

Accenture Core Banking Services

The Role of Core in Digital Adoption

Will your core banking platform
be an enabler or an inhibitor of
the Everyday Bank?



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Multiple disruptive forces, ushered in by the digital revolution, are converging on the banking industry: fast-pace customer demands, unconventional foes, disruptive technology and tighter regulations, to name a few.

Any competitive response in the increasingly complex, highly dynamic environment will touch and rely on core banking systems.

How ready is your bank?

Read on.

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Rise of the digitally-powered Everyday Bank: What role does core banking play?

Digital banking is here—everything from online banking and mobile payments to direct mortgages and trading. As digital drives a customer experience revolution, it is creating a new, strategic part for banks to play in the digital world—what Accenture calls the Everyday Bank.

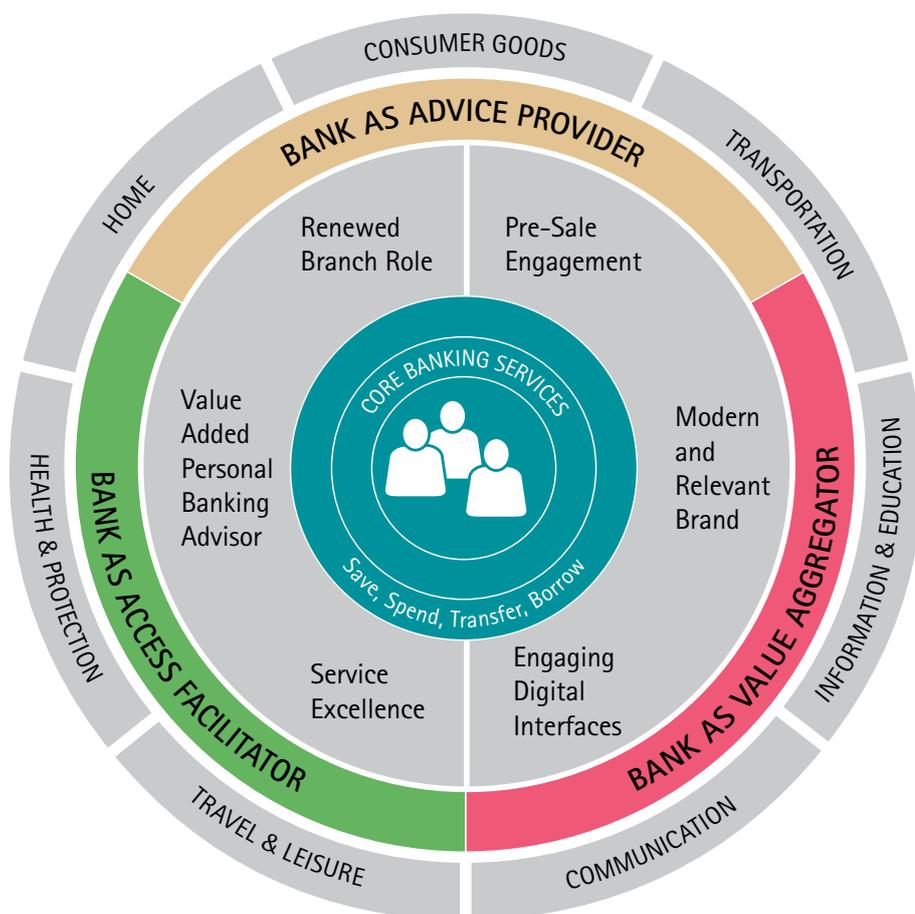
The Everyday Bank focuses on forming much closer relationships with bank customers, being present in their “everyday” lives and satisfying a broad range of life-cycle needs. It assumes three distinct, digitally-powered roles to achieve this aim (figure 1):

- **Advice Provider:** recommending specific, targeted buying suggestions
- **Access Facilitator:** to financial services and non-financial services partners
- **Value Aggregator:** through real-time, dynamically-priced offerings

Based on Accenture research, a gap of as much as one third of traditional retail bank revenues by 2020 is expected between banks that become an Everyday Bank and those that do not.¹

Accenture, along with other partners, helped mBank revolutionize the user experience in online banking—officially launching the new mBank in 2013 as the world’s most design-driven digital bank and biggest innovator in digital banking.

FIGURE 1. The Everyday Bank



Banks are currently exploring several initiatives that might be considered as first steps towards full digital adoption. Most popular are investments in digital design and customer experience—things like new digital channels and extended middleware which includes new business layer logic that provides, among other things, text-based search, customer-driven alerts, user interaction and service-oriented architectures. It's a good starting point, particularly considering today's fervent customer demands and the experimental stage of the digital bank.

However, these initiatives are not part of an end-state approach. They are tactical approaches that serve primarily as intermediate stop gaps with little or no changes to core banking and other

legacy systems. Also, they add layers of complexity and cost due to duplicate back-office functions, replicated data, specialized support for new IT architecture and a less-than-full integration with traditional banking activity. They are not enough, alone, to sustain digital banking.

Banks that seek to become an Everyday Bank will need to go beyond tactical approaches to make core banking a highly-efficient, high-transaction volume, just-in-time engine that powers the Everyday Bank. It means that core banking must evolve to achieve four key objectives; as shown in figure 2, core banking must be digitally fit, analytics strong, an engine for personalized everyday interactions and adaptive to new paradigms.

Working with Accenture to modernize and position its core banking as an enabler of digital banking, a leading Australian financial institution is driving significant banking benefits: real-time customer service, faster time to market for product innovation, differentiated pricing capabilities through new predictive modeling and revolutionized point-of-sale experience for enhanced customer interaction.

FIGURE 2. Four key objectives for digital core banking



Digitally fit

- Extend real-time processing
- Be agile and open to internal and external service information
- Provide high level of automation (cost efficient)
- Be scalable, at a variable cost (pay per use)



Analytics strong

- Provide contextual information
- Allow application of analytical models on line real-time
- Produce quality and granular structured information for multiple purposes



Engine for personalized Everyday Bank interactions

- Provide a new, comprehensive customer ecosystem and partner model
- Support modular/granular offerings
- Allow personalized pricing



Adaptive to new paradigms

- Create new Application Programming Interfaces (API) layer to assemble internal and third-party providers
- Simplify manufacturing layer on behalf of more granular and orchestrated services in the back end
- Decouple data from business functions
- Adapt to new business and cost models
- Facilitate seamless cross-border operations

Adapting core banking for digital: What capabilities are most important to develop, evolve or take to the extreme?

High-performance banks already have, or are in the process of obtaining, key capabilities that are critical to becoming an Everyday Bank. These include capabilities such as integrated, omni-channel sales and service processes, an extended customer ecosystem-centric model and analytics-based actionable insight that, for the most part, are enabled by core banking systems.

Considering the current state and the requirements of digital for core banking systems, banks should plan on taking three types of actions to adapt core banking for digital:

- Develop new capabilities that enable the Everyday Bank, such as incorporating new technologies (e.g., in memory, big data, cloud, social and others) in a native way, decoupling a new data layer from processes and business logic or creating an API layer that integrates third-party service providers—just to name a few

- Evolve existing capabilities to support digital; for example, extending the customer data base to new digital needs shared across all layers or providing additional levels of granularity to gain flexibility and reusability
- Take to the extreme existing capabilities to fuel digital adoption, such as real-time processing, automation and scalability

Based on the four key objectives in adapting core banking for the digital world discussed earlier, several capabilities are most important for banks to develop, evolve or take to the extreme (figure 3).

FIGURE 3. New, evolved or taken-to-the-extreme capabilities of digital core banking

Adapt core banking to be...

...through new, evolved or taken-to-the-extreme capabilities:

Digitally fit



- New capability to assemble financial services with third-party provider services to support customers' everyday life needs
- Extreme approach for:
 - Real-time processing (such as real-time settlement, pricing capabilities, account closure and global risk position, among others) to reduce dependencies on batch processes
 - Significant levels of automation for high efficiency towards zero back office, enabling end-to-end digitalization or incorporating automated rules engines, among others
 - Highest levels of scalability through, for example, a distributed transactional system to support the rising number of customer interactions

Analytics strong



- New sources of information (structured and non-structured) for better understanding of the customer
- New concept of data as the core, putting data and analytics at the heart of the bank (across all application layers—commercial, operational and reporting), adapting core banking to:
 - Provide contextual information (complete but raw)
 - Store and deliver information in ways that allow real-time personalization through predictive analytics and analytical models
 - Allow decoupling of the data layer from business logic and processes, a taken-to-the-extreme capability

An engine for personalized Everyday Bank interactions



- Evolution of customer concept to the next generation of customer database where core banking supports:
 - A new customer category—"digital customer"—that coexists with the current "customer" and "non-customer" categories
 - New types of information used by analytical engines to create more attractive offerings and personalized services
- Extreme flexibility (simplicity, granularity and modularity) through reusable components that supports an increase in value-added services, where core banking can:
 - Create more effective sales and origination processes, reusable in the omni-channel space providing more granular services
 - Enable cross-business functions, such as extended product factory or new sales and origination communication services decoupled from product silos, taking to the extreme the concept of "hollowing out the core"
 - Incorporate dynamic offerings or personalized pricing for customers and non-customers using predictive analytics

Adaptive to new paradigms



- New capabilities, allowing a bank to:
 - Be agile and open, assembling bank offerings with third-party provider services
 - Manage and store third-party information to provide new and better customer services
 - Extend the service offering suite, providing a simplified and more granular service repository in the back end to monetize bank information and services
 - Adopt a distributed transaction model, allowing for horizontal scaling
 - Decouple data from process and business logic to be stored in different ways to allow true cloud scalability
 - Make use of new technologies, such as Big Data, in a native way
 - Deploy multi-tenant platforms to enable seamless cross-border operations
 - Embrace new business and cost models, such as third-party products and cloud- or platform as a service (PaaS)-based services, that will change cost structures



Adapting core banking to the digital world

How ready are your bank's core banking and legacy systems to adapt to the digital world—are they...

- Able to both serve mass transactions and personalize needs, at the right time and at a reasonable cost?
- Resilient enough, with the ability to scale and increase by several times the transactions generated by new digital interactions?
- Primed for high automation levels that help achieve the required efficiency heights, towards a zero back office?
- Ready to provide the right information at the right time without duplicating information across the different architectural layers?
- Ready to incorporate new technologies in ways that contribute to radical transformation of the cost structure, rather than adding complexity and cost?

How are market leaders adapting their core banking to meet new digital demands?

Several banks around the globe are already working to make their core banking an enabler, rather than an inhibitor, of their digital adoption. For those that are, some are evolving gradually through selective capability changes. Others are taking parallel options: a disruptive approach, moving from a traditional bank to become an Everyday Bank while also taking a gradual evolutionary journey, having at the end a new digital brand coexisting with traditional banking services.

mBank

mBank, a preview of a bank of the future focused on customers' needs, built an entirely new, next-generation online channel to revolutionize the way its customers in Poland, the Czech Republic and Slovakia experienced banking. To do so, mBank evolved its core banking to feature simpler transactional layer. The solution required a significant upgrade to mBank's core banking to allow the bank to:

- Introduce very personalized products and services—from peer-to-peer payments and transaction analytics integrated with personal financial capabilities to customer-engaging gamification—that differentiate its customer experience
- Conduct more granular transactions with better structured information for high reusability across different channels
- Isolate data access through cross-module interfaces, removing direct data access from the various services as a first step in separating data from business processes
- Orchestrate data access to present analytical and aggregated, instead of table-driven, information
- Transform long-running transactions into simpler and straight-through processing transactions

BBVA

BBVA, as a leader in banking innovation and a clear advocate of digital adoption, formerly created a new digital unit to reinforce its strategy, lead the technology-driven change and allow the organization to better adapt to new customer demands. As part of the digital strategy BBVA is carrying out simultaneous digital transformation initiatives across two different levels:

- First, BBVA is introducing new digital approaches into its traditional core business; establishing social media and online channels as key customer contact points, moving parts of its architecture into a private cloud, etc. Among the various core banking impacts that BBVA is carrying out to adapt the traditional platform to the digital world, we can highlight the following four:
 - A single, homogeneous and reusable service layer across all channels
 - Extension of the customer database towards new digital category
 - Cross, common capabilities for customer alerts and communications
 - A single multichannel signature for paperless transactions
- Second, it is adopting a disruptive approach, creating new digital products and services—such as Wizzo (a new, simpler and efficient way of making peer-to-peer payments on the internet or offering a mobile wallet for its digital customers), or through the acquisition of Simple (an online banking service provider with a new customer servicing concept; no fees, predictive expending models to help save money, customer alerts and more).

Hana Bank

Hana Bank embraced new digital paradigms by setting the basics right—breaking down platform dependencies

(flexible and scalable architecture) and decoupling channel distribution and core banking layers. Supported by predictive analytical models for online credit risk assessment approvals, Hana also took its online, real-time concept to the extreme, introducing “One Click Mortgage” which allowed the bank to establish “once and done” origination processing, thus helping to reduce exceptions and back office rework.

Such digital adoption was possible due to the core banking transformation Hana carried out simultaneously with a SOA-based architecture. That core banking upgrade provided a more granular service layer for a brand new omni-channel architecture, developed as part of the bank's evolutionary roadmap to its next generation of core banking systems.

Australian financial institution

A financial institution in Australia modernized its core product-based systems with one common, flexible and agile core banking platform. The innovative platform sets the foundation for profitable growth by enabling a series of digital-based capabilities and benefits, including:

- Enhanced customer experience, moving more than 10 million personal saving and transaction accounts into real-time banking; from real-time posting and transparent access to information to instant account opening with the possibility to introduce tailored offers and product bundling capabilities
- Enhanced customer services that allow Internet users to make payments to any of their mobile, email or Facebook contacts
- Incorporation of third-party offers or loyalty programs into the point-of-sale channel, considering customer preferences to provide personalized and more attractive offerings

Journey to the next generation of core banking: How do you get there?

The evolution to digital core banking does not always mean radical change. While in some cases obtaining the new and most important digital core banking capabilities will require redesign and/or replacement of existing core banking platforms and/or modules, the transformation to digital can happen selectively and in gradual steps. Most banks have already started.

In parallel with their intermediate tactical approaches, banks can shape a more comprehensive evolutionary journey to their next generation of core banking for the digital world. There are many scenarios under which banks can structure the nature, scope and approach of their journey. The complexity and depth of the change will depend on each bank's unique starting point, ambitions, priorities and business model (figure 4).

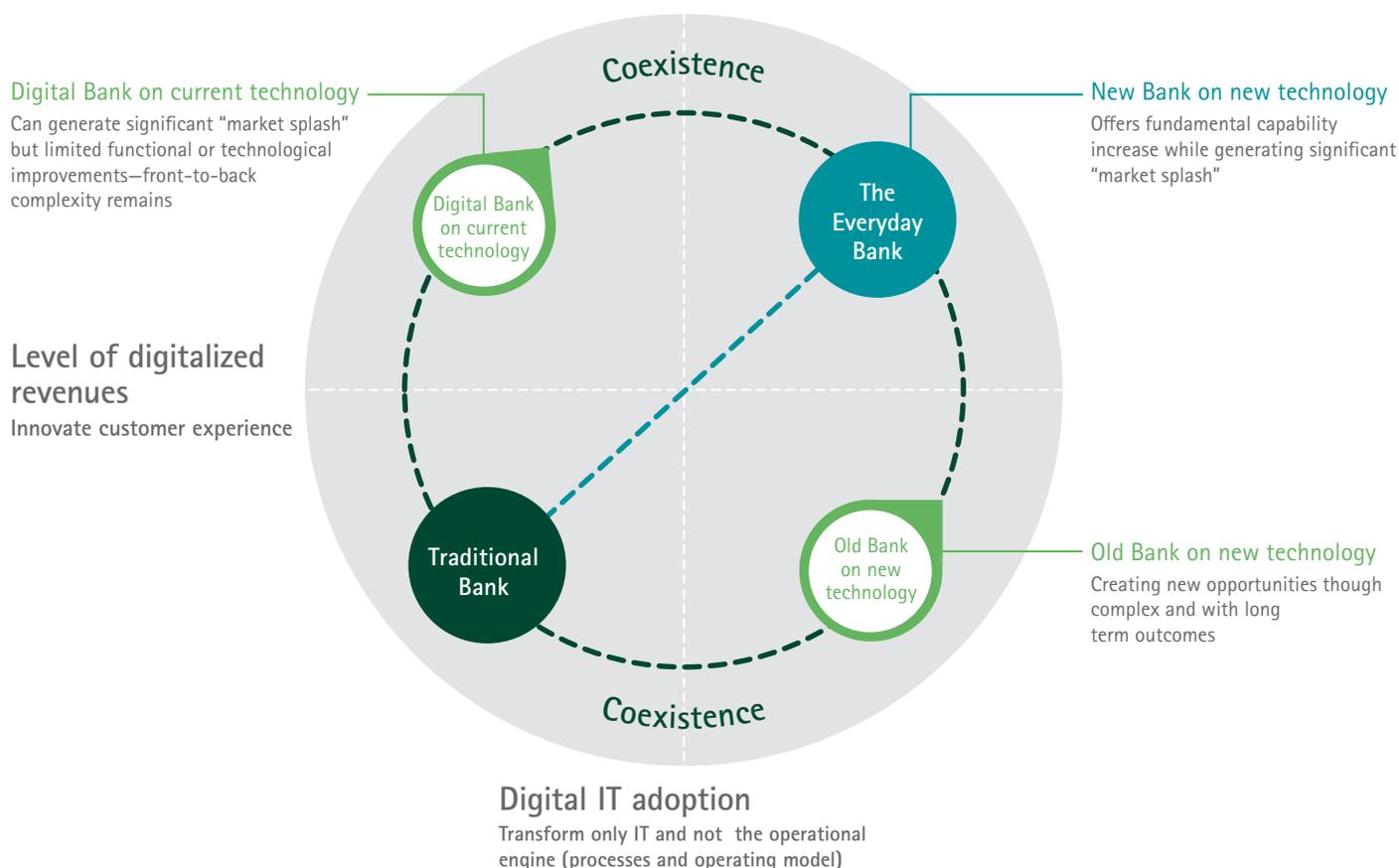
Some banks will indeed evolve gradually by adding new or refreshing old capabilities, taking the concept of "hollowing out the core" to the extreme, thus making core banking more flexible and granular. Other banks will progress more aggressively towards an Everyday Bank by creating a new digital start up or evolving their existing Internet brands.

Accenture collaborated with BBVA to create a new architecture (setting the basics right), on which BBVA will build the digital strategy for both traditional financial services (new digital businesses), and new digital initiatives (like Wizzo).

With the latter initiative BBVA reinforces its 2016 digitalization strategy, which involves doubling its number of online banking customers as well as fourfold the number of mobile banking customers.

For established players, there are five different starting points from which to evolve to next-generation core banking, as illustrated in figure 5. Each point assumes that a bank will first set the basics right and shape a digital foundation technical architecture—one that is truly multilayer, allowing the use of technology in a native way with sustainable data integrity. Each of the digital adoption starting points implies

FIGURE 4. Business strategy and digital readiness dictate the nature of the core banking journey



impact on core banking systems respective to its intensity of change—from gradually to revolutionary:

- **Data as the Core:** adding new technologies and capabilities to be used across informational, operational and commercial layers, providing predictive models and real-time analytics that enable better storage and analysis of massive data with simpler Business Intelligence stacks
- **Omni-channel Platform:** end-to-end process led orchestration, providing capabilities “hollowed out from the core” and orchestrated to deliver a differentiated customer experience, including an enhanced integration layer with third-party providers enabling as well the monetization of bank services and information (customer data validations, balance maintenance or account aggregation services, among others)
- **Customer Digital Ecosystem:** extending the customer database to embrace the new digital customer concept, helping to complement and enhance existing capabilities to collect, analyze and use data on customer experiences and share information internally and externally

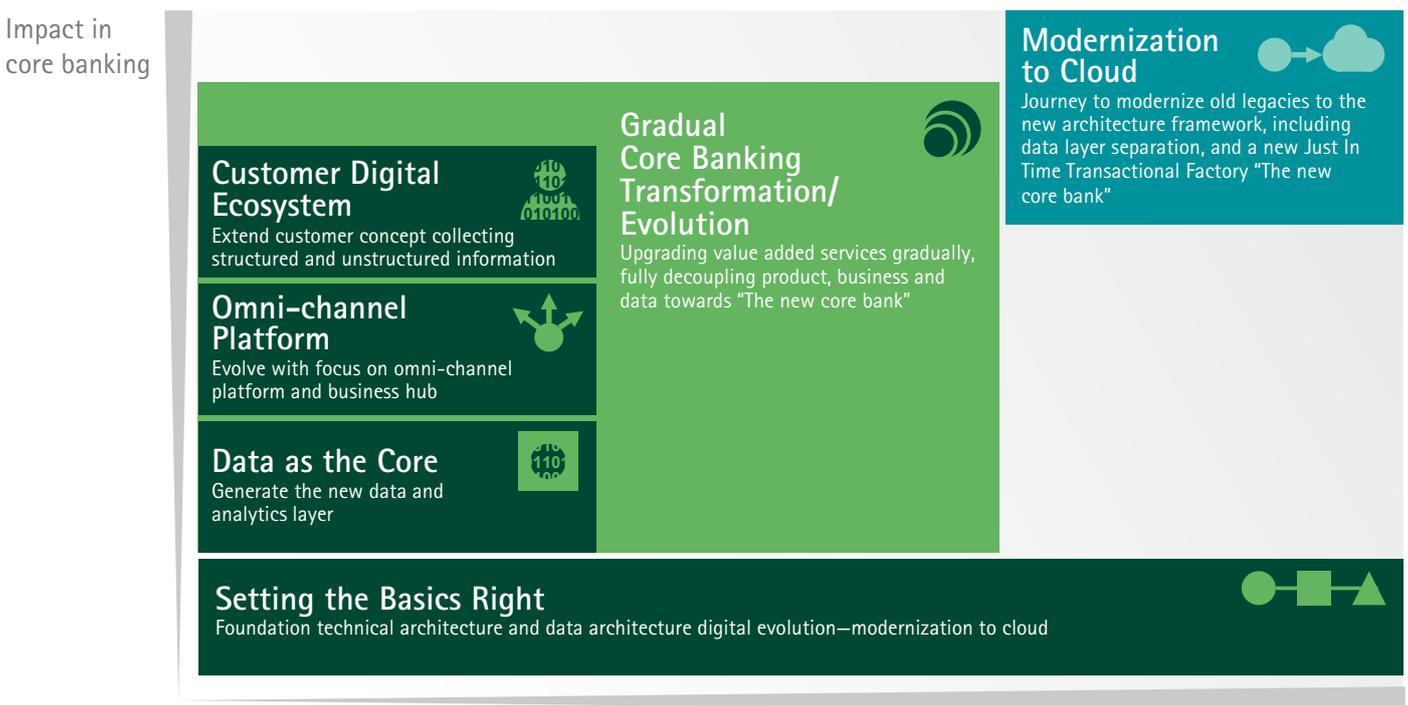
- **Gradual Core Banking Transformation:** an intermediate approach, focusing on gradually building new digital functions and capabilities that enable core banking to:
 - Improve on-line **real-time capabilities**, enabling true 24x7 for every single service and allowing transactions and information to flow in real time across any channel, (getting rid of cut off times or promoting real-time credit scoring, payment clearing, accruing or settlement processes, personalized pricing or cash management are a few examples of core banking capabilities to be reviewed towards real-time processing)
 - Provide the next level of **automation**, extending the “once & done” philosophy across all processes, removing unnecessary rework, moving to a new savings and revenue opportunity ecosystem; supporting paperless, cashless and branchless core banking operating models (high self-service degrees help to reduce branch personnel by 25 to 50 percent and lower back office costs by 20 percent)
 - Be more granular to reinforce service **reusability and flexibility** (in other words, increasing demand from digital channels requires an extremely granular and efficient service repository providing

different levels of functions depending on business and channel needs as an example of granularity.)

- Provide a new **distributed transaction model** where transactions comprise finely-grained services which can be distributed across different servers. This new model will increase reusability and allow the usage of non-relational database technologies to create new search and analytic services while maximizing **scalability**
- **Modernization to Cloud:** a more disruptive approach, building a just-in-time transactional factory on top of a fully automated platform as a service software and hardware stack. Redesign the core banking into a component-based, granular engine that clearly differentiates customer oriented processes and services from internal (or massive) processes and truly decoupling the data layer from the business logic. This provides full adaption to digital while also achieving radical change to the cost structure

In addition to setting the right technical foundation, banks will need to develop a technical and data coexistence strategy that becomes an architecture layer itself. This will enable the integration of both traditional and digital banking capabilities in a gradual approach.

FIGURE 5. Most common starting points for core banking transformation



Will your core banking be an enabler or an inhibitor?

In whatever digital scenario a bank chooses, core banking will play a pivotal role as either an enabler or an inhibitor of digital adoption. Banks that want to become an Everyday Bank with complete renewal of their cost structure to potentially realize 18 to 25 percent Return on Equity (ROE) by 2020² must push forward in their legacy system evolution.

Tactical approaches are a good start, but holistic action—whether gradually or in a more transformative approach—is needed towards the 2020 ROE aim.

Accenture is helping banks understand the impact of digital on their business and their core banking capabilities and navigate towards the Everyday Bank. We blend

together the best of our core banking and digital capabilities to assist banks in making the structural change needed to sustain competitive ROE (figure 6).

FIGURE 6. Accenture core banking and digital capabilities help banks navigate towards the Everyday Bank

	Accenture Core Banking	+	Accenture Digital
Extensive track record of success	<ul style="list-style-type: none"> • 200+ core banking transformations • 4,000+ skilled core banking professionals • Strategic alliances with key core banking vendors, including SAP, Oracle, Temenos and others • Extensive experience with other solutions, like Finacle, Fidelity, Mysis, Silverlake and others • Broad set of methodologies, frameworks and accelerators • Multiple solution factories within a network of 50+ centers and 80,000 professionals in the Accenture Global Delivery Network 		<ul style="list-style-type: none"> • 23,000+ digital professionals serving 4,000+ clients in 49 countries • 7 of top 10 banks are digital clients • Developed applications for 170+ clients through our Mobility Apps Factory • 900+ data scientists globally in 23 Accenture Innovation Centers for Advanced Analytics • 8+ acquisitions in the last 18 months, strengthening our digital capabilities • 34 Accenture Interactive design studios, R&D offices and Centers of Excellence
Innovative and industrialized services	<ul style="list-style-type: none"> • Shaping the Core Banking Journey • Impact of digital on Core Banking <ul style="list-style-type: none"> - Customer Ecosystem Design - Automation Offering - Real-time Evolution Offering • Next Generation of Digital Core Banking Design • Utility Banking • ...others evolving 		<ul style="list-style-type: none"> • Digital Strategy • Digital Enterprise Architecture • Information & Data Strategy (e.g., Big Data) • Cloud • Mobility • Analytics • ...several others
Focus on predictable business outcomes	<p>For example, we helped:</p> <ul style="list-style-type: none"> • mBank define a collaborative approach to digital adoption, enabling the bank after just one year of operation to have more than 300,000 customers using its mobile banking services • Hana Bank augment its home buyer app and virtual branch, supporting more than \$4.3 billion in mortgages since service launch • Core banking transformation for an Australian Bank reduced branch errors by 30 percent and products per customer increased from 2,83 to 3,00 thanks to the core banking capability to cross-sell and bundle products • Simple (BBVA) garner 480 percent increase in customer acquisition, \$6.6 million annual transactions, \$1.7 billion transferred during the year and account ending balance of \$64 million; best customer experience: 37,244 customer calls and 153,199 SMSs alert messages • BBVA creates a hassle-free origination process with new digital passport and multichannel signature 		

Contact us

For more information about Accenture Core Banking Services and how we help you design, enable and accelerate your journey towards the Everyday Bank, please contact:

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NOTES

¹ Accenture, *The Everyday Bank: How Digital is Revolutionizing Banking and the Customer Ecosystem*, 2013. To forecast revenues at risk, Accenture performed scenario modeling using Europe as a proxy. We analyzed the composition of revenues for major banks in Western Europe and studied seven areas of digital disruption (including consumer and SME peer-to-peer lending, alternative

payments, low-cost checking alternatives)—leveraging disruption case-studies to model market share erosion by new entrants and margin compression and pricing pressure on banks. In scenarios of high consumer adoption of digital entrants, we found nearly one-third of retail banking revenues at risk within five years, with major deposit margin compression.

² Accenture Banking 2020 Report, 2013.

ABOUT ACCENTURE

Accenture is a global management consulting, technology services and outsourcing company, with more than 336,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$30.0 billion for the fiscal year ended Aug. 31, 2014. Its home page is www.accenture.com.

ABOUT ACCENTURE CORE BANKING SERVICES

Accenture Core Banking Services, a business service within Accenture's Financial Services operating group, has helped design and implement core banking solutions for more than 200 financial institutions worldwide. Accenture Core Banking Services delivers solutions using a broad set of approaches and capabilities based on our deep industry expertise, global reach, proprietary and third-party software, innovation and digital know-how and mix of consulting, technology and operation solutions—all customized to meet each bank's specific business needs. Its home page is www.accenture.com/corebanking.

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