expensive smartphones.[30] By using imaging and scanning technology, Morgan Stanley's app enables customers to pay bills, deposit checks, and transfer funds while also giving complete access to customers' financial portfolios.

"When you think about what the fundamental pieces of banking are, it's about moving money, so payments is at the heart of that."

Mark Schwanhausser,
Director of Omnichannel Financial Services, Javelin Strategy and Research

Similarly, China Merchant Bank's "Mobile Wallet" incorporates all of the related banking services and financial information that come with the bank's credit card. It operates over China's three major telecom operators and can be used at a rapidly expanding range of stores, shops, and restaurants.[31]

U.K.-based Barclays, meanwhile, has introduced a wearable payment solution. Its bPay system employs a digital armband or wristband that can be linked to a credit card account for seamless, contactless payments.[32]

Adding another dimension of convenience, Poland's Idea Bank SA has combined its mobile payments app with a roving ATM, housed within an electric vehicle driven by a bank associate. With a tracking system built into the app, customers (many of them small to medium-sized businesses) can arrange to meet the ATM for a withdrawal or deposit.[33]

Coming to a Screen Near You: Video-Based Advisors

Today, banks need to connect with more customers at greater scale. Video solutions enable advisors to speak with customers either in the branch or remotely, when customers are banking via mobile devices and PCs. Combined with real-time customer insights from analytics, this enables banks to offer personalized, expert financial advice—anytime, anywhere.

Research from Forrester noted that 55 percent of human communication is based on seeing another person, 38 percent on tone of voice, and 7 percent on the spoken word. This speaks to banks seeking the "advice advantage."[34] In fact, Forrester recommends that "eBusiness and channel strategy executives should be seriously assessing the opportunity created by video banking."[35]

Lloyds Banking Group, which has closed some U.K. branches in recent years, is maintaining its close customer relationships via video.

In particular, video advisors aid customers during the mortgage application process, which can be complicated and lengthy. Having a face-to-face video conversation with an expert advisor, either in the branch or on a mobile device, goes a long way to smoothing what can be a stressful time for new homeowners.[36]

"We're talking here about using technology to replace face-to-face communication, but that doesn't replace the need for customer service and customer interaction...."

Mark Schwanhausser,
Director of Omnichannel Financial Services, Javelin Strategy and Research

Bank of America is also using remote video advice in its branches to support the sales of mortgage, small business, and investment products. This allows the bank to leverage a traditional strength—an enhanced customer experience—inside branches where foot traffic is not sufficient to support dedicated loan officers or specialists. In 2015, the bank nearly doubled the number of branches with this technology to approximately 300 Financial Centers across the country. Bank of America still sells 85 percent of its products through the branch, so this capability offers a great opportunity to expand its expertise with the added personal touch of immersive video.[37] By combining the convenience of an ATM with a "human touch," the bank can offer traditional interactive services to more customers in more convenient ways than ever before. The bank is currently expanding the video services to 500 branches. BofA still sells 85 percent of its products through the branch, so high-definition video offers a great opportunity to expand its expertise in specialized areas, such as investment, mortgage, or small-business loans.[38]

Australia's Westpac needed a solution to connect its far-flung branches with its expert advisors. In particular, the bank wanted to offer financial advice tailored to the needs of small businesses. In 2015, the bank rolled out video-conferencing solutions in 25 branches, and plans to expand the technologies elsewhere. By connecting small-business owners with experts in other branches, the bank can now serve more customers with timely advice than ever before.[39]

Messages that Pivot with the Customer: Connected Ads and Marketing

With customers who are mobile, connected, and accustomed to highly relevant interactions, banks cannot afford to maintain rigid marketing practices. Connected advertising and marketing drives customer engagement and captures important data. In the branch, digital signage delivers important insights about wait times, available products and services, and market changes. Such solutions also enable more

efficient use of branch staff, freeing them to focus on more complicated questions and customer interactions.

To connect with millennials, Bank of America is partnering with Pinterest, the photo-sharing site, to drive access to BofA's Better Money Habits (BMH) site. The BMH site is geared to younger customers beginning their financial journey, and Pinterest enabled BofA to reach nearly 6 million new customers in only five months. Using Pinterest analytics, BofA has gained a wealth of new insight into the needs and concerns of this important customer segment, and has tailored its advice and marketing accordingly.[40]

Gulf Bank in Kuwait used the power of online conversations to drive interest in its Al Danah event, which awards 1 million Kuwaiti dinar to a contest winner. It focused its promotion efforts on targeted Tweets, leveraging customer data to reach specific segments and interest groups at carefully planned times of heaviest online activity. By owning the online conversation around the contest, Gulf Bank drove 23,000 visitors back to its main website and topped the trend list for Kuwati Twitter users for 24 hours.[41]

BBVA Bancomer has used digital signage to great effect in Mexico City's first digital bank branch. The bank deployed a large, curved digital screen that spans the length of the branch. The screen attracts customers, offers customized, changing messaging, and aligns with ATMs that are embedded along the length of the screen.[42]

Rebrand To Reach New Customers: White-Label Services

By providing branded services and products to other organizations, larger banks can gain access to expanded markets. Those organizations, in turn, can enter the financial space by "rebranding" an established bank's services, products, and expertise.

Denmark's Saxo Bank has leveraged its well-regarded trading platform as a rebranded service to more than 120 organizations. By providing technology, knowledge, and infrastructure to its clients, Saxo Bank enables them to enter the online trading market. The bank's white-label services, which include more than 30,000 products, offer integrated front- and back-office infrastructure, real-time risk management, client base development tools, dedicated services, and go-to-market strategies. Moreover, its white-label services made up more than half of the bank's total business in 2015.[43]

Bank of Ireland has extended its reach to millions of new customers through a partnership with the U.K. Post Office. Through this convenient channel, the bank offers a wide range of basic services, including savings accounts, mortgages, credit cards, and automobile, home, and life insurance.[44]

Incumbents as Agile and Inventive as Startups: Product Innovation

Today, cycle times for new products and offerings in all industries cannot afford to lag for months and years. Banks—even larger incumbents—are no exception. While startups by their very nature are small and agile, incumbent banks have their own advantages, as we have seen. When banks combine digital and workforce transformation with traditional strengths and expertise, they can innovate new, highly relevant products and go to market faster than ever before.

Moreover, through analytics, they can target those products with personalized precision to their already large customer bases.

Software-based products in particular can scale rapidly. However, banks must optimize their deep wealth of customer data, market insights, and other sources to drive the rapid creation of new products and offerings. Product innovation also requires organizational change to ensure a culture that encourages bold chances and a willingness to "fail fast" in the pursuit of excellence.

"It's about being customer obsessed…doing all the discipline that comes with that, ethnographic research journey mapping, customer-led design thinking, and letting your customers and the crowd help you iterate."

Alyson Clarke, Principal Analyst, Forrester Research

Banco Bilbao Vizcaya Argentaria, or BBVA, is a multinational Spanish banking group and the second-largest bank in Spain. It is known for its innovative products and overall commitment to digitization. In addition to transforming its digital platform (it went from processing 90 million transactions a day in 2006 to 250 million in 2013), the company has driven organizational change to encourage open innovation and constant collaboration. This included strategic top-down leadership to support a "fail fast" mentality, investments in e-learning and new talent, and easy access to data insights. By transforming technology, project management, and the workforce, BBVA is a more agile and innovative company, able to respond rapidly to changing customer demands.[45]

In Portland, Oregon, Umpqua Bank turned a showcase branch into an Innovation Lab, where it can try new ideas, and, if necessary, fail fast and move on. Those ideas have included everything from video advice and 25-foot interactive touchscreens to social events and the bank's own signature-blend coffee in the branch (customers like the aroma). Again, the emphasis is on fast innovation, trying new ideas, and getting them to market (and other branches) as quickly as possible.[46] Many of the ideas pioneered at the Innovation Lab have surfaced in the bank's "neighborhood store" branches, where interactive Discover Walls share information on the bank's financial products while also highlighting community events, local merchants, artists, and musicians.[47]

Australia's Commonwealth Bank has undertaken a similar concept. Its Innovation Lab brings customers right into the rapid-prototyping process, enabling them to test new concepts and share feedback.[48]

Monetize a Wealth of Customer Insight: Information-Based Consulting

Given their vast stores of customer data, banks have an opportunity to capture additional revenue by sharing key insights with third parties or their own customers.

UBS Group AG, for example, has partnered with Sqreem Technologies Pte. Ltd., a Singapore-based technology company, to use artificial intelligence in creating personalized advice for wealthy clients. By analyzing reams of data, the bank can pinpoint detailed profiles of customers and match them with the right products.[49]

> "When you think about what banks have in terms of data, it is arguably the most intimate portrait of a consumer there is."
>
> Mark Schwanhausser,
> Director of Omnichannel Financial Services, Javelin Strategy and Research

A potential new business model for retail banks is to become "identity brokers," providing an advisory service for customer preferences and needs, product trends, and so forth. For example, such information would be most useful to insurance firms, retailers, or an organization seeking information on creditworthiness.[50] Since banks are already subject to stringent regulations on the information they possess, they could provide "identity assurance" services, confirming a person for a transaction without time-consuming checks by, for example, retailers or public service institutions.[51] Lloyds Banking Group is among the companies investigating this potential new business model.[52]

Of course, the success of such services rests upon a stringent and relentless cybersecurity capability. It also demonstrates how cybersecurity can enable growth—in this case, the creation of new value-added services.

Bank Tellers Don't Have To Be in the Bank (or Even Be Human): Virtual Teller

The traditional notion of a bank teller helping customers face-to-face is changing. Of course, there is still an important role for the in-person teller, but the ways in which customers interact with banks are expanding.

Virtual teller machines offer branch-based self-service from any location, thereby remotely serving customers at any time. This allows banks to automate customer queries using interactive touchscreens and offer remote advice through video. This use case drives more efficient transactions and better customer experience, along with greater employee productivity and lower staffing requirements.

Bank Simpanan Nasional (BSN) of Malaysia is using virtual teller machines for faster, more efficient service in its branches. The virtual tellers enable the bank to offer advice and services either through a touchscreen or with the help of a bank associate via video. The system uses encrypted electronic signatures,

thumbprint verification, and card identification as part of a larger security strategy. So far, 31 branches have each been equipped with three virtual teller machines, sharing the expertise of 448 advisors.[53] Located at branches with less traffic, these remote advisors can now assist colleagues at busier branches.

Two Japanese banks—Bank of Tokyo-Mitsubishi UFJ and Mizuho Bank—are taking an even bolder step in virtual teller services by introducing humanoid robots. These friendly machines are not meant to replace human tellers. Instead, they augment human capabilities and free workers for other interactions.

Nao, a robot at Bank of Tokyo-Mitsubishi UFJ, was designed by France's Aldebaran Robotics. Nao speaks Japanese, English, and Chinese, and interacts directly with customers using video analytics to comprehend their emotions, gestures, and facial expressions. By greeting customers and answering initial questions, Nao enables bank associates to concentrate on more complex customer queries and advice.[54]

Mizuho Bank's Pepper is taking the concept one step further. Larger than Nao, Pepper converses in a number of languages and combines sensors, video, analytics, and cloud-based artificial intelligence (AI) via IBM's Watson supercomputer. The robot can adapt and "learn" through the course of an interaction, and also employs facial recognition to remember individual customers, along with their unique financial needs and challenges.[55]

Nao and Pepper are another example of how digital use cases can be combined in unique ways to drive differentiation. The robots blend video advice, analytics, remote expertise, robotics, and even AI to create an innovative customer experience that improves branch efficiency, human resource management, and so forth. Such blending of use cases is a key to creating new digital value.

Where Are You on Your Digital Journey?

The real value is in making strategic investments that will drive tangible results. This requires a roadmap rooted in an understanding of where your organization is today and where you want it to go. Your investment plan should allow you to build the digital business foundation that will get you there:

- Some banks are at the early stages of deploying technologies to **enable** their digital strategies. They're seeking IT agility and operational effectiveness, they want to move faster, and they're looking to reduce their cost structure. Enabling a next-generation workforce, solidifying cybersecurity, and optimizing IT and call-center efficiencies are examples of key investments at the enable stage.
- Others are using digital to **differentiate** their strategy, such as by delivering the ultimate customer experience through video advice, mobile payments, and sales and services transformation. They are employing technology for new products and services, and they are redefining some of their business processes.
- Banks that are furthest along their digital journey are harnessing technology to **define** their strategies with entirely new business models. These forward-looking companies are combining multiple digital use cases (such as by transforming the branch experience or leveraging data for entirely new services). Apple, Google, and Amazon (all of which happen to be moving into the banking space) have a history of combining technologies to cross industry

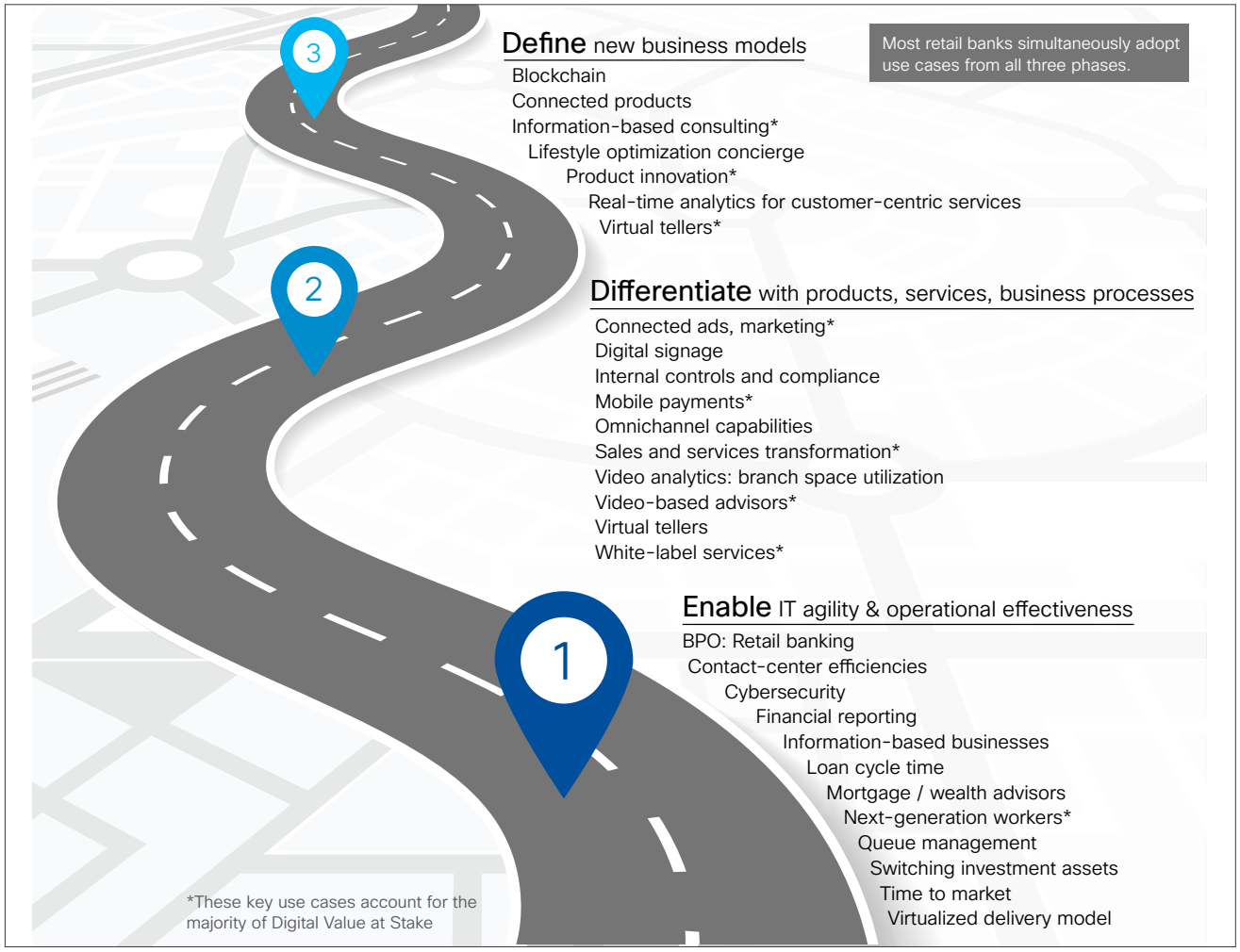
boundaries with innovative new business models. Retail banks have an opportunity also to drive new value and disruption. Figure 4 illustrates where the use cases described in this paper contribute to the digital transformation journey.

As Cisco's customers continue to show, every organization's journey is unique.

Some banks have amassed formidable talent and technology to support their ongoing digitization journeys; others will need new partnerships or strategic acquisitions to help them along the way. All must first assess where they stand on their ongoing journeys, and then prioritize their next steps.

Transformation must be a holistic and comprehensive process, regardless of where you are starting. Developing new digital capabilities requires a sweeping set of changes. However, any organization can proceed with incremental building-block steps, once the right foundation is in place. This includes organizational change as much as implementing new technologies.

Figure 4
A range of use cases contributes to each phase of the digital transformation journey.
Source: Cisco, 2016



Create a Self-funding Model: *Enable* Your Digital Strategy

Many banks are looking for technologies to *enable* their digital strategies. With a solid foundation of digital capabilities in place, these organizations can drive IT and operational effectiveness—whether in call center, the data center, the branch, or the back office—along with greater agility and reduced cost structures. This is where many banks are today.

> "...it's not about the technology. True innovation is about how you change the experience, how you add value to your customers."
>
> Alyson Clarke, Principal Analyst, Forrester Research

At this stage, many banks are seeking to expand the basic infrastructure for hyper-awareness—those capabilities that generate data on what is happening throughout the organization and beyond—into the marketplace. This much-improved visibility drives efficiency by streamlining operations, optimizing transactions, improving physical security and cybersecurity, understanding patterns of movement among customers and staff, and giving bank associates and financial advisors the insights they need to act quickly. For wealth managers, rich data streams—not just traditional financial data, but social media feeds or fast analysis of commentary on a particular stock or product—provide instantaneous insights for investment decisions.

The gains that these investments generate—in terms of both cost savings and revenue growth—provide the means to fund ongoing investment in digital capabilities. By implementing the core digital capabilities to enable your business, you will also create a foundation on which to make incremental investments to drive greater benefits.

Invest to Innovate: *Differentiate* Your Strategy

With the appropriate foundation in place, companies can leverage insights from across the organization to *differentiate* their business strategies. This is where some retail banking leaders are today. Here, the emphasis is on engaging customers—and empowering the workforce—to deliver context-specific value. This will go a long way toward closing the "value gap" between banks and customers. The ability to do this effectively depends on understanding customers' needs and priorities across multiple channels. Customer-facing employees, in turn, must have access to rich and up-to-the-minute data insights, along with opportunities to share their own frontline insights.

Transformation requires digital capabilities that include dynamic, real-time services and advice. It also means enhancing the experience of customers in branches and beyond through the kinds of use cases we have discussed (mobile payments, video advice, virtual tellers, and so forth).

Build Sustainable Competitive Advantage: *Define* New Strategies

The most advanced competitors are harnessing technology to *define* their strategies. These companies are reimagining the industry with new business models. With a broad set of digital business capabilities in place, these banks are positioned to stay well ahead of the competition.

> "...this isn't about the branch winning, mobile winning, online winning, or call centers winning. It's about the ***bank*** winning. And that culture is going to start from the CEO."
>
> Mark Schwanhausser, Director of Omnichannel Financial Services, Javelin Strategy and Research

Retail banks face a new frontier in competition as digital disruptors alter the playing field. These new competitors are combining multiple types of value, leveraging the significant efficiencies and insights of digital operations, and moving with breathtaking speed.

As we have seen, however, established retail banks have the ability to create new business opportunities—even new business models. From mBank's Light Branches and Mizuho Bank's Pepper robot to the new ways of leveraging data for white-label services or information-based consulting, some companies are setting their own agendas.

Here are a few future use cases—some of which may support the creation of future business models—already being explored by a few forward-thinking companies:

- **Lifestyle Optimization Concierge**—"Always on" advice based on personalized knowledge and smart sensing to optimize a customer's health, safety, financial vitality, and so forth. Such services can be connected with wearable devices and track transactions, savings, and expenses on a daily basis. They can then offer real-time, automated advice on how best to manage finances.
- **Blockchain**—The technology behind the "cryptocurrency" Bitcoin, blockchain is a decentralized ledger for payments and transactions that can be more easily secured. Blockchain uses a network of computers that must all "agree" on a transaction. Once the data is committed, it cannot be altered. Bitcoin is just one application. Blockchain could potentially streamline, for example, verification and compliance to the point that the financial services industry saves up to $20 billion a year by 2022.[56] Blockchain can also eliminate the middle layer of verification for machine-to-machine communications, enabling much more efficient Internet of Things connections to streamline operations. Potentially, blockchain could support new business models around, say, autonomous vehicle services or automated micropayments for energy sharing.[57] Banks such as

Goldman Sachs, Banco Santander, Danske Bank, Sumitomo Mitsui Banking Corporation, US Bancorp, and Westpac Banking Corporation have joined the "R3" consortium to explore future use cases for blockchain.[58]

- **Interactive Products**—Real-time analytics can tailor messages to individual customers. One application could be physical "boxes" in the bank branch that represent financial products, and are triggered by sensors or QR codes to interact with customers. The boxes could represent specific offerings such as mortgages, auto loans, or high-yield savings instruments and integrate with digital signage or smart devices (including augmented reality overlays on a smartphone).

Our discussion of use cases reveals but a small taste of what is possible for retail banks. Moving forward, the opportunities will be nearly unlimited. In the meantime, innovative, early adopters will capture a larger share of new value.

"To really transform the customer experience and drive true innovation you've got to focus *on* the screen and *behind* the screen…what actually happens to help enable that experience."

Alyson Clarke, Principal Analyst, Forrester Research

Develop Your Roadmap

Innovative banks are already closing the customer "value gap" with more relevant and interactive advice and customer experiences, while capturing a greater share of Digital Value at Stake. It is imperative for all firms to accelerate their digitization—to become, as Forrester describes it, a "Digital Predator Rather than Digital Prey."[59]

Change is coming. In Gartner's 2016 survey of industry leaders, 7 percent expect the industry to be unrecognizable in five years, 50 percent predict substantial change, and 37 percent foresee moderate change; another 6 percent perceive little or no change.[60] Banks have to be ready.

Technology change is not a solution in and of itself. And there is no "silver bullet" use case. Rather, transformation is a process, a journey—one that must include organizational changes, workforce empowerment, and clear leadership.

Ultimately, transformation comes down to people. That means connecting with customers who are used to intuitive, seamless, and efficient experiences in online entertainment and shopping. Retail banks must offer similar personalized, contextual, and efficient interactions. Again, this requires an architectural and organizational foundation that builds in agility, speed, and pervasive security. But the real question is how does it enable your people, and help your customers?

As the Chinese philosopher Lao Tzu said: "The journey of a thousand miles begins with one step." To begin your transformation journey, consider these first steps:

- First, evaluate where you are on the journey—enable, differentiate, or define? As Figure 4 revealed (page 20), many organizations are likely in the enable phase, with great opportunities to differentiate and define new business models. Begin by evaluating the capabilities that you already have. Many of these can be key elements of an expanded digital foundation.
- Second, build an investment plan that combines the use cases that will best support your business objectives. At first, focus on those that will deliver the quickest value and begin to close the value gap with customers. These gains can then help fund longer-term digital strategies with the potential to drive even greater value.

"The winners, in my opinion, are going to be people that can…take the customer experience piece and put it in the digital program. If you do that, you're going to be successful."

Ray Davis, CEO, Umpqua Bank

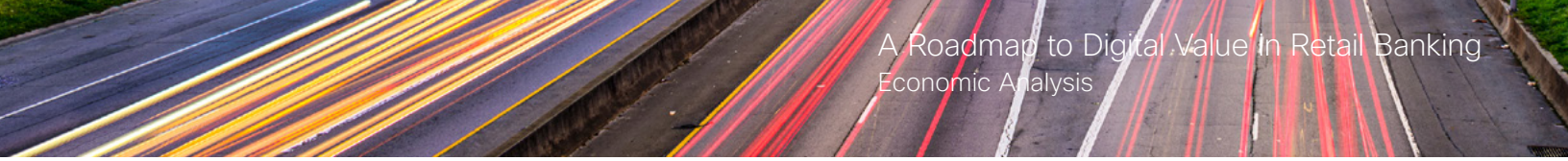
- Finally, use this investment plan to close the gap between the digital capabilities you need and the outcomes you want. While the fundamentals will remain the same, your objectives and priorities may change over time.

Top-down leadership is essential for aligning the company culture with customer needs and business outcomes. It can also ensure that as new digital use cases are adopted, they are woven into the workflow with as little internal disruption as possible. Indeed, for a spirit of bold innovation to prevail, technology transformation must go hand-in-hand with workforce and organizational transformation. A willingness to try new ideas, field-test them quickly, iterate rapidly, and fail fast if necessary must be instilled at every level.

The result will be a bank that is agile and inventive, creating secure experiences and products that reflect the changing needs of customers. Again, the whole purpose of technology is to support people: the customers and your own workers (who need to serve customers better).

There are no shortages of challenges for retail banks, as we have seen. Compliance pressures, legacy IT, cyber threats, and rising costs can be seen as arguments for not transforming. But they are dwarfed by the arguments for further digital transformation.

By making the right technology investments, you will cut costs, simplify compliance, and speed time to market. Digital capabilities enable retail banks to reimagine their traditional strengths (such as financial expertise and advice), while minimizing their weaknesses (such as by automating compliance and locking down cybersecurity).



Though a roadmap is only as good as the journey it inspires, it is a great place to start. Once your roadmap is aligned to your bank's best business outcomes, the resulting self-funding strategy will drive sustainable competitive advantage. You will leverage current investments to drive growth, as you provide the foundation for incremental, future investments. These will, in turn, create new digital capabilities to drive differentiated customer offerings and define new business models.

The threat of disruption is real. So, too, is the opportunity. Your bank does not have to be among the 41 percent of financial services organizations taking a "follower" approach. With the right digital capabilities, your bank will be an innovative disruptor, thriving in a challenging environment and winning a new level of customer loyalty.

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