Using new technology to reshape your bank for the future

Up to two thirds of the profitability uplift required to be a high performer of tomorrow could come through technology-led initiatives.
In the post-crisis environment—characterized by lower growth, tighter capital, ever fiercer competition and closer regulation—banking organizations worldwide need to make significant changes to their business model, cost base and operations to drive a recovery in return on equity. At the same time, they need to keep pace with rapid ongoing change affecting the customers and societies they deal with, amid ongoing shifts in demographics and the global balance of economic power and the arrival of the digital economy. However, they can respond with new technologies, which are redefining consumers’ behavior and expectations towards their banks, and creating opportunities for banks and new non-banking entrants.

Today, these converging trends have put banks at a historical inflexion point: a moment where they can take decisive steps to transform for the new environment, or risk losing revenues, relevance and returns. For many, change is not a matter of choice. Bank profitability is low, and markets are changing in ways that threaten to disintermediate banks from their customers, or replace them altogether. So for banks, the question is this: is your organization positioned to be a winner or a loser in technology-enabled transformation?

The good news is that while the latest wave of technology is part of the challenge, it can also help deliver the solution. Banks can harness the new technologies to tackle underlying cost and quality issues in their business—and simultaneously drive a permanent uplift in financial performance, meet the competitive threat from new entrants, and provide customers with the new service experiences they now demand. We conclude that up to two-thirds of the profitability uplift required to be a high performer of tomorrow could come through technology-led initiatives.

Accenture’s Technology Vision identifies the rapid digitalization of business across all industries, in banking this changes how customers interact, where and how transactions happen, and how services are managed and provided.

For banks, this means that customer relationships are increasingly digital, they will need to provide their services across the new channels and devices customers use, and rethink their service propositions to create relationships in an omnichannel era. In a connected world information flows and service provision are real time, banks need to digitize and automate many of their processes. As a result, banks need to look to their core systems, the workhorses of account and ledger processing, which for many banks are complex and old legacy systems that restrict agility to adapt to rapid technology change.

However, emerging technologies such as cloud, and a maturing landscape of suppliers, provide banks with the opportunity to develop new operating models to meet these challenges. The manufacturing industry was revolutionized by ‘just-in-time’ supply chains, for banks buying in expert services and processing offers an opportunity for a similar revolution in flexibility and efficiency.

The opportunities for banks that get this right are large. As customers increase the use of their digital and mobile channels commerce is going on-line, banks have the opportunity not just to take a larger share of consumer payments, but to grow deep, trusted digital relationships. Technology is also driving down the transaction and distribution costs of financial services, this provides an opportunity to reach the hundreds of millions of potential customers currently excluded from the financial system at the same time as the spending power and incomes of this segment are growing. However, banks need to make these moves quickly, their competitors are, and so too are new competitors ranging from telecoms companies to retailers, who are accessing the same technologies to enter financial services.

To seize this opportunity, banks need to think carefully about what their organization and services will look like in the future, and about how they can reshape and transform from their legacy model to an information-led business fit for the future. It is not just about growing revenues and reducing costs, but how to navigate technology disruption. We’ve termed this future model the ‘connected and digital bank’. This paper sets out the journey to get there.
New technologies—new imperatives for banks

The implications of the current technology wave

Across the global banking industry, the current wave of technology is opening the way to fundamental change—driven both by the pressures facing banks themselves, and also by the possibilities created by new technologies.

On the industry side, banks need to re-establish growth and profitability in today's difficult market of lower returns, higher volatility and intensifying competition. On the customer side, they must reflect rapid changes in behavior and expectations as consumers adopt digital modes of interaction. On the competitive side, technology is enabling new entrants to target the banking business, from established businesses such as retailers and telcos to innovative new start-ups.

New technologies have already enabled transformation of business models across several other industries over the past decade—including airlines, telecoms and music. Customers are increasingly willing to buy products and services from start-ups, peers or new offerings from trusted brands. There is a growing possibility that banking may be next. A new set of brands. There is a growing possibility that banking may be next. A new set of

Meanwhile, many banks are already undergoing complex transformation initiatives to restructure and reshape their business as a result of the financial crisis. Some are experimenting with new digital and mobile services, predicting where the markets will move. However, it is increasingly evident that those businesses that can skillfully employ technology to support and change their business models can respond more effectively to the different dimensions of change. Banks are not known for rapid innovation, and a risk-aware approach is essential for the industry, however in a rapidly evolving market banks need to become more agile.

The size of the prize on offer

So for banks, the question is this: is your organization positioned to be a winner or loser in technology-enabled transformation? Given our view that technology will account for up to two-thirds of the profitability uplift to be a high performer, this question is vital for all banks. The moment has now come when they must answer it as a matter of urgency.

It is not hard to see why decisive action is needed. Banks in the developed markets are struggling to reach a sustainable level of profitability in the face of increasing regulatory costs, and volatile revenues have exposed high and inflexible cost bases. Many emerging market banks are struggling to maintain profitability, as margins are under pressure and investments in new capabilities are required to capture growth opportunities. At the same time, banks worldwide are facing an inexorable move to a digital marketplace, shifting customer behaviors and the emergence of disruptive new competitors and business models.

These challenges demand broad and deep change across banks' business and operating models. Unlocking costs requires banks to tackle the high level of human capital intensity in their businesses by automating manual work, or adapting to ongoing digitization by improving their digital and mobile capabilities and refining physical networks to work in an omni-channel world.

New capabilities are also required to capture growth and manage risks more effectively. The need to increase the sensitivity of customer insight to make customer experiences more relevant and more personal requires banks to invest in analytics capabilities, while empowering risk managers with better credit, market and enterprise analytics can improve risk outcomes. In our view, technology-enabled business transformation can deliver two-thirds of the potential rebuild of return on equity (RoE) that banks need to achieve to reach high performing levels of profitability (see Figure 1).

How will technology enablement deliver this prize? The key is that these changes require banks to manage technology differently. Complex architectures often result in banks being slow-footed and expensive to change, while siloed products and customer data restrict the ability to orient the bank around the customer. To address these issues, banks need to move on from their historical approach of building and managing the overwhelming majority of their software and technology solutions in-house. Instead, they must progress to a more diverse and balanced approach, focused on sourcing and orchestrating the best available technology solutions—whether developed in-house, provided by a supplier or partner, or sourced from the cloud. A number of banks have begun this journey, but most still have a long way to go.
Four main technologies—Cloud, Big data, Social Media and Mobility—are having a profound impact on business and society.

More connected
As of 2012 there are 6 billion mobile phone connections globally and around 2.5 billion internet users. Smartphones are driving uptake of mobile banking—and by 2014 half of the world’s new handsets will be smartphones. Already, developed markets are seeing mobile banking grow faster than internet banking over a similar period after launch. With 30 million mobile money users worldwide, in some emerging markets mobile money, pre-paid account services on mobile phones, now reaches more people than traditional banks.

More data
IDC forecasts that the volume of digital information will grow from approximately 2.4 zetabytes today to 40 zetabytes in 2020, or from 183 to 5,200 gigabytes per person. Banks already manage vast amounts of customer, payments and market data, but many struggle to make sense of the growing volume and velocity of information. The key challenge is getting the right nuggets of information from an escalating volume of noise. A few are pioneering new ways to drive value for their businesses by building insight from their vast data flows.

More social
There are more than a dozen social networks with over 100 million users today, with Facebook alone surpassing 1 billion members in 2012. Time spent on social media is growing rapidly, and ushering in a ‘Like’ economy. Most banks have built a social presence, some have millions of likes, but only a few have started to drive business through social engagement. Social and digital marketing will play an increasingly important role to engage customers as online peer recommendation becomes a key influencer in customer purchase decisions, especially for the digital native generations.

More Cloud
Cloud technology is maturing and service offerings move up the technology stack from data storage and infrastructure to software, platforms and business process. More businesses are adopting cloud to increase flexibility, gain new capabilities and reduce costs. Heavyweight IT companies are providing public services in this market from Google, Amazon and Microsoft, and specialists such as Salesforce are dominating their sector with a cloud based model. Forrester forecasts that the global market for cloud computing will grow to more than $241 billion in 2020. FS company spending on cloud could make up to one quarter of this total. In addition, many companies are adopting the technology to build their own private or hybrid clouds.
Figure 1 High performing banks’ return on equity evolution (retail and commercial banks in mature markets)

Return of equity (%)

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<th>2011</th>
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<th>Regulatory adjustment</th>
<th>Asset quality normalization</th>
<th>Strategic cost reduction</th>
<th>Balance sheet efficiency</th>
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<td>5.2</td>
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Business Transformation & Economic ROE Uplift
Technology Enabled Business Transformation ROE Uplift

Source: Accenture Research Analysis, Bloomberg Data

Delivering performance improvement through technology enabled change

Technology-enabled optimisation
- Strategic cost reduction
  - Transaction channel migration
  - Branch network automation and optimisation
  - Business process management
  - Straight-through processing and process automation
  - Workforce collaboration tools
  - Next generation core banking systems
- Balance sheet efficiency
  - Enhanced credit risk analytics and decisioning analytic liquidity, market and enterprise risk management
  - Controls and fraud analytics
  - Analytic capital and funding allocation tools
  - Digital deposit capture
- > momentum growth
  - Rich online interactions
  - Remote advisors and enhanced interactive tools
  - Analytic customer insight and real-time analytics
  - Increased electronic payments utilisation
  - Marketing factory to optimise sales and marketing spend
  - Personalised product, pricing and offers
  - Customer dialogue management
  - Social media customer engagement

Technology-led disruption
- Cloud-based services
- Just-in-time managed services
- Mobile distribution
- Digital marketing
- Peer-to-peer finance
- Big data risk analytics
- Increased transaction fee-based revenue streams
- Third party revenues from customer offers
- Digital information services
- Monetising customer and commercial data
- New business models to access new customer segments (peer to peer, low income, mobile money)
- Big data analytics
- Mobile financial and commercial services
Technology: both a driver and an enabler

Banks must execute these profound changes while also driving a recovery in performance—a challenge that demands initiatives including balance sheet restructuring, strategic cost reduction, and new levels of efficiency, revenue and customer engagement.

Technology is both a driver and an enabler of this bank-wide transformation. It is driving change through developments such as rapid customer adoption of digital devices and channels, the growing need for analytics to make sense of rising volumes of data, the emergence of new technology-led innovators, and more complex digital and physical security threats. And it is enabling change by opening up new ways to manage existing operations for value, and offering greater business flexibility to meet volatile conditions and volumes.

All of these impacts are seeing the imperatives and metrics around banking technology move away from concepts of unit cost, cost-to-serve, and automation—and towards drivers of value-add such as personalization, engagement, and greater connectivity.

Reaching the inflexion point...

This convergence of pervasive industry and technology change means the banking industry is now reaching an inflexion point in many markets, where technology will enable significant change in banks’ business models. This turning-point is set to be all the more dramatic since financial services in general—and banking in particular—is already more reliant on technology than other industries, and is seeing this reliance increase still further (see Figure 2). Celent estimates the banking industry spent $172 billion on technology in 2012, a number that is forecast to grow at 3.1 percent p.a. to 2014.

...where the winners will be customer-centric

Much of the current wave of technology investment by banks is targeted at moving towards a more customer-centric experience. However, as Figure 3 shows, their efforts to achieve this face a number of challenges. Over the past few decades, banking has become a much more complex business and one that is increasingly mediated by technology. More channels and the impact of social media on reputation management and marketing, more payment types, increasing demand for personalization, expanding product requirements—all of these factors promise to make banking ever more complex and are creating new spaces for competitors. A new approach is needed.

Figure 2  Different sectors’ spending on IT as a percentage of revenues

### Cross-Industry average
3.5

### Software Publishing and Internet Services
8.1

### Banking and Financial Services
6.6

### Education
4.7

### Media and Entertainment
4.6

### Professional Services
4.5

### Telecommunications
4.1

### Healthcare Providers
3.9

### Insurance
3.4

### Pharmaceuticals, Life Sciences and Medical Products
3.3

### Transportation
2.8

### Utilities
2.8

### Industrial Electronics and Electrical Equipment
2.3

### Consumer Products
2.0

### Industrial Manufacturing
1.7

### Retail and Wholesale
1.5

### Food and Beverage Processing
1.3

### Chemicals
1.1

### Construction, Materials and Natural resources
1.0

### Energy
1.0

Three key challenges in achieving a more customer-centric experience

The challenges are intensified by the fact that the fast-evolving technology environment is presenting an increasingly complex environment for banks to navigate. Increasingly, banks need to have a long-term view of where and how technology will change the business model, and one that extends beyond the CIO.

Accenture’s Technology Vision 2013—‘Every Business Is a Digital Business’—highlights seven ways in which companies can harness technology to improve their competitiveness, operations and business results (see Figure 4). While many banks have started to build capabilities around emerging technologies, the pace and scale of change implies many banks will need to accelerate their efforts and work through how the new technology wave will change their business models in new ways.

As a result, the banking industry is in the midst of rapid and accelerating adoption of new technology—but faces critical challenges in exploiting it fully. This mismatch between opportunity and execution has helped to trigger a technology and innovation arms race, led by visionary incumbents, new entrants and disruptive innovators.

In Accenture’s view, it’s time for banks to seize the initiative in this arms race, by using technology to deliver the transformation they need. We’ll now look at how they can achieve this.
Accenture Technology Vision: Every Business Is a Digital Business

- **Relationships at Scale**: Moving beyond transactions to digital relationships
- **Design for Analytics**: Formulate the questions, and design for the answers
- **Data Velocity**: Matching the speed for decision to the speed of action
- **Seamless Collaboration**: Right channel, right worker, right job
- **Software-Defined Networking**: Virtualisation's last mile
- **Active Defence**: Adapting cyber-defences to the threat
- **Beyond the Cloud**: The value lies in putting the cloud to work
Three horizons for technology-enabled change of banking business models

Given the unprecedented changes under way in banks’ commercial, customer and technology environments, and their rapid adoption of new technologies in response, where are banks heading?

Accenture believes that the industry leaders are moving inexorably towards a fresh and differentiated vision for banking: the ‘connected and digital bank’—a new type of banking organization in which business and technology are more closely aligned to create a new experience for customers as their everyday bank.

The connected bank is an integral part of its customers’ ecosystem, engaging and interacting with them digitally and socially through multiple integrated channels.

Operating at the center of a tightly-orchestrated network of suppliers, it will be both more agile than today’s banks, and less of a stand-alone enterprise.

Companies in other sectors are already using technology-enabled business models to deliver differentiated performance and better bottom-line results. The challenge for banks is to explore new opportunities for technology change—creating the basis for new banking business models offering higher RoE.

As Figure 5 shows, Accenture has identified three key horizons for technology change of banking business models:

1. Improve business performance:
   Improve revenue generation, operational efficiency and risk management of existing business models.

2. Extend business model to new markets:
   Extend business models to new markets and new customer bases through new distribution and operation approaches.

3. Develop new markets and new business models:
   Access new revenue streams and develop new economic models for providing financial services.

We’ll now examine each of these horizons in more detail.

Figure 5 Three key horizons for technology change of banking business models
Horizon 1
Improve existing banking business models

The first horizon of technology-enabled transformation in banking is to improve revenue generation, operational efficiency and risk management of existing business models. This horizon is opened up through effective execution of three dominant trends in the technology enablement of banking business models.
1. The development of multi-channel integration to enable an omni-channel customer experience

The future of customer-centric distribution lies in leveraging technology to drive increasing channel convergence and create anytime, anywhere banking services and experiences. This is a move from multiple channels towards an omni-channel customer experience, where customers can have a seamless experience between stores and remote channels regardless of device, operating system even social platform.

Driven by rapid consumer adoption of new—especially mobile—technologies and devices, and increasingly sophisticated multichannel offerings, banking distribution is already changing fast. Some countries’ customers have already digitized to a large extent, in the Nordic region more than 80 percent of customers are using online banking on a monthly basis, and many other countries are catching up fast. Meanwhile banks around the world are reporting that the majority of their customer transactions are now occurring through remote channels, some seeing more than 80 percent. The use of mobile banking is growing at a faster rate than adoption of internet banking, with some banks seeing penetration double year on year, and some large banks in the US, Europe and Australia reporting more than a quarter of retail customers already using mobile banking, and more in some segments such as SMEs. Banks are also increasing customer interaction through social media, ranging from embedded branches and customer services, to enabling social payments and offers—all of which are important to engage the next generation of customers.

The impacts of these changes are profound, customers are not just switching where they transact, the use of new channels is driving up the volume of transactions, changing where they happen and what customers are doing on their own.

Direct channels have moved from simple transactions to a sales and advice channel that drive valuable interactions and relationships, European banks estimated that 23 percent of sales in 2012 were through direct channels, up from 15 percent in 2009, with the volume potentially doubling by 2015. A combination of four distinct drivers lies behind this changing distribution mix—namely customers’ ready adoption of digital and mobile banking channels; the high costs of traditional physical distribution; the changing frequency, modality and expectations of customer interactions; and the need for banks to integrate channels to drive a consistent channel experience.

Banks need to embrace this change, not just as customers demand it, but new entrants are increasingly using online, mobile and point of sale solutions to target banking customers. For banks, it is not just a matter of competitive survival, digitizing the customer relationship also promises significant improvement in the costs of serving customers. The unit costs of digital transactions can be a fraction of the cost of traditional branch and phone transactions, Diebold estimates that in the US an online banking transaction costs 5 percent of a branch transaction, while a mobile transaction can be as little as 2 percent. However, efficiency cannot be measured by single transactions, but the cost of an overall relationship, JP Morgan estimates that the costs for servicing bank accounts are 70 percent lower per household for fully digital users than for traditional accounts. However, for many banks, the potential cost savings of digital relationships are hard to realize, as many customers still value the branch and many important sales and service activities are still only provided in physical locations.

While the role of direct channels will grow, this doesn’t mean the traditional bank branch will lose its relevance. The branch is set to remain the key sales channel in the near future—but what will change is that branch banking is evolving into a new technology-supported role that blurs the physical/digital divide.

The advent of internet and video-enabled banking terminals and ATMs in branches around the world heralds this change. Citi is rolling out a next generation of branch technology and ATMs across its branches globally. And banks around the world, as diverse as Bradesco, in Brazil, and Allied Irish Bank, are building future branch formats to experiment with new customer interactions, branch processes and stimulate digital demand.

To fulfill this role, banks are utilizing technology to develop differentiated branch formats that meet customer needs more effectively at lower cost. Optimizing the branch network in this way for an omni-channel world can maintain a bank’s physical presence and high-street profile, while simultaneously releasing significant costs for investment.

However, succeeding in the omni-channel world does not entail just re-designing branches and adding more and better channels. Banks need to address how interactions, products and relationships are managed across channel. This means addressing the banks’ multi-channel architecture and moving away from siloed channel and product systems towards an architecture defined by separate distribution and manufacturing models that are joined by a business hub or assembly layer. While the distribution model manages customer interactions and the manufacturing layer provides product fulfillment and transactional functions, the business hub orchestrates the customer’s service offering between the two, providing a consistent and flexible experience.

Delivering an integrated omni-channel experience can help banks achieve:

- Greater customer engagement and product utilization
- Increased product sales and cross-selling opportunities
- Reduced cost-to-sell
- Optimisation of branch networks
- Reduced time to market
2. The development of a smart customer experience to enable management of customer relationships at scale and in the digital world

Today’s banking customers are more multi-channel than any bank, and take a holistic view of the companies they interact with across product and service providers. So forward-looking banks are extending their customer experience beyond simply ‘integrating’ channels, and working out to how to become a true partner embedded into the customer’s economic life.

This means creating a smarter customer experience by infusing analytics and customer centricity into banks’ customer offerings. Experience shows that combining pervasive analytics, real-time marketing engine technologies and advanced multichannel integration can make for more engaged, satisfied and loyal customers. As customers become more self-directed and use digital channels more frequently the risk is that their bank interactions become purely transactional, banks will need to design customer journeys and business processes that move seamlessly between digital, mobile and physical contexts. This means enabling customer touch points to be responsive to customer needs, and using digital marketing approaches to drive personalised offers and experiences.

To help achieve this, customer insight analytics based on real-time customer behavior, micro-segments and business rules can allow for more powerful, personalized customer interactions. And an industrialized approach that joins customer analytics with multi-channel architecture can help to deliver high-quality, relationship-based customer servicing at scale, whatever the channel. The opportunity to move marketing messages from broadcast to targeted messaging through industrialised digital marketing approaches can drive up customer responses, and do so at significantly lower cost.

Banks already hold a vast array of customer and behavioral data, and increasingly they are able to access new data sources through partners, social media sites or public and reference data. However, most are at the beginning of their journey to turn this mountain of information into actionable insights. Many hold customer information in separate product or operational systems, limiting a single view of the customer, and most process information in batches to generate a set of generic leads based on what has gone before. New data management systems and analytic techniques allow organisations to join up data across disparate systems and consider important new variables such as behavioral, shopping and social data. They can use this to generate predictive insights, based on individual customer characteristics and in real-time.

This enables the bank to customise services, leads and offers to individual customers and can be exploited across many different channels. The results are impressive, in our experience banks can double cross sell rates, reduce customer churn by 40 percent, or increase marketing ROI by 15-20 percent. Multi-channel lead management can turn inbound service calls into relationship building opportunities, or customize messages on mobile and web pages on the fly. In fact, the smart deployment of analytics is a force-multiplier for relationship management across all interactions and channels.

As customers’ interactions become increasingly digital and self-directed, a “Digital First” vision will be crucial to differentiate customer experiences. This vision is seeing mobile or online banking propositions move beyond “banking services over a direct channel” to become a more integrated, relationship driven experience. Effective digital marketing will be required to engage customers at the beginning of a customer journey, building awareness and consideration of brand, as customers turn to digital and social channels to find out about products, services and financial needs. For the next generation of digital natives, activating the customer through social and digital channels will be increasingly important.

The key is to build rich features and intelligence into direct channels, turning transactions into interactions. Building blocks include ensuring that digital content is relevant to the individual customer’s context, or providing value-adding information, such as portfolio management tools, or rich communication options, such as web chat or video calls into direct channels. Many banks have already incorporated social features into their service models to enhance their customers’ interactions and experience. And some are beginning to use social connections with their customers as a service platform to drive business, as well as a new and lower cost marketing channel. American Express’s Link, Like, Love programme, for example, increases their customers card utilization by providing targeted, relevant offers through Facebook.

In Accenture’s study Banking 2016, we examine the new business models for retail banking explore how banks can create a compelling customer experience in an omni-channel world (see Figure 6).

Delivering a smart analytic and digital first vision can help banks achieve:

• A more relevant customer experience and improved net promoter scores
• Reduced customer acquisition costs
• Greater response rates for leads and marketing campaigns at lower cost
• Increase cross-sales, share of wallet and retention
Enhanced multichannel experiences, social media interactions and mobile technology can enable banks to achieve success—today and in the future.

Today's banks must restore customer trust, defend against new competitors and avoid commoditization. Accenture proposes three customer business models that can help banks overcome these challenges:

**The “Intelligent Multichannel” Bank**

The Intelligent Multichannel Bank frequently engages with customers through different channels, taking personal channel preferences into consideration. The key differentiator of this model is the extensive use of analytics that can enable the bank to more effectively understand and meet customers’ needs.

**The “Socially Engaging” Bank**

The Socially Engaging Bank emphasizes engaging customers where they spend their time, with a specific focus on social media to increase customer intimacy. The intention is to create relationships based on personal interests, leverage influencers and facilitate co-creation (the bank and its customers).

**The “Digital Ecosystem” Bank**

The Digital Ecosystem Bank represents the bank “where the customer is”, providing both financial and non-financial offerings. This model uses the power of mobile technology to offer services extending beyond traditional banking products through a network of partners. The bank can decide to create or be part of a digital ecosystem, depending on the payments solution and the role it intends to play.

Technology provides banks with the opportunity to support the creation of a smart customer experience, by designing a fundamentally new business model that is more agile, responsive and customer centric than ever before. This means thinking holistically about key components including the business architecture, core banking systems, business processes, and data/analytics architectures—and making corresponding changes in how people work and how enterprise services are provided.

Leading banks are shaping a strategic agenda infused with new imperatives—decoupling of distribution and manufacturing, configurable common services and functions, decoupling of manufacturing and corporate core—that each require a rich blend of current advanced characteristics and new innovations.

Business process management (BPM) and managed services are increasingly critical tools to bring together business, technology and operations operating models to drive a customer-centric focus. By ensuring that consistent and customer-oriented processes are in place across customer segment, channel and product, banks can remove much of the complexity and duplication within their business models. While using external managed services can offer additional benefits of increased flexibility and scalability for business processes.

Many banks today have grown to have multiple systems to manage different channels and product requirements. These different systems have been built organically over years, through mergers and acquisitions, and to meet evolving customer needs. The result is a complex web of different offers, processes, data stores, systems and infrastructure.

However, this complexity has resulted in business and systems architectures that are costly to run and difficult to change.

The challenge banks face is that the demands from their customers and markets are often more than their legacy systems can support, while their cost and complexity makes it nearly impossible to keep up with the pace of change. Customer expectation for always-on services and a 24 hour business environment mean that banks require systems that support real-time rather than batch processes. A rapidly changing digital environment leading to new channels, new competition and new market opportunities mean that banks need to adapt their products and services to these new contexts faster than current development lifecycles typically allow. While cost pressures mean that banks need to digitise and automate processes, rationalize their systems and architecture and reduce running costs. The development of core banking technology and business process architecture provides new tools for CIOs to tackle these issues.

To take full advantage of these approaches, many banks are working on their core systems and some are implementing a new generation of core banking platforms designed for flexibility, customer focus and efficiency. This involves taking advantage of new architectures that allow for the industrialization of common business processes to be shared across the enterprise, the virtualization of infrastructure, and the adoption of software and business processes as a service. Together with the latest software solutions to integrate channels, business processes and data while simplifying and automating processes, banks can reduce the duplication of services and technology. For example, technology components can provide a central product and pricing factory that manages different combinations of features and pricing to personalize offerings, rather than duplicating these services within each product system. Enabling the bank with new core technology can also empower new business approaches including paperless front offices, once-and-done processing, while enabling more personalized and consistent customer servicing across different channels.

Among banks that Accenture has worked with delivering change to their core technology we have observed impressive results. Many banks can achieve both significant cost reductions and accelerate growth. Some banks have achieved improvements to their cost income ratios of up to 15 percent, through reducing IT expenses, streamlining processes, reducing back office headcount and front office staff administrative activities.

While increasing commercial time in the front office, improved process quality and speed-to-market has helped banks boost revenues and reduce customer attrition, in some cases increasing customer profitability by 15-20 percent.

Banks face a similar level of complexity in the way that data is managed and stored throughout the organization. Traditional data management approaches have led to data being stored in multiple applications and stores leading to duplication and inconsistencies. Banks are already bringing together the vast amounts of data they hold to transform the way they interact with customers, manage risks, or manage their own operations. Meanwhile new data feeds from public sources, social media or partner companies are increasing the volume and variety of information accessible to the bank. Given the vast amounts of data that banks hold, a key performance differentiator will be the ability to drive data to insight, and insight to action. As with customer interactions, banks can also improve their enterprise performance through analytics. Banks are already expert at detecting customer fraud, but increasingly similar techniques are being applied to make better risk management decisions, across credit decisioning to portfolio analytics. Analytic techniques are also being applied to process management ranging from process quality, claims management and collections to analytic approaches to IT security.

As job roles become more complex, organizations are seeking to enhance their ability act with agility and speed by turning to workforce collaboration tools, such as instant messaging, teleconferencing and shared workspaces, to enhance enterprise productivity. Human capital costs and expert talent are essential to bank performance.
While video and teleconferencing are developing into essential tools for internal management, they are increasingly being applied to extend the reach of customer facing experts. Similarly, many of the new banking imperatives require access to scarce talent, be they banking skills or functional skills such as technology, data analytics or risk management. Collaboration technologies enhance the organization’s ability to scale the talent they have, and tap into external partners in a more seamless way.

Banks will require more flexibility in how they manage their internal resources, be they technology or talent. The rise of cloud computing enables banks to realize new capability benefits in the way they access infrastructure, software and business services. Banks can take advantage of cloud techniques to manage their own technology, creating private clouds to increase flexibility and utilization of their own infrastructure, applications and services. However, as cloud computing matures, and service offerings move up the technology stack from storage and infrastructure to applications, platforms and services, banks will look to external parties to provide new capabilities through public or hybrid cloud. Already banks are tapping into scaleable data centres or testing environments, and many are using specific SaaS applications like Salesforce.com, while some smaller banks have event taken the step to use third party cloud services for their core banking systems.

Similarly, rapid changes in the business environment are leading to banks tapping into suppliers and partners to access new resources and capabilities. Banks are mature outsource services—to gain benefits of scale or flexibility, to reduce costs and to focus on their strategic priorities. Increasingly, banks are now turning to their suppliers to provide core business processes as managed services to gain new capabilities or greater flexibility around costs. Examples of these include banks working with partners to provide complex data analytics, social media engagement or IT security.

Case study Core Banking Modernization—Commonwealth Bank Group

The Commonwealth Bank Group of Australia decided to undertake a comprehensive program to modernize its existing banking legacy systems with a customer-centric platform that enhances the way the Group provides services to its customers and does business. The Core Banking Modernization is an integral part of the Group’s vision to be Australia’s finest financial services organization through excelling in customer service by having a world class customer service platform.

The Group selected the SAP for Banking Solutions portfolio and appointed Accenture to support the implementation. This means the project benefits from the proven experience of SAP and Accenture in managing large scale technology integrations along with the Group’s own wealth of experience in developing customer centric systems and managing innovative change programs to meet customers’ needs.

The modernization program is a natural progression following two years of focusing on improving the Group’s IT capability, including reorganizing the function and providing ongoing efficiency gains worth over $200 million per annum. The Group has also spent two years on research and development to prepare for the program and mitigate the related risks.

This transformation is delivering a better customer service platform and greater simplicity in IT systems, infrastructure and business services, as well as significant operational benefits and cost savings. The Group’s customers are benefiting from having a more agile, flexible and open banking experience.

For banks, these changes to enterprise technology mean increased productivity and efficiency. They can support a ‘just-in-time’ bank that can be focused on meeting customer needs while flexibly orchestrating technology and services providers. For customers these changes can be profound: more joined up services, fewer forms, faster response rates and more relevant offerings.

The enterprise technology transformation offers banks the opportunity to:

- Increase customer-centricity through simplified processes and increasing customer-facing time
- Reduce operating model and IT costs
- Increase flexibility, scaleability and time-to-market
- Improve process quality and decision making
- Increase employee productivity and collaboration

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Horizon 2
Extend the banking business model

The second horizon of technology-enabled transformation in banking is to extend the business models to new markets and customers, by applying new approaches distribution and operations. This expansion is enabled by the fact that technology capabilities are transforming the economics of—and access to—financial services, allowing banks to access formerly hard-to-reach markets in three dimensions.
1. Lowering the price-point for delivery of financial services—a critical enabler for bringing financial services to low-income populations

There is a huge opportunity for banking services at the bottom of the global income pyramid. While significant progress has been made around the world to extend access to financial services, some 2.5 billion people worldwide still had no access to formal bank accounts as of 2011 (see Figure 7). Rapid economic growth and rising incomes in many emerging markets are creating millions of new customers for banks, but hundreds of millions of people remain outside the scope of traditional banking services.

In many emerging markets, a key problem is access, with little financial infrastructure to reach the 500 million Indians without a bank account or the 390 million Chinese. However, there are also large numbers of people in some developed markets outside the formal banking system, notably 30 million in the US, 15 million in Italy, and 2.6 million in Spain, where the relevance and price of financial services is equally important. Finding the right banking models to meet these customers’ needs profitably, offers a huge opportunity for new banking business at scale.

Microfinance Institutions (MFIs) are showing the way in servicing these segments profitably, reaching more than 200 million customers, in 2010 MFI’s, focused mainly on small savings and credit, averaged a return on equity between 7.5 percent to 8.3 percent across the public and private sectors.

For traditional banks, serving the bottom of the pyramid customer segment raises major challenges around how to achieve a profitable return on high volume but small value financial needs. However, technology is now playing a key role in enabling financial services providers to reach the bottom of the pyramid at justifiable margins.

To unlock this opportunity, banks need to reduce the cost-to-serve inherent in the traditional banking business model. This means lowering the cost of distribution and extending distribution beyond conventional channels. For many banks this means rethinking the bank branch using technology to simplify and automate customer servicing, or using correspondent agents supported by mobile and point-of-sale technology to manage physical distribution.

Figure 7 Large numbers of potential customers are outside the banking system in developed and emerging markets

Adult population without formal bank accounts, 2011
For others, reaching new customers through mobile banking and payments is key, as discussed in the next section on mobile money. However, it also requires simple products to make them easier to use, buy and operate and critically for the bank, easier to administer. These steps in turn enable banks to reduce the price-points to purchase and operate products, and simplify and automate servicing processes by removing manual interventions. Simple and easy products services will also become more important in meeting the needs of the next generation of youth customers, most of whom will be coming of age in emerging markets.

Leading banks are applying this approach to design and build new, simplified business models that leverage technology to create offerings that are more accessible to people lower down the pyramid. Experience shows that by automating as much of the customer servicing and back office processing as possible, banks can reach a cost point that is effective at these levels.

Around the world banks are breaking new ground in financial access. RHB’s “Easy Bank” in Malaysia provides a simple set of products through low cost branches and partner stores. Since launching in 2009, EASY has grown to 245 outlets and contributes 6.6 percent of the group’s pre-provision profit. Standard Bank of South Africa’s Access Bank, uses a combination of small branches, a network of agents and a mobile banking and payment service to reach its target customers with a simple portfolio of low cost Access Account products. Based in Kenya, Equity Bank has grown from a small building society to a bank of 7.8 million customers by focusing on accessible and efficient servicing of low income and rural populations. Equity Bank has invested in its technology approach to boost the efficiency and flexibility of its business model, with fast account opening times, mobile point-of-sale to enable agents and mobile branches in communities that wouldn’t support a regular branch, and partnerships with M-PESA the ubiquitous mobile payment service in Kenya. And in the US, American Express and Walmart have collaborated to launch Bluebird, a prepaid card service targeting lower income and young customers. With a simple range of services at low cost, and convenient servicing options in Walmart stores or through mobile and internet channels, Bluebird has gained over 1 million account holders since launching in October 2012.

For the banks that choose to pursue this market segment and can build simple, low cost models, the opportunity to win a share of huge new customer segments is immense.

### Why are growing numbers of banking organizations considering cloud computing?

#### Cost reduction
- Lower capital and operational costs
- Pay-as-you-go pricing

#### Elasticity/scalability
- Capacity only when you need it
- Achieve high business agility

#### Speed to market
- Reduction of time to pilot and test projects
- Faster availability to Customers

#### High-performance computing
- Increased capacity from your current physical infrastructure
- Effectively “infinite” computing capacity on demand

For more information, see A New Era in Banking: Cloud Computing Changes the Game at http://www.accenture.com/us-en/Pages/insight-new-era-banking-cloud-computing.aspx

Mobile money providers are rapidly expanding access to—and penetration of—alternative retail financial services. The GSM Association’s (GSMA’s) 2012 global estimate of mobile money adoption shows rapid growth, with 150 mobile money services in operation at June 2012, up from 109 in 2011, and a further 109 services planned (see Figure 8).

This growth reflects the fact that mobile offers a more pervasive and readily-available channel than banking infrastructure in many countries. With global mobile phone penetration exceeding an average of 85 subscriptions per 100 people in 2011, and projected to reach 100 in 2013, there are substantial and growing opportunities for mobile peer-to-peer financial services to reach the unbanked cost-effectively and profitably. While only 3 percent of people worldwide have used mobile phones for financial payments, this proportion is 9.1 percent in low-income countries—and rising fast.
Mobile payment services require a critical mass of mobile penetration, which many countries now have, and a favorable regulatory environment. M-Pesa, the mobile peer-to-peer financial services offering launched by Safaricom in Kenya in 2007, has demonstrated the power of mobile money to transform financial access in emerging markets. Since its launch in 2007, M-Pesa has grown to have over 17.1 million users—more than 50 percent of Kenya’s adult population—and is now supported by a network of more than 65,000 agents, eclipsing traditional bank branch distribution. For Safaricom, M-Pesa revenues have grown by over 40 percent year on year since 2010, and now make up 17.5 percent of the mobile operator’s revenues. Already used for a range of services from transfers to friends and families, to paying in-store or for bills, the success seems set to continue as M-Pesa expands its financial offering to include savings and lending products. Since launching the M-Shwari savings product in November 2012, they have acquired 1.2 million savings customers.

While M-Pesa is a unique case in terms of the impact, a number of countries in sub-Saharan Africa have more mobile money users than traditional bank account holders, and mobile money agent networks now exceed bank branch distribution in 28 countries worldwide. Another country, where mobile money providers are transforming the provision of financial services is in the Philippines. With only 27 percent of adults with accounts at banks, a population spread over 7,000 islands, and a high degree of migrant workers, but 92 mobile subscriptions per 100 people, the opportunity for the development of mobile money is ripe. Two providers, Smart Money with over 10 million users and GCash with more than 2 million users are leading the development of a new kind of financial ecosystem.

However, it is not just telecommunications providers who are entering the mobile money market. While many banks provide mobile banking services to existing account holders, some are creating new services to acquire and service customers outside their traditional reach. South Africa’s banks have built a number of solutions including Standard Bank’s AccessConnect mobile service and Nedbank provides an M-Pesa service in partnership with Vodacom, while in Turkey, Garanti Bank has partnered with TurkCell to create a prepaid account managed through the customers mobile SIM. Significantly, India’s payments regulators have established a bank-led payments system to expand mobile usage. With 58 banks now members of the scheme, the user base is growing rapidly. As of June 2013 the system had 51.2 million users, up 145 percent on the previous year, while monthly transactions had increased more than 100-fold.

ICICI Bank is a leading provider of mobile banking services, but is breaking new ground with a set of innovative partnerships to reach rural and unbanked customers, including with ECO Mobile, Aircel and most recently to pilot M-Pesa with Vodafone.

For banks, a key challenge is that many of the mobile money providers today are telecommunication companies with large customer bases and established agent distribution networks. While some banks have developed their own mobile money services, partnering with mobile networks to provide banking services to complement their existing distribution assets may be the way to capture this market opportunity at scale.
3. Harnessing the technology-enabled wave of innovation in payments, with new instruments and channels capturing more customer activity

Customers make payments every day, as such payments is usually the most widely used service offered by banks to their customers, and as such, retail payments are a catalyst for change within the banking industry. With the growth of e-commerce, digital money and mobile payments, payments’ role as a strategic revenue pool for banks is under attack—turning mPayments, ePayments, payment cards and even digital currencies, into a strategic battleground between banks and new entrants. Innovators such as PayPal, Square and O2/Telefonica, together with a legion of others start-ups and established players, are targeting a slice of the growing electronic payments market—developing both complementary offerings and disruptive competitive solutions for payments.

New payments capabilities are driving the development of new business models, as in the way that PayPal originally enabled Ebay’s online auctions. Now we see payments enabling changes to banking business models, such as the rise of niche online lenders spurred on by immediate loan disbursement, the continuing rise of ecommerce marketplaces fueled by the increasing popularity and acceptance of online payments, and the advent of payments within social networks.

Banks will need to embrace these changes to ensure that their payment services are relevant to customers in this new world, but also explore how payments can change the dynamic of their banking offerings. In some cases, this will require banks to rethink payments as a service or platform. For examples, rather than owning the payment product for every context, banks can develop their payments solutions as an application programming interface (API) that third party retailers, social networks or app developers can embed into their own products—allowing customers to initiate payments directly in the context they want, but run through the bank network.

However, there are still significant benefits to be captured from day to day activities. Increasing the penetration of electronic payments into cash economies offers a significant growth market for banks and a cost saving opportunity, but it is also one that needs to be defended. Cash usage remains high, at c.55 percent in developed markets and over 90 percent in emerging markets. In Europe alone a 1 percent change increase in electronic payments share could result in up to €300 million of additional fees, while converting payments to electronic formats results in a fraction of the processing costs for banks. While retailers criticize merchant fees, and customers like the convenience of cash and traditional payments, it is up to banks to convert users to new methods. And it is precisely the prize on offer that is attracting so much innovation in payments from new competitors and start-ups.

Figure 9 The payments competitive landscape: banks under attack

- **Point of Sale**: Square, iZettle
- **eCommerce**: PayPal, Obopay
- **Digital Wallets**: Google, Isis
- **Payments Processors**: TSYS, First Data, Broadridge
- **Vendors**: Clear 2 Pay, Fundtech
- **Clearing Houses**: Vocalink
- **Alternative Payment Schemes**: Monet, Payfair
- **Telco’s**: Vodaphone, TIM, Wind, Airtel, MTN
- **Utilities**: ENI, Edison, Shell
- **Retailers**: Walmart, Starbucks, Biedronka
- **Money Service Providers**: Western Union, Traxpay, FECXO

Newcomers will take advantage of value chain “disaggregation” to enter the market and compete with existing players.
This potential is emerging at a time when the payments value chain is “disaggregating”, and newcomers are seeking to identify and exploit market opportunities selectively as they emerge, (see Figure 9). The dilemma that is facing banks—and which they need to solve—is whether to compete with other players in payments initiation, or shift towards a role in processing and clearing.

In cases where they choose to compete through processing capabilities, banks need to manage and address the embedded rigidity of their current payments infrastructure to adapt to rapid innovation in the market. While banks have an opportunity to compete with innovators through their own product and service innovation, they may need to take some big steps towards creating a more agile infrastructure that enables change and innovation, and maintains their competitive advantage in areas like clearing and liquidity. Payments transformation towards a “hub” approach—under which a centralized payment engine integrates transactions from different segments, channels and payment networks—simultaneously enables reduced costs per transaction, sustains product profitability, and boosts flexibility to compete.

To compete with the myriad competitors they now face—targeting payments initiation in particular—banks will need to move quickly to drive innovation in their own organizations, work with payments suppliers to access new capabilities, or seek to partner and co-opt some of the emerging payment approaches. An example can be seen in retail eCommerce.

While cards will continue to dominate retail eCommerce payments for the foreseeable future, alternatives such as PayPal or Dwolla are claiming a rising market share. The arrival of alternative digital currencies such as Bitcoin could accelerate change further away from incumbents. But online bank e-payments (OBeP), where banks enable customers to pay merchants directly from their bank account through a secure channel, offer an opportunity for banks to seize back their central role in eCommerce. In countries where they have been introduced, such as the iDeal payment scheme in the Netherlands, OBeP services have become one of the foremost products for online purchases.

Case study Launch of a new retail arm—leading Italian bank

This innovative retail bank—now employing more than 700 people—was launched by a top-10 Italian banking firm at the height of the global financial crisis. At launch, its parent group set targets for the new bank to amass more than 300,000 clients, over 100 branches and more than €10 billion in deposits by 2011, and then to double these numbers by 2013. The scale and complexity of the launch project meant it would impact all of the group’s functional and business areas, including its IT infrastructure. But the build phase was scheduled to be completed within an aggressive timeline of only three months.

The client engaged Accenture to help it establish the business management, sales management, IT systems, marketing, finance and back-office operations that would put the new business on the road to high performance.

The new bank went live on time and on budget with a unique, innovative and totally integrated multichannel operating model that offered customers attractively priced and innovative products via the channel of their choice. This demanded the implementation of a multilayer technical infrastructure with a multichannel architecture supporting web-, smartphone- and home-based banking, fixed and mobile branches, a contact center and back-office capabilities. Following the success of the launch, the bank decided to team with Accenture on a number of other strategic projects, including branch evolution, a financial advisor sales channel, business model integration, operations support, the bank’s Home 2.0 evolution initiative, and an innovative iPhone banking platform.
Horizon 3
Technology enabling development of new business models

Technology has enabled an era of transformative innovation across a number of industries. The third horizon of technology-enabled transformation in banking is to join this trend, by harnessing the convergence of new technologies to create new business models for providing financial services.
1. Analytic approaches to information are creating new ways to identify and create value for customers

Banks have traditionally been leaders in using information to create value, by measuring and analyzing risk. While they hold vast amounts of potentially highly valuable customer, transactional and market data, few banks have been able to overcome legacy data architecture issues or shortages of analytic skill to fully realize this value. However, as big data and analytics technologies develop rapidly, innovators are finding new ways to create value, using data as the platform for new business models—both improving on existing models and creating new ones. They are also taking advantage of new data sources, both internal and external, social and public, and new techniques to mine data from unconventional and unstructured sources. The goal is to use data to penetrate new markets by measuring risk better, finding new insights to create sales or cost saving opportunities, or even creating user services that customers want and may even buy.

For example, in the US, ZestFinance is pioneering a big data approach to improve on credit scoring models in the payday lending market. ZestFinance’s approach combines many traditional credit metrics with a wider set of public and behavioral data and Google-like algorithms. Meanwhile, in Brazil, Cignifi is working with mobile phone companies to credit score customers in the absence of credit reference data, by using call records and pre-paid airtime purchase data. Both approaches are using unconventional data and behavioural insights to enable the provision of financial services to customers who were previously viewed as unmeasurable risks.

As banks seek out new ways to find value from big data, their major areas of opportunity include applying predictive behavioral analytics and developing complementary information-based services to create new revenue streams. For example, banks have opened up major new business opportunities by applying big data solutions to improve credit referencing, and creating new financial markets by using non-traditional sources of data—such as social media—to gain a better understanding of customer credit behavior.

Looking worldwide, there are emerging examples of these approaches being applied successfully in financial services. In the US, Progressive Insurance has pioneered the use of driver analytics for car insurance to create a business model based on ‘pay-as-you-drive’. Australian banks have been at the cutting edge of utilizing their customer and payments data to create value adding customer tools. For example, ANZ Business Insights aggregates payment transaction data to provide small and medium-sized businesses with actionable insights into customer behavior and sales trends. And Citibank’s Treasury Diagnostics offering is a service conceived to help CFOs and Treasurers enhance the financial performance of their companies, by providing comparison and analytic services on their customers financial health.
2. The digitalization of commerce is enabling organizations to focus beyond simple transactions to become part of a customer’s digital financial ecosystem and create additional customer value.

The development of commercial and social ecosystems, in which companies, service providers and social platforms link up information and offers based on a customer’s context, is changing the market dynamics in many industries. Driven by the convergence of digital payments, digital money with new coupon, loyalty, and digital marketing approaches, converging commerce is taking off around the world. The advent of these types of ecosystem blurs the boundary between different customer experiences—from sharing, searching or discovering new things, through the purchase transaction, and on to loyalty, service and customer experience.

As a result, the ecosystems are dissolving the traditional boundaries between different industries.

In light of the emergence of each customer’s “digital ecosystem”—and its ongoing expansion to include ever more elements of consumers’ personal, workplace and commercial activities—banks need to take a broader and more joined-up view of what a customer does. Rather than looking at each payment transaction or financial decision in isolation, banks need to understand the customer’s pre-purchase and post-purchase decisions. As Figure 10 illustrates, doing this effectively now requires banks to collaborate with various partners across different aspects of the customer’s digital financial ecosystem.

As well as being collaborative in nature, these ecosystems are also seeing intensifying competition between different players looking to provide similar services. Given their existing trusted relationships with consumers, banks have a clear opportunity to play the leadership role in many customers’ ecosystems.

Conversely, those banks that fail to embrace the opportunity to participate in collaborative ecosystems may well find themselves supplanted by others seeking to fill this space, and end up being frozen out of their formerly pivotal commercial role. This trend is becoming more important as mobile handsets bridge the digital and physical world, and mobile operators move into the business of loyalty rewards and payments.

The "secret sauce" for the success of the ecosystem is an enriched portfolio of customer offerings—payment, vouchers, ticketing, loans, travel insurance—accessible via an innovative offering model, including elements such as personalized daily deals, loyalty rewards, price comparisons and links into social media. In developing new offerings models, banks can draw on lessons from non-banking industries such as retail. Many banks are now developing customer loyalty programs to increase relationship value, and working with third-parties to create value from loyalty and vouchering offers. The value for banks lies in increasing customer take-up of...
their products and services by making these as relevant as possible to customers’ needs in many different contexts, creating new income streams from partners, and protecting their customer relationships against dis-intermediation by competitors. Meanwhile, for the customer, these approaches can provide easier access to the products and services they want, while also rewarding loyalty.

Banks and financial services providers are already experimenting with these approaches. American Express has partnered with Facebook to provide offers for customers based on their ‘likes’, and with Foursquare to offer location-based offers when customers check-in to a location. It has also built its own Go Social platform to enable businesses to build their own social offerings for the American Express customer base. Commonwealth Bank of Australia is developing a range of mobile and online services that satisfy different customer needs. For example, the CommBank Property Guide app gives mobile banking users access to a wide range of property related information on the go, while their Kaching app enables customers to make peer and commercial payments through new channels such as email addresses, phone numbers and Facebook IDs.

Developing compelling ecosystems require banks to think about the customer experience in new ways, beyond pure financial needs, and requires banks to work with a wide range of partners that impact on their customers economic lives. However, there are strong potential benefits for those that get it right:

* New revenue streams from partner offers and payments volumes
* Increased customer engagement and loyalty
* New marketing opportunities and cheaper customer acquisition

### 3. The development of a networked society is enabling companies to create financial intermediation—without the traditional intermediaries

The networked economy creates opportunity for “collaborative consumption” at scale, with early models already impacting financial services. One of the foremost instances is peer-to-peer lending and funding services, where the ‘network’ provides the necessary intermediation instead of the balance sheet. Examples include crowdfunding business models, which work through direct matching of potential borrowers with pools of potential lenders or funders through a network platform.

To help grow their reach and transaction levels, peer-to-peer lenders have built social platforms to provide wider and bigger financing options. While still small in overall size, peer-to-peer lending has quickly grown strong customer bases among both investors and borrowers. Zopa, based in the UK, has arranged more than £270 million in loans among its 500,000 members; Lending Club in the US has arranged over US$2 billion, while Prosper’s 1.6 million members have funded over US$400 million.

At the same time, innovative business models are now being used to bring social and peer-to-peer concepts to established financial services companies. Examples include Friendsurance, a German company established in 2010 that provides a platform for customers to cooperate in the way they buy insurance from major providers and reduce their costs by agreeing to cover a defined amount of a potential loss amongst themselves. Also in Germany, Fidor Bank has partnered with a local peer-to-peer lender, Smava, to provide customers with the opportunity to make their own loans, alongside Fidor’s own digital banking products. And in the UK, Santander is discussing collaboration with Funding Circle, a SME peer-to-peer lender.

While still a nascent area of finance, the popularity of peer-to-peer financing is growing, but the reasons for its appeal varies. For some, it is an opportunity to beat banks at their own game, for others the promise of better rates for savers or lenders appeal, for some it is the community participation—particularly in the array of crowd-funding fundraising sites like Kickstarter or charitable networks such as Kiva. For banks, the opportunity is to explore the opportunity to use peer-to-peer techniques to engage customers in finance in a new way—facilitating social or network connections between customers, rather than as a financial intermediary. While the benefits may primarily be reputational and driving customer engagement, should this market grow banks could start providing network-finance to join borrowers and lenders without deploying their balance sheet and the capital it requires.
New technology drivers will change the way banks manage and use technology

For banks, today’s fast-evolving technology environment is characterized by four key challenges—namely rapid and multi-directional change; increasing business demands; complex legacy environments; and limited investment budgets. At the same time, the imperative to improve returns is placing growing demands on how banks use technology to enable their business.

In response to these pressures, banks are migrating away from complex legacy technology models to more integrated and then orchestrated models. The goal is to provide technology services that are more digital, flexible, scaleable and efficient that support the anytime, anywhere and customer-centric demands of banking today.

For banks seeking to progress along this journey there are strong differences in appetite. Some banks remain committed to maintaining competitive advantage through their own key platforms and technology, others accessing best-in-class technology means utilizing external vendors and suppliers. However, in both cases a major enabler of performance is reducing technology complexity—while cost and execution risk remain the main barriers. For those running their own systems, simplification is critical for increasing business agility and reducing costs; while for those seeking greater externalization the first step is to resolve enterprise and technology complexity.

**Decoupling for agility...**

Many banks have built up their architectures and infrastructure over many years, effectively embedding legacy complexity and silos at each step. Functional decoupling—such as separating distribution from manufacturing and manufacturing from the corporate core, and creating shared services to reduce redundancy—increases business agility by breaking down the silos between channel, products, process and information. Leading banks are using a variety of different approaches to redesign business architecture, including business process management and technologies such as Service Oriented Architecture.

At the same time, technology is making the boundaries of the organization ever more permeable. Banks are increasingly drawing on their supplier ecosystems for more extensive technology capabilities—effectively promoting these providers from supplier to co-innovator. Increasingly, banks need to look to work with partners to gain access to capabilities, customers and information they don’t have in-house, or to share the costs or particular capabilities by using utility services. These partners may be organizations in other industries, or even other banks. The model of inter-bank cooperation is well established in areas like shared payments networks, but as cost pressures bite banks may need to work together in other non-sensitive areas. As this trend gathers pace, banks will start to provide their technology services from a diverse mix of internal capabilities and a multi-vendor, multi-partner ecosystem from which they pick the best-in-class service providers. As a result, successful enterprises of the future will need a broad technology vision that orchestrates and governs a large supplier and partner ecosystem.

Cost and capability pressures continue to drive banks to reconsider what they can and want to own and manage in-house. While many banks have already outsourced many non-core processes attention is now turning to higher value processes and capabilities. As the supplier ecosystem matures, critical skills remain scarce and the technology to deliver business processes as a service arrives, banking could face a revolution in how their operating model works. As ‘just-in-time’ revolutionized the manufacturing industry, reducing waste and inventory costs, while increasing flexibility, a similar approach can now be applied to banking to increase customer focus, reduce costs and increase flexibility.

As retail banking becomes increasingly digitalised, and as bank’s extend their service offering to be closer to the customers’ digital life, the volume of transactions and interactions will steadily increase. The bank will need to be increasingly agile to capture customers and growth opportunities across different channels and with different partners – and this makes the servicing environment more complex. To respond to these challenges, a ‘just-in-time’ approach (see Figure 11) where the bank dynamically assembles the customer service offering at low cost and high flexibility may emerge as a new technology-enabled operating model.
A ‘just-in-time’ bank would be enabled by a network of managed service operations and cloud-based applications supporting a lean corporate core. The key services and resources to deliver the bank’s operations would be enabled as needed, scaled up and down according to business demands and priced on a per transaction basis. Rather than build capacity on its own back office and infrastructure, the bank could obtain industry standard services and technology on demand. Services could range from document processing, collections and payments through to analytics, customer management, even agent distribution. The ‘just-in-time’ bank would focus on strategic capabilities of customer, balance sheet and risk management, with improved control and understanding of the embedded costs of its operating model.

...while adopting a more holistic view

Management and optimization of the supplier ecosystem is also extending horizontally between organizations. Large IT buyers are co-operating to develop standards and best practices for new enterprise technology to allow alternative third-party sourcing options. Industry-level examples of this trend include the Open Data Centre Alliance and Enterprise Cloud Leadership Council.

More generally, most organizations have now acknowledged that transformative simplification and cost reduction cannot be achieved in silos. This awareness is seeing several leading banks take a holistic approach to technology and business simplification, in order to deliver better services more efficiently.

Their efforts to date have confirmed that reducing product complexity can address many legacy business issues—including the challenges of having multiple channel and product applications, multiple technology platforms and infrastructure, duplicated and varying business process, and multiple stores of information.

New innovation models...

To help address these legacy challenges, many larger banks—prompted by the pace of change and the challenges of innovating at speed—are adopting new strategies and models to accelerate innovation. These include fast innovation/fast prototyping; network innovation based on a business unit ecosystem; “open” innovation with suppliers, customers and other third-parties; incubators to make bets on agile start-ups; and even acquisitions to gain emerging technology capabilities.
Some banks are already taking these steps: BBVA has established innovation centres in Madrid and San José in the Silicon Valley; La Caixa runs ‘FinAppsParty’, an open 24-hour financial apps development program; and a number of banks have acquired new capabilities through acquiring start-ups, such as JPMC buying Bloomspot, a daily deals provider.

To support and enable these models while meeting the emerging technology imperatives, banks need to drive a change in the skills focus of their business units and IT organizations. These needs include increasing technology literacy within business enable better business/technology partnership and innovation, together with a move in IT from an ‘owner operator’ to ‘service provider’ mindset.

When these changes are made successfully, the result is the evolution of a new overarching technology business model.

...supporting the evolution of the connected and digital bank

As we highlighted earlier, today’s banking imperatives demand the emergence of a new kind of banking organization: the connected bank—one in which the business and technology visions are totally aligned, and which operates both as an integral part of the customer ecosystem and as orchestrator of the partner and supplier ecosystem. These characteristics will make it more agile and less stand-alone, bringing it several advantages over unconnected competitors. The key attributes of the connected and digital bank are shown in Figure 12.

The operation and management of the connected bank will depend on seven underlying technology principles required to support the requirements of high performance banks—as shown in Figure 13.

Case study Launching real-time processing in the US—BBVA

BBVA Compass, a subsidiary of the global financial services company BBVA, is a US banking franchise that ranks among the top 20 largest US commercial banks based on deposit market share. Since entering the US market in 2004, BBVA has demonstrated a consistent commitment to excellence.

BBVA recently worked with Accenture to deliver a game-changing project at BBVA Compass, by migrating the US bank’s legacy core system serving all commercial, wealth management and 716 retail branches to Accenture’s Financial Solutions platform. This landmark transformational upgrade created one of the first major real-time bank processing systems in the US.

In a disciplined and regimented implementation process carried out against a tight timeframe, Accenture helped BBVA Compass implement Alnova Financial Solutions across all its branches in seven US states. BBVA and Accenture started the implementation with a single branch in Colorado over a six week period, after which the entire state went on a trial phase for another six weeks. Then they extended to four Western states, and four months later went live in all seven.

The transformation to the state-of-the-art Alnova core platform has helped BBVA Compass realize a wide range of business benefits. These include a drop in account opening turnaround time from 45 minutes to only five; a decrease of 75 percent in time-to-market for new products; and cost savings of over 13 percent. Furthermore, the solution’s real-time transactions and integration across the entire framework have enabled BBVA Compass to achieve a new level of customer centricity—a key differentiator going forward.

While the journey towards becoming a connected bank will be different for each organization, the technology enablement of bank’s business models offers powerful benefits. For banks it is about bringing together the best capabilities and information available in-house and across a network of partners and suppliers to deliver a more agile business, responsive to the rapid changes the customer and competitive market, with a focus on internal efficiency and flexibility. Together this can help banks meet emerging customer requirements and compete against incumbents and innovators—both of which are essential to restoring profitability. For customers, the connected bank can deliver a more relevant set of financial services that are designed around a customer’s economic decisions that are easily accessible where and how the customer wants.
**Figure 12** Attributes of the connected and digital bank

**Smart**
- Relevant
- Analytical
- Data driven
- Trusted advisor
- Easy to use

**Connected**
- Customer focused
- Digital
- Mobile
- Social
- Partner ecosystem

**Efficient**
- Automated
- Low cost distribution
- Fewer people
- Business process driven
- Supplier ecosystem

**Agile**
- Speed to market
- Adaptable to customers
- Scaleable and flexible

**Secure**
- Trusted identity partner
- Risk aware
- Physical and digital security

**Technology Business Model**

**ASSET-LITE**
- Business enterprises own few or no IT assets

**SERVICE-LED**
- Buyers buy "Services"—prebuilt business solutions—not piecemeal IT services

**EXTERNALISATION**
- The first choice of buyers is to consider "buying"—not building—IT solutions

**ECOSYSTEMS**
- The enterprise evaluates external providers on their partners and value chains

**Figure 13** Technology principles underpinning the connected and digital bank

A unique customer information database available and integrated enterprise-wide for multiple users, personalising product offering; economic capital risk-based pricing; or underwriting analysis at a one-to-one client level

24x7 availability through any channel providing similar functionality to serve all channels with no duplication of data or functions

Facilitating lean processes with horizontal applications (origination, product factory, collateral management, etc.) supporting different products and lines of business, hence avoiding function duplication, with a consistent user-interface and seamless integration of all applications based on the same technical and architectural principles

Seamless integration between product applications, covering the entire lifecycle, from set up to servicing and with process standardisation as a key feature

A high degree of automation and real-time processing of all items, ensuring immediate updates to positions, providing a superior customer experience, and reducing exceptional cases and any subsequent back office rework

IT processes enable system consolidation among business units, entities, countries, etc.

Multi-product, multi-language, multi-currency, multi-entity, multi-country functional coverage
Next steps
In Accenture’s view, the converging competitive, customer and technological changes facing today’s global banking industry make it imperative that banks embrace technology that matters to move towards the ‘connected and digital bank’ vision—or risk losing further value and being marginalized in several of their formerly key roles.

Banks are faced with a complex set of choices about their business model and technology for a digital age. To reach the right answers, they need to form a vision and a plan to get there, based on seven key steps:

• Identify areas of the business where technology-led change will be profound, such as customer experience, data and information or social media, and establish governance across the business and technology functions to understand and plan for these changes and create the business case

• Explore emerging technologies, innovators and customer behavior to understand what is relevant for your business

• Build scenarios for emerging business models and disruptors to identify where you want to experiment, enter or avoid

• Evaluate the demands on your existing technology and core banking systems resulting from increasing technology change and new business models

• Build a network among your partners, suppliers and even customers to gain new insights, capabilities and accelerate innovation

• Establish a shared vision for the future of the bank and how it will use and manage technology to deliver business value

• Many banks will need to re-organize responsibilities and reporting lines and mobilize teams across business and technology to move from vision to execution.

From managing payments to lending to savings, banks’ central positioning in the customers’ lives—and the resulting revenues—are under threat. The only option to retain that positioning and drive their RoE back towards its pre-crisis levels is to leverage new technologies to become more agile, more cost-effective, and more integrated into their customer and supplier ecosystems.

This is why the vision of the connected and digital bank represents the future. Whether your bank’s journey to this vision is already under way, or you have yet to start, Accenture believes that in the race to recover RoE and to remain relevant technology matters more than ever.
Contact us

To find out more about how Accenture can help you navigate your route to the connected bank, please contact:

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Notes

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About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 275,000 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$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.