Cognizant

Digital Banking: Enhancing Customer Experience; Generating Long-Term Loyalty

To stay profitable and grow in the new digital economy, banks need to adopt a customer-centric business model, diversify online delivery of products and services channels, and begin making meaning from valuable trails of digital information.

KEEP CHALLENGING™

Executive Summary

The banking industry's efforts to shift to digital channels have been halting, at best — a business unit here, an upstart department there. But given the industry's financial pressures and global economic uncertainties, there is increased urgency — and opportunity — to adopt a holistic approach to going digital and integrating that strategy across the banking ecosystem.

Embracing a fully digital strategy requires end-to-end modernization of a bank's often outdated infrastructure. Equally important, it requires a transition from an account-based view of banking customers to one that knows them as individuals and enhances the customer experience with relevant, convenient and personalized products and services.

Digital modernization gives traditional banks a second chance. A smart, enterprise-wide approach positions them to deepen customer satisfaction and loyalty, driving long-term relationships and profitability.

However, customer focus is often a stretch for the banking industry. When it comes to innovation, banks have been relatively slow movers as a result of regulatory and compliance challenges. It took PayPal to revolutionize online payments, and Square to extend personal payments so smartphone users could easily pay for goods and services.

Digital modernization gives traditional banks a second chance. A smart, enterprise-wide approach positions them to deepen customer satisfaction and loyalty, driving long-term relationships and profitability. Such an approach also has the potential to meet consumers' expectations and bring banking back to the bank.

The following elements form a clear model of success for banks:

- **Smart management of information is vital to digital banking.** Banks need to marshal online data — the unique virtual identity for each individual that we call a Code Halo™ — to offer their customers personalized attention.
- **Banks need to act, but more important, they need to act strategically.** Providing the cohesive, cross-channel experience that customers expect

requires an enterprise-wide approach that can be implemented in localized ways, such as for specific lines of business and functional areas.

- **Although the ROI of digital banking is substantial, the costs are steep for not adopting digital banking.** Costs include lost opportunity, customer attrition and stagnation in new-customer growth and product sales.
- **Embracing the holistic shift to digital and its streamlined, cross-channel approach** requires banks to evaluate their options carefully and select the ones that best fit their strategy.
- **An enterprise roadmap is a key prerequisite for implementing a digital banking program.** The roadmap balances key customer values (loyalty, convenience, relevance, interaction and mobility) against the bank's values (profitability, loyalty, operating efficiency, market expansion and risk mitigation).

This white paper is the first installment in a three-part series that explores digital banking as a vital strategy. We look at how banks can convert the inefficient use of capital in fixed assets and operating expenses into manageable, consumer-centric experiences that contribute to revenue uplift and cost reduction. Part 2 of our series explores digital banking's focus on customers. Part 3 describes the organizational and technology changes required for traditional banks to make the shift to digital.

Customer Relationships as New Sources of Value

Before the global economic crisis of 2008-2009, the banking industry created shareholder value through financial leveraging. Today's increased regulations and competitive challenges are forcing banks to deleverage and identify alternative sources of value. Enter digital banking. New digital models steer banks in the direction of customer relationships that present new sources of value. The focus is on engaging customers and building trust in the key activities of digital banking: marketing and sales; customer onboarding; and account opening and servicing.

Banks have their work cut out for them. Consumer trust vanished from the banking system after the global financial crisis. Deeply hurt by large banks, customers turned to smaller banks and credit unions to manage their personal finances. Use of non-bank lenders, payment processors and financial information sources (both personal and general) increased as never before.

Digital technology gives banks the opportunity to regain their relevance with customers, and the heart of that connection is data. Every consumer click, swipe, comment and search creates a unique virtual identity that we call a Code Halo.[1] Indeed, managing Code Halo thinking is vital to banks' digital transformation (see sidebar, below). Strong financial products and services are still essential. But smart management of digital information — the Code Halos — can deepen customer relationships and generate new revenue streams. Organizations that compete in this way understand how to create, share and apply meaning from Code Halo intersections. And increasingly, these companies are the winners in their markets (see sidebar, page 11).

Quick Take

Code Halos: A New Model for Digital Banking

Before banks can begin managing Code Halos and digital transformation, they need to understand the extent of their industry's disconnect with customers. Consumers are increasingly integrating the personalized virtual world with the "real" world. Personal technology has changed many aspects of their personal lives: how they connect with friends, ask for directions and collaborate with colleagues.

But not how they get their cash.

Upon inserting their bankcards into ATMs, most customers see a screen that reads, "Press 1 for English. Press 2 for Spanish." Really? This sophisticated financial services institution, with billions in assets and branches around the world, doesn't know which language a customer speaks? It knows checking and savings account balances. It holds loans on customers' cars and homes, knows their net worth, and maintains records of every transaction.

But it doesn't know what language they speak.

The inconvenience is minor, but it underscores how ATMs and bank tellers know only the transactional data in their systems of record, rather than what is in customers' Code Halos. To customers, the banking experience leaves them feeling disconnected. What happened to that pleasing online interaction they experienced with sites like Pandora, Amazon, Hulu and Netflix, which know not only what language they speak, but also their likes and dislikes? The sites know such details because they see what ATMs and bank tellers can't. They see Code Halos. (To learn more about Code Halos and the new rules of success, download "Code Rules: A Playbook for Managing at the Crossroads," http://www.cognizant.com/Futureof-work/Documents/code-rules.pdf.)

Adapted from the upcoming book, Code Halos: How the Digital Lives of People, Things, and Organizations are Changing the Rules of Business, *by Malcolm Frank, Paul Roehrig and Ben Pring, published by John Wiley & Sons.*

Creating Value from Information

Banks, too, can make meaning from the digital information that surrounds people, organizations and devices (see Figure 1). In fact, in a recent study that we conducted with Oxford Economics, the banking and financial services industry generated more value than any other sector from the ability to compete on code. Analytics is proving especially profitable, with companies in the financial industry indicating that 10% of revenue and 10.1% of costs are directly affected by how well they make meaning from business information.[2]

Strong financial products and services are still essential. But smart management of digital information – the Code Halos – holds the potential to deepen customer relationships and generate new revenue streams.

The competitive landscape in banking and financial services has changed, and standing still is not an option. The challenge lies in the trade-off between investment and expected return on investment (ROI). Is banks' best path to rationalize, refactor and optimize the existing systems and infrastructure? Or is it to improve, adopt and transform new paradigms?

For large banks, a key concern is brand reputation, which can be affected by multiple channel offerings that deliver different customer experiences, often with somewhat divergent data and results. For small banks, the central question is one of investment and returns.

Generating Value from Digital: An Outside-in View

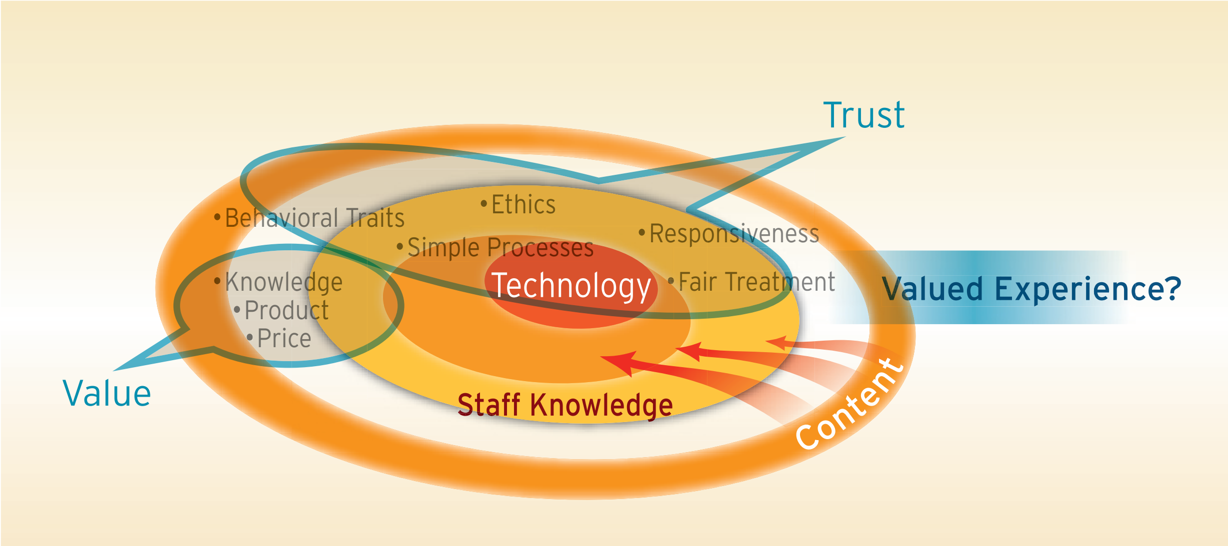


Figure 1

Customers Are the New Focus

Regardless of their size, profitability and growth demand that banks focus on serving customers at the right time, with the right level of service and at the right cost. Several factors are driving this customer focus. Number one, today's customers expect personalized pricing and portfolio mixes. Banks that can't deliver will suffer reduced profitability. While banks, by default, sell every product to every customer, digital banking allows customization, providing the data and analytics capabilities needed to examine each customer's profitability and offer individualized or segmented products and pricing.

Second, churn is occurring more frequently than ever. Many customers choose — and switch — banks based on convenience and quality of service rather than on product and service features. In some countries, government regulations are encouraging additional churn. In the UK, where banking rules made it difficult for customers to switch providers, the enactment of new rules now makes it easy for customers to change banks and even take their account numbers with them.[3]

Additionally, with non-bank entrants firmly established in the payments and lending areas, these lucrative lines are at greater risk for attrition. The growth of Quicken mortgages is an important example. (For more on banking's new customer-centric shift, read the upcoming second installment in our series, "It's All About Customers.") And lastly, customers expect to experience banking without boundaries, just as they do in retail and other industries. What matters most to them is how they experience the bank's brand, regardless of the channel.

Although an enterprise-wide digital strategy is necessary, banks can successfully implement digital banking in localized ways, for specific lines of business, departments or divisions.

To provide the cohesive, cross-channel experience customers expect, banks need to take a holistic approach. Digital banking scales and succeeds only when it's approached from a broad point of view that allows for increased customer satisfaction and informed cross-selling and up-selling. Although an enterprise-wide digital strategy is necessary, banks can successfully implement digital banking in localized ways, for specific lines of business, departments or divisions. An evolving approach that occurs over time can help banks avoid the necessity of change management exercises that can disrupt operating models.

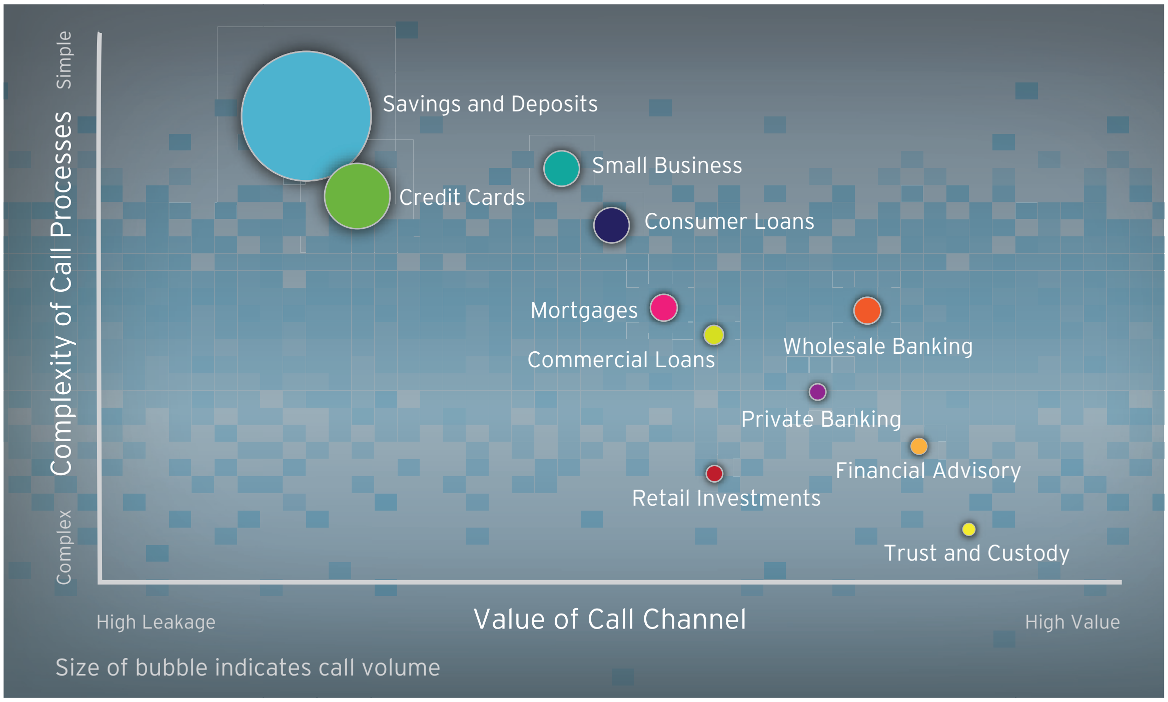
Digital Banking's Return on Investment

What is the ROI of digital banking? It's the combination of lower channel costs, plus increased revenue for the benefit period, minus the cost of deployment amortized over its useful life, multiplied by the internal cost of funds for that period.

Beware, however, that there is no benefit until digital adoption is achieved at scale. The benefit drivers include digital self-service, churn reduction and new customer and product acquisition. This reality must be taken into account for ROI analysis, along with the cost of any marketing, loyalty program or other pricing benefit used to encourage digital adoption.

What is the cost of not implementing digital banking? Lost opportunity and relevance. Over the next two decades, banks that fail to incorporate a new way

Sources of Probable Digital Leakage



Note: This figure is constructed from Cognizant survey data and depicts banking lines of business. Bubble size represents average call volume. Toward the top of the figure are lines of business with a higher propensity of calls, which should easily be replaced by digital self-service functionality. Toward the bottom are the more "complex" calls requiring human interaction because they are high-value sales or relationship-based. The bottom axis shows the degree to which "digital leakage" is likely occurring — that is, they add no value by nature of the call channel itself, and in a perfect world, they would be largely replaced by digital self-service. There is an order of magnitude of savings of $15 to $1 in human-assisted vs. digital self-service.

Figure 2

of doing business will experience a steady increase in customer attrition and stagnation of new-customer growth and product sales.

Consumer products and lines of business provide an especially potent opportunity to reduce call volumes and branch visits that don't add value. However, these same customer interactions are likely to cause a good deal of digital leakage; in other words, they add no value by nature of the call channel itself and should largely be replaced by digital self-service. These interactions result in unnecessary human assistance should digital channels provide an uneven self-service capability (see Figure 2).

Few banks can marshal the resources and program management to address digital modernization across the entire bank topology all at once. An approach that breaks down these modernization activities into manageable projects, each with their own ROI, is recommended.

Digital Bank Initiatives Lead to Innovative Business Models

Digital modernization requires banks to reinvent their core businesses of lending, retail banking and payments (see Figure 4). It replaces branch investments with less expensive digital channels that enable banks to build economies of scale with a much lower capital investment. It also generates revenue more quickly so banks

Quick Take

Digital Technology: Seven Strategic Areas to Consider

The technologies required for a digital banking implementation fall into seven discrete areas of strategy around the emerging SMAC Stack (see Figure 3).

1. **Infrastructure:** Few banks have the integrated infrastructure in place to enable the seamless retrieval, storage and distribution of information and data, both up- and downstream. Cloud technologies lend themselves to digital innovation with their security, reliability and elasticity. The cloud can also serve as a flexible integration layer, accommodating off- and on-premise applications that need to be integrated into the digital architecture, as well as digital app delivery.
2. **Data:** Precise information is the key to understanding bank customers and creating unique digital personas for tailored interactions. Financial instruments and transaction processing, however, typically involve the exchange of large volumes of data from multiple sources. It's a mammoth task: data management accounts for 92% of the cost of the financial services business, according to estimates.

   Digital banking requires a new set of plans and policies to control, protect and enhance the value of data and information assets. This effort includes reference architecture components of a master data management (MDM) strategy, unified information delivery (reporting) and information integration. Global data semantics include industry-standard data models like IFX/FDSM, as well as the definition of supporting processes and structures, including data governance, data quality and data organization.
3. **Content:** An enterprise content management roadmap for digital banking includes storage, management, workflow, process, integration, BI, analytics, reporting, information architecture meta-model, content type, and lifecycle and syndication methodology. It also includes consolidation, migration and a search strategy, product evaluations and adoption strategies.
4. **Business process:** Process components include a service orientation, governance, technology adoption, process orchestration, tuning and optimization, rules engine adoption and enterprise service bus adoption.
5. **Analytics:** Analytics capabilities include multi-dimensional analysis by geography, customer type, product, traffic source, channel, campaign, Web page, scenario, IVR path, and speech to text. They also include data, Web site and real-time content analysis, user profiling and segmentation, campaign optimization, time and path correlation, frequency and monetary analysis. Also important is the ability to track customer behavior to correlate with revenue-driving activities and nurture cross-selling opportunities.
6. **Social and mobile:** Information must be accessible from anywhere and from any mobile form factor. Other key components include social media and collaboration for external client-facing business applications and for internal productivity improvements, gamification for customer engagements, the digital app store as a one-stop shop for mobile business applications, authentication and access security.
7. **User experience:** A consistent user experience needs to be provided across all major interaction touchpoints. Other key factors include an information architecture, personas, wireframes, screen flows (process UI), visual design, interactive mockups, campaign management, branding, search engine optimization, user experience and session management, responsive Web design, usability, prototyping and UI technology.

Going Fully Digital

Figure 3

Digital Banking's Multi-dimensional Attributes

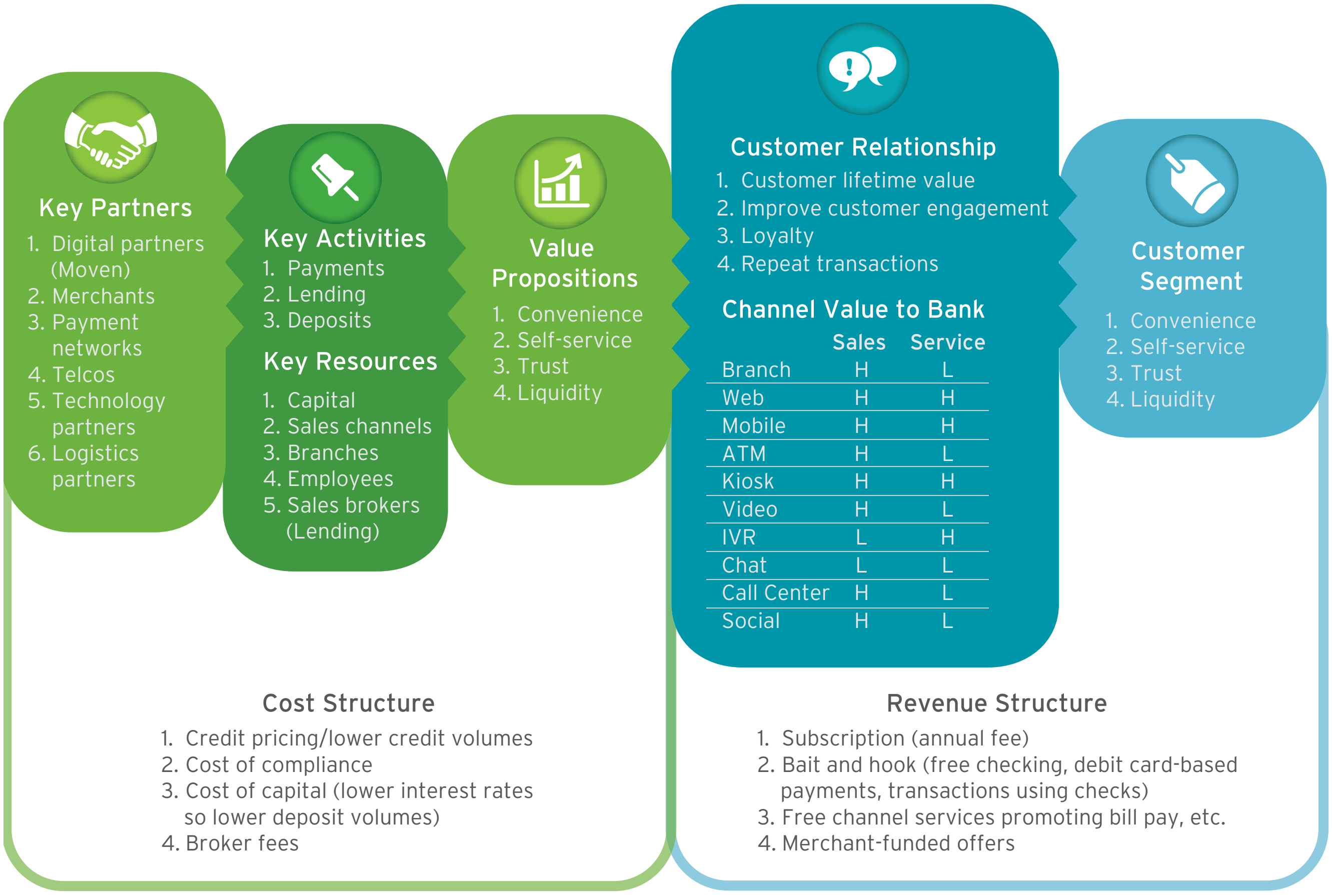


Figure 4

can attract more capital. Social mobile, analytics and cloud technologies, or the SMAC Stack™, are digital modernization's foundational elements, as they enable increased micro-segmentation and personalization (see sidebar, opposite page).

There are several factors that influence the shape of digital banking programs, and banks need to carefully select the options that best fit their strategy.

- **Channels.** Which channels can, and should, banks dominate? For smaller banks, a mobile channel strategy may be the best choice rather than investing in a state-of-the-art digital branch infrastructure. For larger banks, a diversity of branch designs is an option, as are kiosks, smart ATMs, digital recognition technology, video and enhanced personal banking tools and offices.
- **Partnership and acquisition models.** Banks can offer digital services directly, or they can partner with or acquire young companies to gain digital capabilities and processes. BBVA recently acquired Simple, an American online banking platform, for $117 million. BBVA, with €607 billion in assets and 50 million customers, believes traditional banks are losing their monopoly on banking. In an opinion piece in the *Financial Times*,[4] BBVA warned that banks face certain death unless they take on the likes of Amazon and Google. New entrants lack the legacy costs that burden banks, and they can tempt clients with convenient mobile apps.
- **Revenue models.** E-commerce business models build on the potential for generating multiple transactions from individual customers. Online banking goes

Digital Banking Enterprise Roadmap

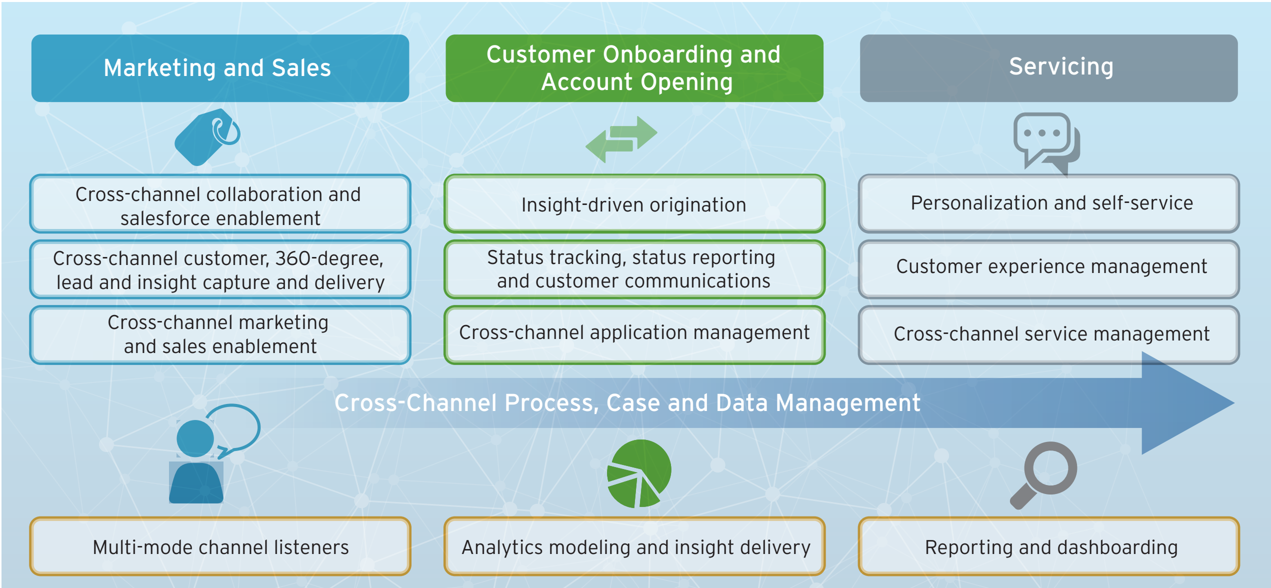


Figure 5

beyond single transactions by focusing on interactions and loyalty that serve to maximize customer lifetime value.

A bank's choice of digital business model is also heavily influenced by other factors:

- Processes for sales, customer acquisition and customer service.
- Customer experience with automation, self-service and assisted service.
- Product pricing and design, as well as the cost structures supporting them.
- Underlying incentives and compensation systems.

The Enterprise Roadmap: A Key Prerequisite for Digital Banking

Before embarking on a digital banking program, organizations need to develop an enterprise roadmap (see Figure 5). The roadmap needs to balance key customer values (loyalty, convenience, relevance, interaction and mobility) with the bank's values (profitability, loyalty, operating efficiency, market expansion and risk mitigation). The roadmap begins with a conceptual view underpinned by governance, readiness and discipline. It approaches the most valuable problem dimension first – "predict and prevent" – to create a superior customer experience that embraces Code Halo thinking to radically improve satisfaction and enable customers to choose self-service first. (For more on the technology behind digital banking, read the third installment in our series, "How to Transform Your Bank Using the Power of Digital.")

Banks must also develop a comprehensive business plan to eliminate organizational and procedural constraints across lines of business and to deliver value to internal and external stakeholders.

A cornerstone channel optimization strategy is critical. As channels evolve to create seamless, integrated customer experiences, and to leverage analytics for changing customer behavior across all touchpoints, the focal point of the effort must not be the channels themselves but the customer.

Building a Digital Organization Structure

Many banks operate in silos that do not offer integrated service offerings, digital or otherwise. Such compartmentalization is the result of traditional organizational management approaches that segregated offerings by and within lines of business and by product and channel. The accretion of legacy technology over time exacerbated the problem. However, outdated silo structures run counter to digital banking's holistic view of customers, and they have played a large part in the industry's painfully slow transition to online banking.

Digital banking breaks through organizational barriers. It compels banks to rethink organizational constructs, as well as revenue and profitability recognition across the enterprise (see sidebar). The reorganization includes merging current lines of business management and the enterprise-level product and technology functions, as depicted in Figure 6.

Breaking Organizational Barriers

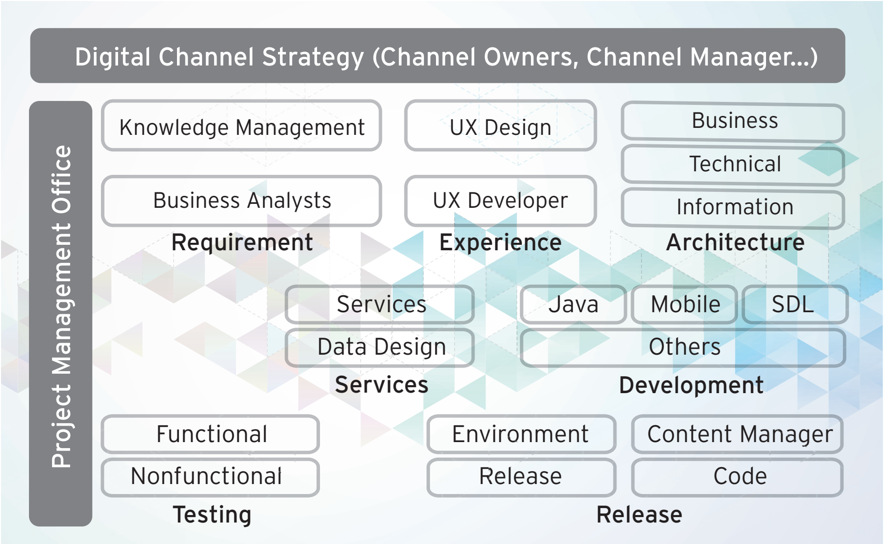


Figure 6

Quick Take

Connecting with Customers — and Generating Leads

We worked closely with a major diversified U.S. bank to deliver a unique, differentiated experience for mobile customers and visitors. The bank's mobile marketing Web site — the industry's first — not only delivers rich, interactive features, but it also uses an integrated CRM and digital marketing solution to identify thousands of leads each month from its hundreds of thousands of visitors. Keynote consistently rates the mobile site among the best in its performance rankings.

The mobile channel is built on a content management platform, integrated with digital marketing capabilities, customer analytics and cloud-based CRM for lead management. The digital marketing suite enables business users to retain control of targeted mobile campaigns, while the integrated CRM solution captures customer and prospect leads to help drive customer acquisition.

In addition to creating the mobile channel solution, we are working with this bank to enhance its online banking platform and to seamlessly port millions of customers to the new user experience. We are also helping the bank create pioneering mobile programs, such as a photo bill pay capability and Western Union money transfers.

Looking Forward

Embracing a fully digital strategy requires banks to modernize end-to-end, and to adopt a customer-centric approach.

Here are five steps that can help banks ensure that their move to digital banking will result in greater customer satisfaction and long-term profitability.

1. **Manage — and master — the information that's vital to digital banking.** For banks to create new sources of value, they need to understand the data that makes up their customers' Code Halos, each individual's unique virtual identity.
2. **Act strategically.** Providing a cohesive, cross-channel experience requires an enterprise-wide approach.
3. **Calculate the cost of not adopting digital banking:** Lost opportunity, customer attrition, and stagnation in new-customer growth and product sales.
4. **Evaluate options carefully.** Digital banking isn't one-size-fits-all. Banks need to select the options that best fit their organization and strategy.
5. **Create an enterprise roadmap.** A roadmap is a key prerequisite for implementing a digital banking program.

Stay tuned for the next two installments of this series. Part 2 probes digital banking's explicit focus on customers, and Part 3 examines the organizational and technology changes required to make a full digital pivot.

Footnotes

[1] Malcolm Frank, Paul Roehrig and Ben Pring, "Code Halos: How the Digital Lives of People, Things, and Organizations are Changing the Rules of Business," John Wiley & Sons, April 2014.

[2] Paul Roehrig and Ben Pring, "The Value of Signal (and the Cost of Noise): The New Economics of Meaning Making," Cognizant, October 2013, http://www.cognizant.com/InsightsWhitepapers/The-Value-of-Signal-and-the-Cost-of-Noise-The-New-Economics-of-Meaning-Making.pdf.

[3] "Bank Account Switching Service to Launch in September," BBC News, Aug. 16, 2013, http://www.bbc.com/news/business-23700012.

[4] "Banks Need to Take on Amazon and Google or Die," *Financial Times* Dec. 2, 2013, http://www.ft.com/cms/s/0/bc70c9fe-4e1d-11e3-8fa5-00144feabdc0.html.

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About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 171,400 employees as of December 31, 2013, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.

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