

A new era in banking

Cloud computing changes the game

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Cloud changes all the
rules in banking.



Table of contents

How cloud computing will shake up the banking industry	3
Trend 1	
Cloud-based services will leverage social and mobile media to transform the banking experience and relationships for customers	7
Trend 2	
Private clouds come to dominate core banking	10
Trend 3	
Public cloud will dominate non-core and non-differentiated banking activities	13
The future of cloud computing in banking	
Competition, collaboration and convergence	15
Realizing the cloud-enabled future	
Prioritizing strategy and execution	18

How cloud computing will shake up the banking industry

To achieve and sustain high performance in the future, traditional commercial banks across the world will need to master two fundamental changes:

1. The transformation of their product offerings, channels and customer service to reflect the demands of the "changing consumer"—connected, impatient, empowered, and demanding of services that meet their individual and social needs.

2. The reshaping and reinvention of their core banking operations to enable a more competitive, customer-centric, efficient and sustainable business model.

A failure to achieve either of these imperatives will expose banks to disintermediation by nimble, low-cost online and mobile providers of personal financial management and payments services—resulting in loss of relevance to customers and, therefore, their prominence in the financial services value chain.

A new business model...

Sounds far-fetched? We don't think so. Accenture's Banking 2015-20 study confirms the pre-crisis, high-leverage banking approach is no longer a proper fit for purpose in the post-crisis world. For example, to successfully manage current market challenges (e.g., with liquidity, volatility and regulation), retail banks can no longer rely extensively on expensive branch-focused distribution to achieve sustainable growth. Rather, they must look to "smart size" their distribution network. In this new market context, banks will need to successfully overcome specific distribution and marketing challenges in the following three ways:

1. Restore customer trust and engagement

This will be particularly challenging due to a perceived lack of transparency and fairness and increasing demand for social responsibility; and

2. Hold their ground with their payments business

Increasingly, the market is witness to progressive disintermediation where "banking without banks" and a rapid rise of ecosystems (e.g., Google Wallet, PayPal) are creating a new market paradigm; and

3. Avoid commodization

Going forward, banks need to differentiate the customer experience, products and services.

A powerful nexus of changing customer behavior through the use of web, mobile and social connectivity and emerging new technology (e.g., digital, analytics and cloud) are motivating "smart banks" to

re-examine and re-engineer their business models. Accenture sees at least three unique business models emerging among smart banks (See Figure 1):

1. The "analytical multichannel" bank
2. The "socially engaging" bank
3. The "digital ecosystem" bank

The "analytical multichannel" bank engages customers frequently through various channels while offering personal preferences and is underscored by:

- advanced multichannel integration focused on digital channels and integrated architecture;
- pervasive analytics based on effective customer data collection and micro segmentation defining new products and pricing;
- real-time interaction management (i.e., predictive modeling and real time events management); and
- a product offering based on micro segments and optimized by channels

The "socially engaging" bank interacts with customers who spend their time leveraging information provided via social media. It is dependant on:

- customer feedback and preferences monitoring through social media to mitigate risks and react to issues;
- social digital marketing to engage the customer with the proper content; and
- a product offering defined by social CRM and enriched customer data through social media tools.

Figure 1: The smart banking revolution and emerging business models

The smart banking revolution

Today



Smart banking



Possible paths →

The "digital ecosystem" bank offers extended services by leveraging a dynamic network of partners. It is distinguished by:

- an enriched proposition through mobile commerce, focused on financial and non-financial offerings, geo-localization and hot deals;
- the active use of mobile payments, based on near-field communication (NFC) or mobile wallet; and
- alliances and partnerships with non-banking operators.

...underpinned by a new technology environment

Banks must achieve these attributes while adapting to the new technology landscape outlined in the Accenture Technology Vision 2012. For banks, this new world will be characterized by three main technology trends:

1. Distributed IT will be the new normal

Data will be dispersed across more locations—in-house, outsourcing vendors, cloud computing providers, third-parties and under the control of far more owners, including branch versus corporate, business versus IT, one business unit versus another. Analytics will intersect the distributed data and become distributed as well.

2. Distribution requires decoupling

The decoupling and disaggregation of banks' business process flows, applications and infrastructure will enable improved business agility, including faster and lower-cost geographic expansion, and easier adoption of new technologies such as mobility and social media. This decoupling enables banks to consider sourcing discrete business processes "as a service" from third-parties.

3. Exploding volume of metadata yielding greater insight

The rapid digitization of banking channels and services enables tracking and analysis of everything from keystrokes to consumer behavior to social identities. This brings opportunities for more sophisticated customer intelligence, enabling banks to migrate to "social enterprises" and reinvent their relationships with customers.

Figure 1: Accenture "Banking 2015-20," by Piercarlo Gera, Managing Director Strategy Consulting Financial Services April 2012

The shape of banking clouds to come

As banks adapt to these changes in their competitive and technology environments, cloud computing will play a major role. Cloud's combination of low cost and high scalability, effectively unlimited processing power and storage, unprecedented agility and speed to market, and variable pay-per-use cost structures all support the qualities that banks will need to compete and win in the future.

Already, some newer banking entrants—unburdened by complex and costly legacy systems—are using cloud to support core banking applications. However, we don't expect to see a wholesale mass-migration to public cloud services across the entire banking industry. Instead, banks' adoption of cloud will be highly selective and targeted, focusing on matching the characteristics of each specific process with the different variants of cloud computing.

In our view, there will be three key trends in banks' use of cloud computing, reflecting the different "flavors" outlined in the accompanying information panel.

Trend 1



Cloud-based financial services offerings will leverage social and mobile media to transform the banking experience and relationship for customers.

Trend 2



Single-tenant private clouds—through virtualization—will play a pivotal role in core banking, enabling banks to keep control over the location of sensitive customer data. Over time, hybrid clouds and public sovereign clouds will enter this domain.

Trend 3



Public cloud and cloud-based shared services will dominate non-core and non-differentiated banking activities, from workforce collaboration to document management and even payments.

The various "flavors" of cloud computing

Cloud computing is a model, not a specific technology. Cloud computing, by Accenture's definition, allows companies to access IT-based services via the internet. A cloud-based model provides rapid acquisition, low to no capital investment, relatively low operating costs and variable pricing tied directly to use. Cloud computing services operate at several levels: infrastructure as a service (IaaS), software as a service (SaaS), platform as a service (PaaS) and business process as a service (BPaaS). There are several different "flavors" of cloud, each bringing its own specific implications for banks. The main variants are:

Public clouds

Public clouds extend the data center's capabilities by enabling the provisioning of IT services from third-party providers over a network. The data and processing may be located anywhere in the world on infrastructure that is shared with the cloud provider's other customers, or "tenants".

Private clouds

Private clouds are built by applying virtualization within a bank's own data centers. Because private clouds are not exposed to external "tenants," banks tend to regard them as a more secure environment for customer data.

Hybrid clouds

Hybrid clouds blend public and private clouds depending on the sensitivity of the data and applications in each process, and the degree of business criticality and differentiation. Most banks will follow a "hybrid" cloud strategy which can also be a cloud owned by and located within the bank, but operated by a third-party.

Public "sovereign" cloud

Public "sovereign" cloud is an emerging variant, under which a public cloud provider commits to keeping the cloud data and processing within a specific jurisdiction. This facilitates compliance with data protection regulations forbidding personal data from passing beyond national borders.

Trend 1

Cloud-based offerings will leverage social and mobile media to transform the banking experience and relationships for customers



Cloud computing's disruptive impact on banking will be the way in which it transforms how consumers research, learn about and buy financial services and products and manage their personal finances in the era of social media. Already, a new generation of cloud-based online personal financial management applications—mint.com, Geezo and BankSimple to name a few—are gaining traction among customers.

By offering disaggregated banking services, and moving information, advice and money in a faster, more responsive and more personalized way, these new entrants aim to become the "front office" for customers' banking needs, leveraging the social and mobile experiences that consumers find so compelling.

At the same time, cloud-based applications such as peer-to-peer lending and crowd sourcing of loans (often micro-loans) are gaining momentum, especially in emerging markets. And banks' role in payments—including in the emerging area of m-commerce and mobile wallets—is being challenged by online heavyweights PayPal, Google and Facebook.

The cloud computing threat...

Cloud computing is responding to supply and demand. On the supply side, it is enabling new entrants into the market with lower cost platforms. On the demand side, it is enabling customers to bypass the banks and go directly to cloud-based services. For banks, the complication is that "talking at" customers is now a thing of the past. Instead of being told what is happening, customers want a personalized dialogue.

If banks fail to reinvent their services to reflect these changes, they risk seeing their relationships with customers taken over by the new providers who understand and harness the new paradigm more effectively. This would ultimately relegate banks to a back-office utility running

bank accounts behind these third-party cloud-based front-ends, to serve merely as regulatory gatekeepers for activities such as anti-money laundering (AML).

Banks are facing these threats to their existing model at a time when investments in customer service are tightly constrained and when consumer trust has been damaged by the financial crisis. Also, regulatory, market and customer pressures on their interest-based revenue (e.g., loans) mean they need to rebalance away from interest-earning revenues and towards revenues from services (e.g., fee-based).

These service revenues are precisely the ones that are most threatened by third-party social financial sites like wesabe.com and P2P lending sites such as yes-secure.com. This competition could result not just in lost transactional fees but also in far less regular contact with customers, thus compounding the impact on revenues.

... also offers opportunities for banks

Cloud computing poses challenges for banks, but also offers the tools and capabilities to resist disintermediation by leveraging social/mobile networking and differentiated bundling capabilities for the changing consumer profile.

Many banks are doing this already by investing in social media tools and creating a social enterprise strategy, including linking to customers'

Facebook profiles and involving them in communities ranging from basketball to wealth management. Once a customer opts-in and clicks "like," the bank gains access to that individual's personal social profile—which it can then blend with its own customer/transaction information and other public, location and web behavioral data to build a 360-degree view of the customer. The customer is, therefore, willing to share their social data and activities in exchange for increased personalization.

This, in turn, enables banks to generate and deliver relevant offers on a timely—even real-time—basis via the customer's preferred channels. To do this, banks will integrate business processes with advanced analytical capabilities, including using "closed loop" analytics which—by nature of its capability—aids in driving continuous refinements to processes, services and products in real-time. Mobile and location-based data add an additional dimension—such as a customer checking the availability of mortgage loans in a particular neighborhood.

Banks reaching out in the cloud

Citigroup has implemented various social media strategies to communicate better with its customers, including a blog that actively seeks questions and comments from customers, a YouTube channel, and a service that will allow customers to talk to bank staff through Twitter or other social media. Bank of America uses Twitter as a customer service and advice tool, and reports that customers find it a faster and more effective way of getting the help they need than traditional customer service channels.

Smart cloud-based bundling puts the customer in control

For banks, the main barrier to winning in the social and mobile environment may be cultural, rather than technological. Historically, banks have felt that they own the customer. Today nobody owns the customer and online social financial providers have grasped this reality. New entrant BankSimple, known today as only Simple, serves as a platform for its online customers to access mobile and web-based financial services. Simple is not a bank in and of itself but rather has formed partnerships with a number of banking entities to provide its customer wide-ranging financial services centered on a debit card relationship.¹

Banks need to see their services not from their own point of view, but from the customer's—and then innovate to deliver against that view.

The key to this innovation is bundling. Core banking products such as checking accounts are increasingly

undifferentiated. The real differentiation lies in the pricing and bundling for consumers. Some banks might locate their product engine in a cloud, while retaining a unique and sophisticated bundling capability that pulls together and combines cloud-based components in responsive, collaborative and dynamic bundles relevant to specific customers.

This bundling opportunity varies by market, and goes beyond financial products. For example, banks in France are bundling personal home care services such as gardening. Further opportunities exist when providing customers with digital storage "safes" in the cloud, bundled with value-added services like tax, financial and wealth management advice. Cloud-enabled digital wallets carrying a range of different services on smartphones is another high-potential area, although this will require agreements with telcos over customer ownership. In the absence of such agreements, telcos might start providing these services themselves—without the banks.

1. American Banker "BankSimple, Bank of Internet Benefit from Fee Discontent" October 27, 2011, by John Adams

Cloud-based product and bundling opportunities vary by geography

In developed markets, mass financial insecurity is creating opportunities to help economically-pressed consumers stay out of financial trouble and reduce debt. Such opportunities include offering "sleep-at-night" services, using analytics to track spending and alerting account holders by email or text when they hit 75% of their monthly budget.

In emerging markets, the biggest opportunity is boosting financial inclusion for the 2.5 to 3 billion unbanked people worldwide. To do this, banking and non-banking organizations are developing new service models including micro ATMs, mobile payments systems such as M-PESA and G-CASH, and crowdsourced/peer-to-peer micro-lending communities such as kiva.org.

These emerging market models can operate profitably at transaction revenue levels below the radar of most banks. A crowdsourced micro-loan of US\$25 is enough to start a business in some emerging markets—an amount that would be more than swallowed up by transaction fees under a traditional banking model.

Trend 2

Private clouds come to dominate core banking



As cloud-based offerings come to dominate the financial services marketplace, the ability for banks to integrate multiple cloud-enabled service and product providers will become the industry's "new normal." This capability will be necessary for offering compelling services and products in the way that customers want to consume them—and banks must prepare for the new environment or risk being left behind.

This new normal will challenge banks' traditional ways of translating their business requirements into IT solutions. It will also dramatically reshape the role of the IT function, requiring a new governance model, new skills, new behaviors, and new ways of sourcing IT infrastructure and services.

At the same time, changing customer demands mean banks will have to focus on their key differentiators and transform their operations by adopting a lower-cost, more flexible and more scalable operating model, and by moving to a service-oriented mindset. Cloud computing will help by enabling banks to break down existing silos, decouple physical from virtual IT, and separate production from distribution—all boosting their agility and customer responsiveness.

Data security drives choices

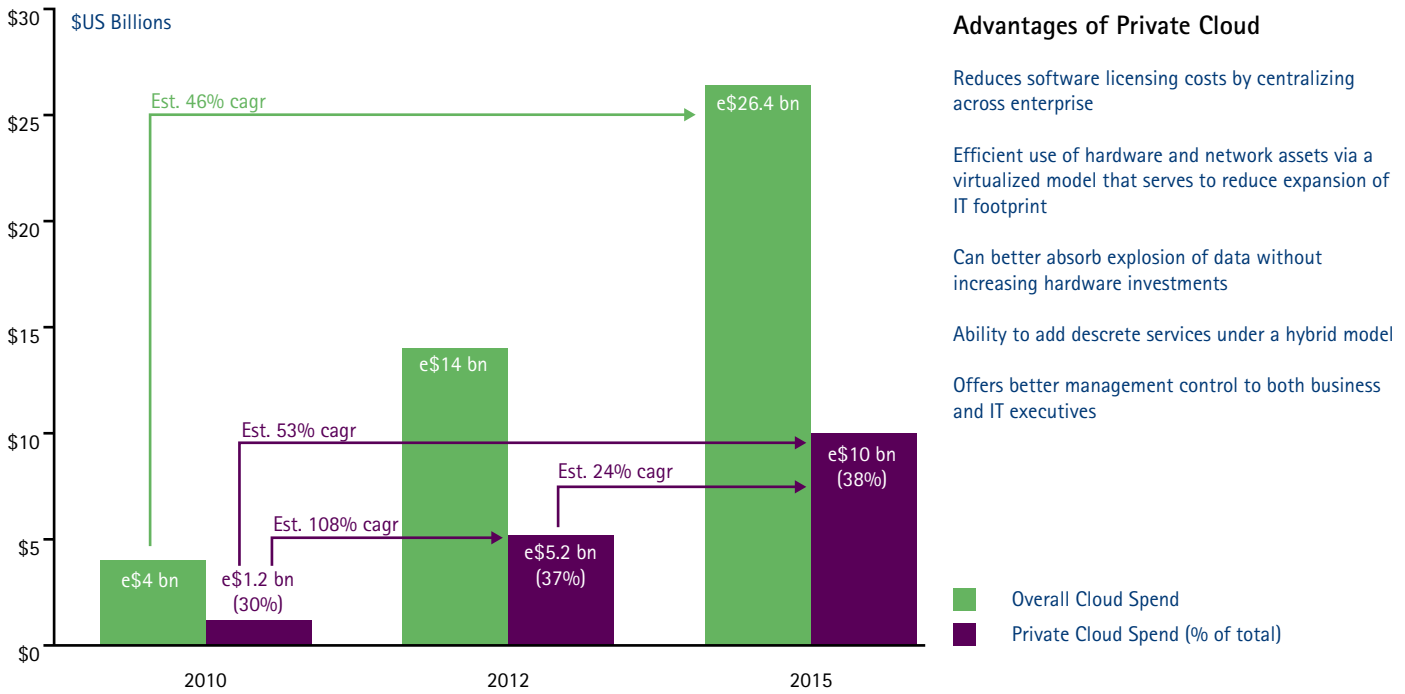
Banks appreciate the relevance of cloud solutions for executing these changes. At the moment, however, many are reluctant to entrust their sensitive customer and financial data to public cloud services run by third-parties. Data privacy and security regulations in many countries prohibit the

storage and processing of customer data outside national borders. Banks are also wary of the potentially disastrous impact of a serious breach of security or privacy, or of even a brief outage in areas such as ATM operations, fraud monitoring or credit card processing. Many banks, therefore, take the view that they should keep their core banking processes under complete control in their own data center so they know where the data is at all times.

That said, some—especially newer—banks have proved willing to take a fresh look and incorporate multi-tenant cloud solutions into their core banking activities. For example, banks including Metro Bank in the UK and Sofol Tepeyac in Mexico are using Temenos' T24, the first production-grade core banking system that runs in the cloud. Some leading US banks are using the Varolii cloud-based voice dialer. By using Varolii to deliver routine requests for borrower information, SunTrust has reduced the number of inbound calls to its call center, shaved more than a day off its overall loss mitigation timeline, saved between \$8 and \$25 per call, and cut first payment defaults by more than 60 percent.²

2. TMCnet.com "Suntrust replaced predictive dialer with intelligent automated communications solution from Varolli" February 10, 2010 www.tmcnet.com/channels/predictive-dialer/articles/77047-suntrust-replaces-predictive-dialer-with-intelligent-automated-communications.htm

Figure 2: Estimated spending on private cloud by financial services companies worldwide



Source: The Tower Group: "Destination 2015 – Spending on Cloud Computing in FS." By FS Senior Research Director Rodney Nelsestuen, June 2011.
 Note: Spending estimates based on assumption of no clear global cloud standards

Alongside this early usage of external, multi-tenant cloud offerings, private cloud models—through virtualization—are playing an increasingly pivotal role in core banking by enabling banks to realize the cost, scalability and flexibility benefits of cloud computing while preventing external exposure of customer data. This focus on private cloud is underlined by industry research among global financial services companies showing that they expect spending on private cloud to increase as a proportion of overall cloud spend (see Figure 2).

Such findings raise the question of where banks will target their cloud computing investments. As banks' confidence in cloud services grows and data regulation evolves over the next few years, we believe their fears over security and privacy will steadily decrease. As a result, banks' use of cloud computing will expand and deepen—with private clouds extending beyond the enterprise (through collaborations and joint ventures), use of public cloud increasing, and cloud models being executed in parallel at different levels of the technology stack, ranging from IaaS, via SaaS and PaaS, to BPaaS.

Figure 2: Tower Group (The Corporate Executive Board) "Destination 2015: Spending on Cloud Computing in Financial Services," by Rodney Nelsestuen, June 20, 2011

Security and privacy in the public cloud: overcoming the concerns

Banks commonly assume that a private cloud based in their own data center is the most secure option for cloud. However, the real picture is more complex.

Are public cloud services really less secure than in-house?

In many cases, the security mechanisms put in place by global public cloud providers may actually be stronger than those in many banks' internal systems. While the headlines generated by cyber attacks on cloud providers may create the impression that they are insecure, there is comparatively little public reporting on how often individual banks' sites are attacked or brought down.

There are a number of approaches that may help banks overcome their concerns over security and privacy in the public cloud. One such approach is using a specialist third-party assurance provider to certify the security architecture of a cloud against very strict criteria—potentially higher than the standards the bank applies internally.

Regulatory restrictions

To comply with the rules which prohibit customer data to be passed beyond national borders, consider a public "sovereign" cloud concept. As explained earlier, this option is one whereby a public cloud provider commits to retaining data within the particular territory. Also, to enable customer data to be processed offshore, banks can use watermarking, encryption and/or masking so that the data is anonymized while offshore. The data can be de-masked on return to the home country, making it identifiable again.

Smarter privacy

Privacy is a further key consideration, including monitoring and authentication of transactions. With credit cards, the current approach of blocking doubtful transactions and contacting customers is increasingly disrupting the user experience and causing dissatisfaction. By using "three-factor authentication" (e.g., a smart card, a password, and a biometric identifier, such as a voice signature) security in the cloud would become smarter—reducing disruption and increasing satisfaction.

Trend 3

Public cloud will dominate non-core and non-differentiated banking activities



Cloud computing will increasingly provide banks with new lower-cost operating models thanks to virtualization, greater automation, and the ability to push more activities offshore. As these benefits are realized, banks will face decisions regarding the business case for moving legacy systems "into the cloud" or building new cloud-enabled assets that they will then integrate into the legacy environment.

For banks to choose and pursue the right business case, a strong and well-established process/application/technology architecture will be critical. For example, if a bank makes a concerted move into BPaaS or SaaS, it will need certainty over the continued availability, reliability and utility of the cloud platforms underpinning them.

As ever, the optimal approach will vary among banks. Not all banking activities will move onto the cloud in the next five years. Adoption of cloud models generally has greatest impact in areas of the value chain with the most variability. Banks that manage higher transaction volumes with little variation might find the best financial option is to balance offshore labor arbitrage with the use of cloud computing.

Horizontal and back-office processes

While security concerns mean many banks are reluctant to use public cloud services in core banking, public cloud has a big role to play in banks' horizontal and back-office processes not directly involving sensitive customer data. Today, these

processes include email, office/workforce productivity, internal collaboration and knowledge-sharing. In the future, public cloud use could also potentially extend to activities such as credit card processing, check clearing, and analytics on aggregated data.

For banks, those enterprise processes that are best suited to public cloud include procurement, HR and customer relationship management (CRM). Salesforce's CRM cloud has gained strong ground among banks in the past couple of years, and Spanish banking group BBVA recently announced that it would migrate its whole workforce to the cloud-based Google Apps suite.

Public cloud for non-core banking areas may impact the economics of internal shared services. Consider it an alternative to outsourcing with different economics and less lock-in. These public cloud services may be ring-fenced within the external provider, possibly on a national basis as a sovereign cloud, so banks can still have assurance over where their data is located.

BBVA banks on Google cloud

In January, 2012, BBVA announced its decision to migrate its entire 110,000-strong workforce to Google Apps—representing Google's biggest enterprise contract to date.

The bank plans to use Google applications like Gmail, Chat, Calendar, Docs and Video Conferencing and other collaboration tools to "achieve a cultural change" across the 26 countries where BBVA currently does business. The decision to distribute BBVA's data across a public cloud managed by Google's data center was driven—in part—by the increasing mobility of the bank's workforce. For example, much of the bank's computing needs have moved to smartphones, tablets, laptops and computers used outside the bank's walls.³

The benefits of cloud-enabled agility

By its nature, the cloud model is available to everyone. So while the early adopters will enjoy a period of competitive advantage, others will catch up over time—as happened with the initial waves of offshoring. However, all banks stand to gain significant benefits from cloud computing adoption, including new levels of strategic optionality.

Specifically, cloud enablement makes new and bundled products and services easier to develop and provide, whether on a stand-alone basis or through partnering with cloud-enabled specialist providers. When services are ramped up, the infrastructure can be scaled; if not, they can be abandoned.

So banks based in mature markets can use cloud computing to enter and scale up in emerging markets more quickly and at lower cost and risk. And banks in emerging markets will use cloud computing to reach their unbanked populations by leapfrogging physical branch networks and moving straight to electronic and mobile banking. Cloud environments will also facilitate M&A and consolidation by making it easier to integrate and divest businesses. When the acquisition is complete, the bank would begin the transition to the cloud by migrating data over wire, creating an asynchronous link among the data centers run by the new entity.

3. BBC "Google persuades Spanish bank BBVA to use the cloud" January 11, 2012

The future of cloud computing in banking

Competition, collaboration and convergence

What's on the horizon?
There are seven ways in which cloud computing will impact future banking products, services and technologies.

1. Customer relationships will be redefined

The overarching and most disruptive impact of cloud computing will be how it redefines the relationship between consumers and their providers of banking products and services. Cloud computing will make these services more convenient, more accessible, easier to use, and more personalized to the individual's needs and lifestyle. This is both a threat and an opportunity as it remains to be seen whether it is banks that lead this change—or, increasingly, non-banking entrants.

2. Cloud computing will steadily progress at all levels of the stack

As confidence grows and more banking cloud products and services emerge, usage of cloud models will continue to advance at all levels of the IT stack. Currently, many banks are focusing on IaaS and/or SaaS, having virtualized their infrastructure and started to use SaaS for undifferentiated activities. There is also sporadic adoption of SaaS among banks that have yet to virtualize their infrastructure, enabling them to pursue IaaS in parallel with SaaS.

While adoption will continue, the pace will vary by bank and geography due to regulation, the status of their legacy systems and the levels of flexibility among their employees. With cloud-based BPaaS, there are similarities with the way end-users can scale up or down their space usage on the cloud today by provisioning or removing capacity. Banks can take the same approach with their own systems and processes.

Scale of IT infrastructure will also influence cloud computing adoption. Newer and smaller banks built on client/server architectures have less overlapping legacy systems and infrastructure, and will therefore be quicker to adopt cloud technology higher up the stack. Larger banks currently tend to focus on virtualization, and may be culturally more resistant to expanding their adoption at the higher levels. That said, some large banks are already picking specific activities and radically cloud-enabling them with SaaS and BPaaS—underscoring the fact that cloud computing adoption is not an all-or-nothing choice.

3. Non-banking cloud-based competitors will keep up the pressure

Rather than being technologically innovative, the emerging generation of cloud-based, socially-driven money management tools are customer services and experience innovators. They will continue to ramp up efforts to win customers not just from banks, but from each other. Banks must, therefore, continue to respond to these competitive pressures in order to avoid disintermediation—by investing in capabilities around social media, analytics, and targeted product and service bundling.

4. Emerging market banks will lead cloud-based innovation

Emerging market banks generally have less systems and infrastructure legacy than their counterparts in mature markets, making it easier for them to adopt cloud models. At the same time, banking innovation in emerging markets is being accelerated by faster economic growth and distinctive social needs. Witness the success of M-PESA in Kenya and other emerging countries, and the provision of online and mobile market information for farmers in India and Bangladesh.

For those emerging market banks too small to invest alone in a cloud-based core banking infrastructure, they may choose to form a consortium to leverage a shared cloud. In this case, they could collaborate to build and share a new core system that allows them to be more flexible and create more products for their customers. In a number of Latin American markets, the largest two or three banks might be able to invest millions of dollars on their infrastructure but they would be the exception. In Panama, for example, there are nearly 50 banks that have assets of fewer than \$5 million.

5. Collaborative cloud-based shared services will emerge between banks

In a similar way to telcos sharing network infrastructure, banks will start to collaborate to pool non-differentiated activities into joint ventures (JVs) using "private clouds" within a closed group of banks. These JVs could provide shared services that interact with customers in more engaging ways while simultaneously freeing banks from the burden of routine transactions. In the UK, for example, the ongoing check cessation program means check processing could be a good candidate for cloud adoption, enabling it to scale down cost effectively as the transaction volumes decline.

Collaborative JVs could also be suited to areas that are integral to core banking but not differentiators with customers, such as security. By turning security into a service that is shared with other banks and operated via a joint venture private cloud, banks could stop duplicating investment, industrialize their security processes for economies of scale, gain new service options and have immediate access to the latest apps. These collaborative private clouds could even be "hybrids" powered by a third-party, increasing the benefits of cost and flexibility.

6. Cloud-enabled collaborative bundling will expand across and beyond financial services

Banks' growing use of cloud computing to enable dynamic and responsive bundling will trigger an industry-wide drive to make third-party financial and non-financial products interoperable in the cloud. This will enable a bank to operate as an integrator and aggregator of a diverse array of products, using its differentiated cloud-based bundling capability as the "glue."

In this environment, banks will compete either by being a financial services ecosystem leader, in which case they use their technology as a platform for other companies in the ecosystem; or as an ecosystem participant, a role that may be most appropriate for smaller or niche players and which will leverage the technology provided by the ecosystem leader. To join this ecosystem, third-party specialists within and outside financial services—from charge cards to concierge services to entertainment and sports—will migrate their offerings to the cloud so banks can integrate them more easily.

Emerging markets: ATMs in the cloud?

For banks seeking to grow rapidly in emerging markets and reach unbanked customers, the time and cost of setting up distribution represent major hurdles. Opening a branch or installing a new ATM is expensive and can take several weeks. So third-parties could offer cloud-based services that support rapid growth in a bank's distribution network and infrastructure. Examples might include telcos using their network assets to offer ATMs or point-of-sale terminals in a cloud. The cloud could help overseas correspondent banks conduct foreign transactions for smaller institutions in their home country.

Currently, there is much discussion about collaboration between banks and telcos, especially in areas such as mobile and contactless payments. In our view, conflict over customer "ownership" means banks and telcos will mainly compete rather than collaborate. However, there will be exceptions. For example, a government-driven pilot in France involving banks, telcos and transportation providers is expanding, and Barclays and Orange are collaborating on contactless payments in the UK. There is also scope in emerging markets for telcos to offer services to banks, such as ATM and POS networks in a cloud (see above).

7. Payments in the cloud will be a key focus

Consumers' migration to digital mobile and contactless payments will affect buying habits, channels and customer service in all markets, and will impact all consumer-facing industries. The preparations for when these services

reach critical mass are intensifying convergence and competition between banks, retailers, telcos, card issuers and other participants in the payments value chain, especially around the consumer interface and digital mobile payments channel.

Banks are still an integral part of the payments value chain—but they risk losing overall control as new entrants claim different parts of it. As with PayPal, the effect can be to sharply reduce the bank's role and direct contact with the customer. With powerful competitors such as Google and Facebook now joining the market, payments in the cloud will remain a key focus, both as a service in its own right and as a beachhead for other offerings. Next steps could include telcos bundling savings plan payments into their bills, and banks offering payments shared services to sectors such as telecoms. This focus will be sustained by the cloud's huge potential across the entire payments arena.

Realizing the cloud-enabled future

Prioritizing strategy and execution

In the foreseeable future, cloud computing will be omnipresent. No industry can afford to ignore it. But its impact will vary in every case.

To move decisively and securely to its cloud-enabled future, it is vital for each bank to have a clear and consistent cloud strategy specifically tailored to its business, coupled with the commitment, will and resources needed to execute the strategy in full. Given the range of variables and choices involved—from public to private cloud, from IaaS to BPaaS—mapping out this journey is a complex, yet necessary task.

Overcoming organizational barriers

Many banks are facing a reality that their current governance and organization are not yet ready to tackle such choices. If BPaaS is the optimal solution for a particular activity, what will prevent the CIO from pushing back in defense of the legacy systems? And what will stop the Chief Purchasing Officer from resisting new sourcing models on the grounds that buying BPO, applications outsourcing, infrastructure outsourcing, hardware and software separately has been the winning strategy for many years?

The fundamental issue is that each choice around cloud computing effectively means “decommissioning” a portion of the IT and process stack, ranging from business capabilities to infrastructure. The human capital perspective may also be critical, since cloud providers will not welcome any significant transfer of staff that would affect their business model.

All of these considerations underline the need to prioritize both strategy and execution in moving to the cloud. One without the other will fail.

To find out more about how Accenture can help your bank harness the power of the cloud to achieve and sustain high performance, please contact:

Emmanuel Sardet
emmanuel.sardet@accenture.com

Emmanuel Sardet is the global Technology and Infrastructure Services lead for Accenture Financial Services, based in Paris. His experience comprises more than 20 years across consulting, technology and outsourcing helping our clients to transform their IT to deliver more business benefit – from strategy to run.

Emmanuel Viale
emmanuel.viale@accenture.com

Emmanuel Viale is a Director of the Accenture Technology Labs, based in the Sophia Antipolis Lab in the South of France. He specializes in identifying and delivering applications of innovative technologies for our financial services clients.

Additional Contributors

Laurie A. Henneborn
laurie.a.henneborn@accenture.com

Laurie Henneborn leads the global Technology research team within Accenture Research – an in-house network of professionals who have strong knowledge of various industries, geographies, technologies, and functional domains, as well as research methods and techniques. Laurie specializes in cloud and applications-related topics.

David W. Helin
david.w.helin@accenture.com

David Helin is also a member of Accenture Research and is aligned to the global banking research team. He regularly conducts strategic financial analysis on banks worldwide and has also focused recently on the credit services market, cloud computing and equipment leasing.

or visit
accenture.com/cloudstrategy

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