

A Race Banks Must Win

Digitisation of financial services has brought banks into competition with a different set of challengers. To stay ahead, banks must recast their role in customers' lives, using analytics to provide helpful, value-added advice and services. Failure to act quickly will have profound consequences for the status and profitability of the industry.

Chapter 1 The Challenge

Sets out what we mean by experience-driven banking, how it is changing the industry beyond recognition and what's at stake.

Chapter 2 The Challengers

Examines what challengers are doing and how banks must respond to safeguard their future.

Chapter 3 The Future

Looks at ways in which technology and culture are coming together to produce sectoral change, the backdrop to a process of continuous innovation that will occupy the industry for years to come.

Throughout we showcase examples of experience-driven service in practice.

Overview

Digitisation is changing financial services, empowering customers and opening up the industry to new competitors and business models. But, as well as threats, digitisation also provides opportunities, most notably the chance for banks to recast their customer relationships.

To gain competitive edge, banks must seize the opportunity to become more involved in customers' commercial and financial lives, analysing their transactional data to provide them with expert advice, find ways for them to save money and proactively recommend products and services they actually need.

The most successful companies will be those that are able to marry this analysis with analysis of customers' locational and contextual information to be able to deliver the right products, personalised to individual customers' circumstances, at the right time and over the right channel – what we are calling experience-driven banking.

Delivering experience-driven banking is a race against time. Banks have access to customers' transactional data. But big technology companies such as Google and Apple have a deeper reach into customers' lives. And, through initiatives like Apple Pay and Google Wallet, they are fast building data on customers' financial transactions.

So, banks need to act fast – to put in place the conditions to be able to deliver experience-driven banking, ranging from cultural change to technology renewal.

It is a race banks must win. Banks won't disappear, but if they aren't able to deliver the value-added services that customers want, then others will – with profound consequences for the role and profitability of the industry.

The Challenge

"Banking is necessary, banks are not." Variations on this quotation have been circulating for decades, espoused by (among others) Richard Kovacevich, when he was chairman of Wells Fargo, and Microsoft's Bill Gates.

Now though, banks are feeling the heat from competitors new to the world of banking who are capitalising on rapid advances in technology and fast-changing customer behaviour to launch innovative, data-driven business models.

Increasingly, banks will be defined by the user experience that they offer discerning clients and data is playing an increasingly integral role in delivering this differentiated experience. As we will see later, a number of financial firms – from challengers such as Moven to established names like Barclays – are making important strides in this area.

"Embracing digital opportunities and exploiting the possibilities of data to enhance user experience are essential for banks to remain relevant," says John Schlesinger, Chief Enterprise Architect at Temenos. "But to do so requires much more than investing in digital channels, it also means putting in place the right infrastructure and processes throughout the whole business."

The process is under way, but it's still early days. European retail banks, for example, have digitised only 20-40 per cent of their processes, while 90 per cent of European banks invest less than 0.5 per cent of their total spending on digital, according to an analysis by the consultancy McKinsey.¹

However, the pressure is on. Accenture estimates that digital transformation will put about 30 per cent of bank revenues at risk by 2020². A survey by Capgemini, meanwhile, found that only 37 per cent of customers believed banks understood their preferences adequately.³

At Temenos, we believe banks have a bright future. To get there will entail a wrenching migration from the high street to the online world. Banks will have to be nimble, flexible and responsive to a new set of customer demands, and immerse themselves digitally. If they fail, there is no shortage of interlopers willing and able to step into the banking market and take a slice of the profits. Or as JPMorgan's Chief Executive, Jamie Dimon, told investors earlier this year, a new breed of competitors, mainly based in Silicon Valley, "all want to eat our lunch."

- 1) McKinsey, The Rise of the Digital Bank, July 2014
- 2) "Everyday Bank: How Digital is Revolutionizing Banking and the Customer Ecosystem", Accenture, June 2014
- 3) "Big Data Alchemy: How Can Banks Maximize the Value of their Customer Data?", Capgemini Consulting, April 2014
- 4) Jamie Dimon, Annual Letter to Shareholders, April 2015

Change of Focus

Banks are having to shift from being account-focused, where there is little differentiation between institutions, to being customer-focused via digital channels, where there is intense competition. This shift exposes banks to new competitors, particularly Internet and mobile natives Google, Amazon, Facebook and Apple. With varying degrees of success, these groups are pushing heavily into the banking business, in a trend that could, among other things, undercut the banks' role as a link between merchant and buyer.

As part of their transformation, banks will have to embrace self-assisted transactions (SAT) – where customers initiate their own transactions – and straight-through processing (STP), transactions cleared without human intervention. This is because customers, accustomed to the world of ecommerce, want the flexibility to bank when they want and to have their transactions fulfilled instantaneously.

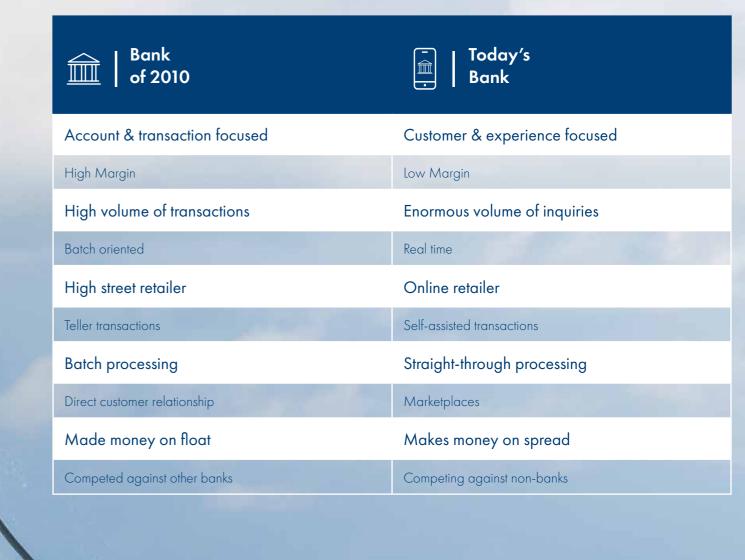
The move to self-assisted transactions is disrupting the banking value chain because it breaks the link between the consumer and the financial provider. As in other industries that have digitised, such as travel or book retailing, the value is moving from providing services per se to helping customers to navigate multiple providers and make the best-informed decisions. Financial marketplaces will therefore become increasingly important.

Banks will have to make the leap from service provider to trusted adviser and from selling only their own products to offering a gateway into financial services and potentially other digital services. This will not be easy. Banks have many obstacles to overcome, around technology, around processes and around culture and mindset.

The rival technology companies boast several inherent advantages: they understand customer care and have significant insight into their customers' lives; they can work in real time and at low margins; and they can sustain high volumes of queries while still making money. In short, they are set up to handle swathes of data and deliver an intimate customer experience.

NOW AND THEN

AND ASSESSMENT





Moven

A Game Changer

"The people we call Millennials are now of bankable age, and they expect things to work very differently from the way their parents did," says Brett King, Chief Executive and Founder of Moven, a startup on a mission to reinvent the consumer bank account. "They want to pick up a phone and send some money, and they expect it to work just like that. So a lot of what we're doing is about redesigning the banking experience from the ground up."

Moven has created a new kind of debit account that gives customers instant notification of their transactions and status, linked to a smartphone app that allows users to monitor spending against their average behaviour. Spend a bit less than your monthly average and you'll get in-app green lights, but spend more and red alerts will appear.

"We looked at the problem of how people spend money and save day-to-day," he says. "All we needed to do was stop people spending more than they do on average. That was the start of the design."

King thinks that conventional spreadsheet and list-based budgeting tools simply don't work for this new generation of customers, especially those with little or no experience of financial products and services. "The spreadsheets and lists are based on a budgeting idea that's 100 years old. So if that doesn't work, what's better? How can we change the experience for someone who's financially illiterate?"

King describes Moven's approach as "gamification" of the banking process – a complete re-engineering of the underlying ideas to make the experience more like a game than a financial application. That extends to some of the app's other features, such as sending money to friends via text message or email even if they don't have a Moven account. Ultimately, King says, the aim is to make financial applications and services more approachable for Moven's target audience.

King has a warning for would-be players in this new world. "This is still banking. You can't shy away from the fact that this is tough to do. There's an element that is pure experience design but then there's the regulatory aspect, the infrastructure, the actual moving of money. That requires something else – it's not going to come from two guys in a garage."

Whoever's doing it, he believes that great shifts in the banking landscape are already under way. "These are pretty dynamic times," he says. "We'll see more change in the next two years than we have in the last 200."

Uber

Experience-Driven Chauffering

By any standards, Uber is one of the technology world's most successful recent startups. A taxi service that summons a car at the push of a smartphone button, Uber now operates in more than 200 cities across 57 countries. According to a Wall Street Journal report in May 2015, a new round of funding will soon value the company at \$50 billion, just five years after it launched in 2010.

One reason for Uber's popularity is that it makes a normally complicated set of negotiations very simple: find the nearest car, inform the driver of your destination, determine the quickest route and negotiate payment behind the scenes, all using only a smartphone app. Uber is quick and convenient for customers, who express their satisfaction (or otherwise) by rating drivers after each journey. And it's beneficial for enterprising car owners, who can sign up online to become Uber drivers and immediately begin to generate revenue from an otherwise depreciating asset.

The ease with which Uber allows transactions to take place in its core business is a lesson for anyone in any sector. But Uber's real power is in the data generated by its transactions. All banks stand to gain from studying the use Uber makes of its data: call it Experience-Driven Chauffeuring.

Uber gathers data on everything from precise pick-up and drop-off points to length and time of journeys, how much customers spend, which hotels/bars/restaurants they visit, how often they do so and what levels of luxury they expect from their car journeys. That data allows Uber to fine-tune its services across the board, as well as tailor them for particular customers. In partnership with third parties such as the Starwood hotel chain, for example, it can offer customers combined loyalty deals; ride with Uber, get Starwood points and special offers on rooms in regularly-visited cities.

Uber's data is now powering new services such as UberFresh, a grocery delivery service, and UberRush, a courier service. But the service that is grabbing most attention today is UberPool, with which customers can split the cost of their trip with another customer requesting a journey on a similar route. Speaking at the Institute of Directors annual convention in 2014, Uber Chief Executive Travis Kalanick said that UberPool could potentially take a million cars off London's streets, a third of the total number. "People are already able to get around without having cars," he said. "But when Uber makes that journey incrementally better, because it's a competitive marketplace, a lot of people can move to that thing that's better."





Experience-Driven Banking

Experience-driven banking involves using digital channels and data to analyse the behaviour, demands and transactions of customers. Thus informed, banks are able constantly to predict what their customers will need and want next, and can offer relevant products and services in the right place at the right time, via the right channel.

Increasingly, to retain customers – especially younger ones, the so-called "Millennials" - banks will need to use data and analytics to provide value-added service. An EY banking customer survey found that people would expand their relationship (or pay more) in return for providers giving expert advice, finding ways for them to save money and rewarding their loyalty.⁵ Accenture found that 58 per cent of Millennials would like their banking providers proactively to recommend products and services that they need.⁶ And the success of new banking ventures such as Simple (acquired by BBVA), built around the concept of helping people to achieve their financial goals, demonstrates that consumers would like their banks to be more involved in their financial and commercial lives.

When financial providers are able to combine this kind of personalised service with other information, such as context and channel preferences, we begin to enter the realm of experiencedriven banking. Imagine, for instance, receiving a text message to

remind you of your daughter's birthday with suggestions of top-rated gifts along with the location of the nearest store with these gifts in stock as well as advice on the best way to finance the purchase.

Experience-driven banking isn't just a retail banking phenomenon. All banking customers want their banks to become more involved in their financial circumstances, helping them to make better financial decisions. A BCG study of the wealth management market, for instance, found that more than 60 per cent of customers were demanding services – made available across all types of devices - that helped them to understand their financial situation better and offered tailored recommendations. A growing proportion – between 20 and 60 per cent – wanted social interaction built in too.⁷

Similarly, a study from Temenos/IDC on corporate banking showed a strong demand from businesses for services that could bring a real-time consolidated view of information as well as a willingness to look outside traditional financial groups in order to obtain these services. A quarter of corporates are already actively looking at non-bank providers.8

In experience-driven banking, every transaction enacted by a bank should be used to inform the next transaction; everything the bank knows informs the next step it takes on behalf of the client. It's about marketing (real-time targeted campaigns), sales (providing a banking marketplace where and when customers need it) and a better service and transaction experience via order management.

All this promises a revolution in user experience. The closest comparison is perhaps how Amazon shook up the online retail world, offering simplified and quicker payments, targeted products, links to other areas of interest and far more.

Banks are well placed to offer experience-driven banking given that they have access to customer transactional data, but this edge is under threat: the technology-sector disruptors have been exerting great effort and focusing on gaining access to the same data.

The challenge for the banks is to be able to use that data, link it to other contextual information, serve it up at the right time and place and at the right cost. This will require significant change – and quickly.

The Required Architecture

The good news for banks is that a common architecture can accommodate these pressures across all lines of business. But banks will have to migrate to this new architecture over the next 10 years or risk losing their clients. During that time, the distribution of the banking product (what's sometimes called the front office) will separate from the "manufacturing" of banking product (the middle office) and settlement (the back office) in a similar fashion to the split that occurred in capital markets and wealth management.

These separate parts of the banking process can communicate with each other by application program interfaces (APIs), and they do not have to be owned or run by the same organisations. This new model has, of course, been significantly boosted by the advent of the cloud, which increases processing power, significantly lowers costs and allows real-time and extremely flexible software updates.

⁵⁾ E&Y, "Winning Through Customer Experience: EY Global Consumer Banking Survey 2014"

⁶⁾ Accenture, "The Digital Disruption in Banking: 2014 North America Consumer Digital Banking Survey"

⁷⁾ Boston Consulting Group, Wealth Managers Face a Digital Dilemma, June 2014

⁸⁾ Temenos and IDS Insights, Bank Payments Services at a Crossroads, October 2014

Necessary Components

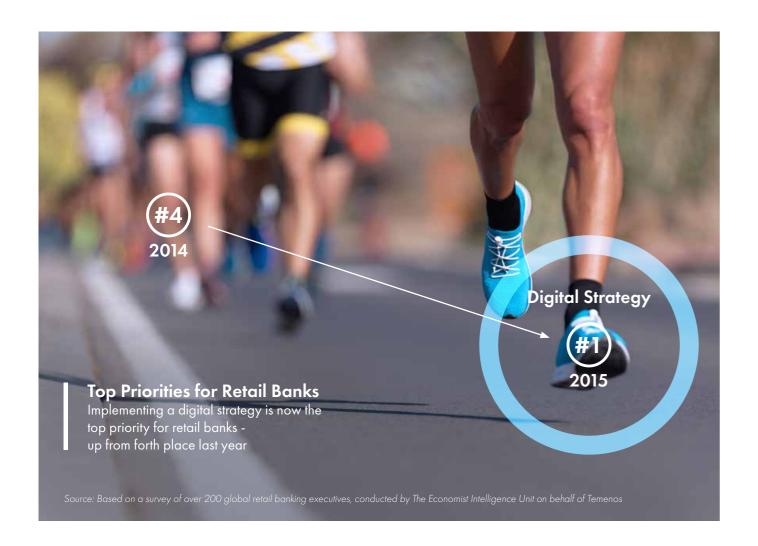
Banks will need some critical software components, as well as having the right architecture, to be in a position to deliver experience-driven banking. Clearly, having responsive channels through which to publish relevant content is important, as are the analytical capabilities to gain insight into customers' lives and make targeted recommendations.

What is often overlooked is the importance of modernising legacy. So much of bank data is still not real time – it is split across multiple systems and organised around products not customers. It will be impossible in these old systems to generate the right levels of analysis. Further, the simplification of processes and increases in automation needed to fulfil customer demands for instant gratification will not be possible against such a backdrop.

React or Be Left Behind

The race is on to offer experience-driven banking, but banks do at least seem to be alive to the need to react quickly. The second Temenos annual survey of retail banks, released in March and conducted by the Economist Intelligence Unit, reinforced the view that banks face an uncertain future and will need to digitise to thrive. It also showed that banks are aware that technology firms are breathing down their necks.9

For bankers, creating a responsive digital strategy has become the most important priority this year, up from fourth in 2014. The survey showed that 35 per cent of the 200-plus executives asked thought that new entrants and competitors would have a major effect on the market – eating into profits – in the next five years, and that disruptors would grab market share from current accounts and savings.



Challengers

A range of start-ups is emerging to nibble at parts of the banking model. Initially, at least, the focus has been in areas such as personal finance, trading and wealth management. These firms include Wealthfront, Mint, Lending Club, TransferWise and eToro, which take advantage of technological change to offer customers better value or a differentiated financial services experience.

Nonetheless, the main opponents in the scramble to offer experience-driven banking are the larger technology companies. The ambitions of Amazon Payments, Apple Pay, Google Wallet, Gmail Bill Pay and PayPal, among others, have been well documented. Some will succeed, others will not. The advantage that these organisations enjoy is that their customer data is already refined, meaning they know client preferences and can target relevant offers. Most Apple users have long abandoned fears of surrendering data in exchange for convenient service and quality products. Facebook is well placed to take advantage of its huge user base. The race is now on to get access to customer transactional data.

Apple Pay Leading the Charge

Introduced last September, Apple Pay has emerged as a genuine challenger to banks' retail business. Apple appears to be making more headway than rival initiatives including PayPal, Google Wallet and Walmart's CurrentC. It already has over one million US customers and an estimated 220,000 partner US retail outlets, as well as six major banks and the three major credit card companies, MasterCard, Visa and American Express. Retailers like Whole Foods Market have seen "significant growth" in Apple Pay's use.

Apple Pay securely stores multiple credit and debit cards on the Passbook application by encrypting or "tokenising" the information. Each card gets a device-only account number; actual card numbers are never stored or shared. With the wave of an iPhone and a thumb reading, the first alternative retail payment method that's faster, easier and more secure than cards has emerged.

"In no time Apple Pay has exceeded two decades of bank efforts to enrich the way in which credit card payments work," says Schlesinger. "We are already seeing evidence that this is the first payment mechanism where consumers are prepared to change merchant if Apple Pay is not offered as a way to make the transaction. Its brand is that strong."

Apple has also been smart in the way it has set up its fee structure. By taking a fee from the card issuer, mostly banks and credit card companies, it has ensured a revenue generating model irrespective of what happens to merchant acquirers and scheme owners (such as Visa and MasterCard) over the longer term. The role of the latter is likely to be made much less important by a combination of contactless payments, real-time settlement and distributed ledger technology, such as Ripple and Blockchain, which allow for instant, inexpensive and secure settlement.

With Transactional Data. the Threat Grows Exponentially

While the convenience and security aspects of Apple Pay are interesting and revenue stream significant, the real value is in the data. Apple Pay doesn't store any of a customer's data on the smartphone itself and most of the sensitive data is encrypted. However, that does not stop Apple from gaining information regarding such items as the merchant name, and the date and time of the transaction, which it can then associate with a person's Apple ID. Gaining this level of insight can put Apple in a position to recommend third-party products and services and to help customers to make better and more informed spending decisions.

Banks Must Play to Their Strengths

Despite the hoopla around new payments, banks nevertheless retain many inherent strengths, and the savviest should emerge as even stronger brands from the shake-up. They have the deepest networks, the ability to offer integrated products and services and - for now - they hold their customers' precious spending and savings data.

Banks still have time to create data models to inform consumers and merchants about transactions at the point of sale, and about financial management. Their customers could be given more options for products and services when it is most convenient to them; the merchant benefits, too, from improved customer satisfaction translating into sales.

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John Schlesinger, Chief Enterprise Architect at Temenos







All About Community

Germany's Fidor Bank is taking a very specific approach to Experience-Driven Banking – one aimed at a core audience already accustomed to digital culture, according to Frank Schwab, CEO at Fidor's TecS division, a subsidiary that develops and operates the fidorOS digital banking platform for Fidor Group and its white label partners.

"We're only targeting digital natives, the people who are spending their lives on Facebook, Google+ and so on. That's more than just young people – there's a large group aged over 40 who make significant use of internet sharing services, as well as a lot of small businesses with fewer than 100 people that are based online."

While Fidor does offer its customers traditional banking services such as accounts and loans, its biggest differentiator is a new raft of services aimed squarely at these digital natives – in particular crowd-sourced funding and peer-to-peer lending, where customers can borrow from each other.

"You can borrow money from the bank, but you can also ask other customers in the community to lend you money." That gives them a pool of 300,000 community users to choose from, says Schwab, people who are actively talking about and giving advice on everything from household costs to investment strategies on the bank's websites and social media platforms, across thousands of separate conversations. They can also rate financial adviser and the products they sell.

Encouraging active participation in the Fidor community is clearly key to the success of initiatives such as these, one reason why the bank offers cash-based incentives for customers to get involved. The more actively they communicate with other members, the more they get paid, whether they're asking or answering questions about mortgages or interest rates. Amounts vary, from a few cents for asking a question to €1,000 for making product suggestions that get picked up by the bank.

Fidor is also working hard to build an external community of businesses that use its core banking services. In March 2015, it launched its open application programming interface (API), a set of technical services which lets third-party developers create apps and services that make use of Fidor's core banking features. Fidor already has several customers using the live API with 100 more in the pipeline, building everything from applications for buying precious metals to trading currencies. Schwab says that it can take as little as a day to integrate via the Fidor API, rather than the usual months or years in conventional banking environments. "This is truly ground-breaking," he says. "It turns all the thinking upside-down."



A Huge Data Challenge

When it comes to experience-driven retailing, few companies face data challenges and opportunities on quite the same scale as eBay. At the Gartner CRM Summit in London in 2014, eBay's Head of Global Analytics, David Stephenson, noted that the company's 100 million customers generated 100 million hours of customer interaction data every month from their travels around the site – a volume of data that is effectively impossible to analyse fully.

Simple queries about the most popular items appearing in daily searches can involve processing five billion page views, he said – "so there is a huge problem just to ask a basic business question".

That hasn't stopped eBay from trying. In 2014, the merchandising site alone generated sales of \$83 billion, not far short of retail giant Amazon's sales over the same period. Overall, the company reported a total enabled commerce volume of \$255 billion, thanks to its other specialist marketplaces such as StubHub and payments processed via the PayPal subsidiary.

Perhaps most importantly, revenue grew by 12 per cent, a key indicator that the company is finding some good answers to those business questions despite the challenges.

Much of eBay's recent growth has been through its mobile apps, which it launched early on smartphone platforms in response to increased customer mobile usage data. In 2009, eBay's first iPhone app accounted for more than \$600 million in volume in its first year; by 2014, total mobile payments had grown to more than \$45 billion, around 20 per cent of the entire payments volume.

But eBay's investment has not stopped at apps. With the right data to hand, it can continually improve everything from its trademark feedback mechanisms to merchant incentive strategies, search algorithms and seller tools. One significant result of such ongoing improvements is that eBay's central merchandising brand has evolved far beyond its origins as a simple auction site; today, more than 75 per cent of its business comes from fixed-price, buy-now listings.

eBay continues to evolve rapidly, and will see further change this year when PayPal becomes a completely separate company. But it has long been ready for such upheaval. John Donahoe, Chief Executive, said in a 2011 Harvard Business Review interview that the company was very focused on "capitalising on this period of dynamic change in how consumers behave". Today, that focus is paying dividends – a valuable pointer to any bank trying fully to engage with the customer data challenge.





Trust Builds Business

Trust is another key component of experience-driven banking. To gain the most from banking of this type, consumers will need to opt into many of the services. Being persuaded to do so will be a question of trust. Moreover, experience will drive trust, thus reinforcing the advantage. As such, returns on trust are potentially exponential with the possibility for a winner takes all situation.

As EY puts it, "Customers generally trust their primary providers, but the highest level of trust is a clear differentiator in creating advocacy, and customer experience is a key driver of that level of trust." Consumers' trust in banks suffered as a result of the financial, but some research shows banks continue to enjoy an important, albeit narrowing, advantage. For example, a recent ING survey on mobile banking found respondents ranked their own banks first, way ahead of technology companies such as Google and Apple in terms of trust."

Data: It's Personal

An arguably more important and likely more enduring competitive advantage banks have is access to customer transactional data. But, banks must mine and better deploy the data.

A good precedent from the retail industry is Amazon. It has been ground-breaking in its ability to take customer data to offer a highly personalised experience, tailoring recommendations, for example,

as well as providing a seamless and single point of access to multiple vendors in its ecosystem. The retail giant has also made gift certificates a form of money transfer; a pioneering step in what will be a sustained move towards making digital assets (such as air miles or mobile minutes) interchangeable and readily exchangeable as currency which banks will need to embrace.

The kind of experience-driven services that banks should be providing include tools to help customers to understand their spending better, applications to help them to achieve financial goals such as saving targets, real-time offers based on their location and past spending, marketplaces for financial (and non-financial) services, social media integration, peer-to-peer advice and lending, frictionless payments (such as transferring money to a friend by text without knowing their bank details) and wallets to help customers manage multiple types of digital assets and multiple financial relationships with all their banks and utilities, for example). In addition, banks will need to do more to reward customer loyalty and we already observe many examples of banks setting up retailer-like loyalty schemes.

"Data plus channels is where banks could compete hardest," says Dharmesh Mistry, UXP Product Director for Temenos. "They have the data, they can create new digital services like passports and vaults. Then having a strong channels capability allows them to trace and communicate with customers in a timely and relevant way according to their preferences."

Here, There and Everywhere

The Temenos/EIU retail banking survey showed that many established banks are already thinking this way. BNP Paribas Fortis, KBC, ING and Belfius have set up Belgian Mobile Wallet, operating as Sixdots. Wells Fargo and Standard Bank have created their own tech labs to test out new technology and apps. Barclays (see case study on page 20) has launched the hugely successful Pingit service, which allows customers to send and receive money from their mobile devices to or from anyone with a UK phone and bank account. Garanti Bank (see case study on page 17) is possibly the advanced established bank in terms of experience-driven banking, boasting a whole range of services around easier payments and spending and saving tools. But perhaps the most innovative is a service that uses a combination of Foursquare, GPS and transaction history to give customer real-time location-based offers on their favourite brands and at their favourite stores.

Francisco González, Chairman and Chief Executive of the Spanish bank BBVA, has for some time predicted the industrialisation of core banking, separating order management and order taking. He told Euromoney: "[By the end of this year] BBVA will be perceived by the market as a new digital player, and as a result we should be able to capture quite different and ultimately higher valuations from investors." 12

Among the bank's digital steps is an open-platform initiative, collating real-time information on every financial transaction its customers make.









Breaking Down Barriers

The second largest privately-held bank in Turkey, Garanti has a healthy proportion of mobile banking users, with 1.8 million of its 2.8 million online banking customers also using their mobile devices to manage transactions.

In 2013 the bank launched a separate mobile initiative called iGaranti, designed specifically for young people and young professionals to manage their current and savings accounts. iGaranti is already breaking down many of the barriers that exist between young people and banks. Some 500,000 individuals have downloaded the iGaranti app to date and over 280,000 people have registered for the iGaranti service; 110,000 of them now active customers.

"Younger people don't always like banks much and don't want to have a relationship with them," says Isik Ilhan, Garanti Direct Manager. "They're looking for an experience more like that in the rest of their digital world."

iGaranti's design places it firmly in that environment. Social media integration is an integral part of the overall banking experience; customers can send money directly to their Facebook friends, for example, without needing to know bank account details. It's also fully integrated with Foursquare, which enables some revolutionary geolocation features. For example, iGaranti users can choose to receive special offers from preferred brands with

stores near their current location. To date, 43 per cent of card owners have benefited from such offers, according to Ilhan – a clear indication, she says, that it's something the target audience

Today iGaranti includes around 20 separate features designed to make managing money easier, including one-click buttons for quick payment of bills or transferring money to savings accounts, overspending alerts, quick loans, currency converters and an ATM withdrawal feature that lets customers obtain cash using only their phone rather than a card. It also includes features for planning spending based on previous months' behaviour.

One major innovation is the voice-control feature, which lets users manage everything from transferring money to buying or selling foreign currency, simply by speaking rather than typing. The application can even talk back to the user via Avatar, a smart financial coach offering personalised tips and suggestions - all part of making the iGaranti experience more engaging.

"Many young people don't have any experience of managing money and spending, so we're trying to make it easier and more enjoyable," says Ilhan. "We think that we can make it a more involving and interesting part of their life."



Disruption is likely to continue in two main forms: providers targeting discrete parts of the value chain where they see the possibility to lower costs or improve service; and, secondly, providers spotting the opportunity to capture value by acting as an intermediary between banks and their customers.

The speed of change is accelerating however. Disruption is extending way beyond personal banking into corporate banking and the composition of the industry is changing. We are likely to see a continued splintering between groups that are focused on the front, middle and back offices.

To operate successfully in the middle and back offices will require low costs, the highest levels of straight-through processing and, inevitably, adoption of the cloud. To succeed in the front office, with its higher margins, will mean offering experience-driven banking as effectively as the technology giants.

One of the biggest targets of the disruptors is Generation Y (Millennials): young, digitally savvy consumers who have less trust of traditional financial institutions and a view of banking that differs from that of their predecessors. They will be tomorrow's financial decision makers.

By 2020, this generation will represent 40% of the population in the US¹³ and more than 50% in many Asian countries, such as India¹⁴, as well as representing more than 50% of the global workforce.¹⁵

This will have profound implications for customer loyalty and competition. For example, the propensity of Millennials to use the same wealth manager as their ancestors is only around 10%16 while 72% of Millennials would likely move to a non-traditional banking provider (compared to 27% for those over 55).17

It will also have a significant impact on technology adoption. For instance, more than 72% of Millennials are active users of mobile banking, while 92% are active users of social media.¹⁸

It is therefore crucial for banks to remain at the heart of technological change, adopting new technology to be able to meet the needs and preferences of customers, especially Millennials.



- 13) Forbes, What Millennials Want In The Workplace, Jan 2014
- 14) PWC, Millennials at Work: Reshaping the workplace, 15) Idem
- 16) Technology in Wealth Management: Opportunity or Threat, Finextra, 5 February 2013
- 17) Accenture, North American Consumer Digital Banking Survey, April 2014
- 18) Accenture, North American Consumer Digital Banking Survey, April 2014

There is no disputing that cloud growth appears exponential as banks look to the virtual to install and manage software. The research firm IDC expects cloud software sales to surpass \$100 billion by 2018, growing five times faster than packaged software.¹⁹

The Role of the Cloud

"The question is no longer 'if' cloud transition will take hold but 'when'," analysts at Exane BNP Paribas wrote last year. "The cloud computing transition is becoming increasingly widespread throughout the software industry."20

One of the real values of the cloud is its ability to "scale" transactions and confirm them in real time, in the way that online retailers such as Amazon and travel sites like Expedia do. This separates payment and execution and potentially creates a role for banks in intermediation

Here's how the cloud breaks down barriers. Previously, banks had to build data centres and make them viable globally; that's now gone. Getting a banking licence is still complex but the separation of the front-end function from other parts of the banking process means new players can skirt the areas requiring licences – such as deposit taking – and salami slice the aspects that don't, such as personal financial management.

These groups cannot execute orders, but they do have the data to inform customers and can achieve payment links to banks through APIs. This kind of disintermediation has been seen already: the British challenger bank Aldermore raises its home loans via Newcastle Building Society, for example.

Order execution is therefore becoming a commodity and needs to run at the lowest possible cost per transaction. By far the cheapest place for that is the cloud. "For undifferentiated core banking at the lowest possible cost it's hard to see how you can beat the cloud," says Schlesinger. "In the cloud you can have an idea for a product in the morning and have it running globally in the afternoon. And the cloud removes the massive planning for software upgrades."

Furthermore, by lowering costs, cloud can play a crucial role in growing banks' addressable markets and extending financial inclusion around the world. As initiatives such as M-Shwari (a mobile-only bank in Kenya) have shown, distributing financial services over the right channel and at the right price point can have dramatic consequences: two years from launch, M-Shwari had 9.6 million customers, more than 50% of the adult population in Kenya. With still more than 2 billion (or 40% of the adult population) unbanked, there is still a great need to reduce the cost of banking.

Overcoming the Innovation Barriers

The barriers to innovation are many: legacy systems, legacy processes, culture and so on.

One way to begin to overcome these obstacles is to start small. Small legacy replacements, for instance, that can grow into larger projects over time as the business case is proven. Or, as many banks are now doing, start a new entity, a new digital bank, free of legacy issues and with a new brand to which existing business can be migrated over time.

Marketplaces

Banks will have to go beyond offering products and services at the right time and over the right channel if they are fully to reap the promise of experience-driven banking. They will need to offer a broader reach, recommending third party products and services as well as their own.

More than anything this will require a change of mindset. Banks recognise that parts of their business are at risk from disruption. But their response has typically been to try to keep hold of as many profitable business lines as possible. They need to recognise the imperative to cannibalise major parts of their business before new entrants do it for them.

As value shifts from the production of financial services to the distribution of those services, banks will need to become trusted advisers and service aggregators. They should aim to become a one-stop marketplace for financial services, packaging up products for their customers, recommending those that best suit their customers' needs, preferences and budgets.

And why stop at financial services? The same digitisation of commerce that blurs industry boundaries and allows non-banks to offer banking services also allows banks to offer non-banking products. Bank should leverage their brands and customer relationships to offer a broad array of products through their platforms – legal services, education, music, mobile phone call time and so on.





20) "The Gathering Storm," Exane BNP Paribas, 3/9/2014







Case Study

With more than 40 million customers spread across banking in all its forms, Barclays has a huge opportunity to benefit from Experience-Driven Banking. But the bank will only do so with a relentless focus on putting the customer at the heart of the process, according to Matt Hammerstein, the bank's Head of Client and Customer Experi-ence. "We have no excuse for not doing that today," he says. "Technology makes it much easier because of the speed, efficiency and ability to tailor to the individual."

Hammerstein says that Barclays now has the biggest mobile banking user base in the UK, a fact which gives it clear direction when designing new experience-driven services. The bank already has considerable experience of creating innovative mobile applications. Its Pingit service, launched in 2012, allows customers to send and receive money from their mobile devices to or from anyone with a UK phone and bank account. It now has more than 3 million users, and over £1 billion has been sent through Pingit to date.

"We're still putting as much transactional stuff into the current mobile apps as possible," Hammerstein says. But the ambition doesn't stop there: he thinks that the advent of wearable technology, in particular, represents a great opportunity for the bank and its customers. "How can we use Apple Watch as an extension of the mobile service? We can use wearables to help customers avoid overdraft fees, for example, by sending push notifications when people are approaching their account limits."

This personalised approach is being extended into many forth-coming products and services for the bank's retail customer base. "We're also thinking about the big moments in people's lives – buying houses, getting married and so on. How do we add real value to the customer at those times?"

Barclays already has some ideas. "Think about an app for home buyers which allows them to search for properties by neighbourhood, and see their financing options for each house right there in the app. From there, it's easy to link to brokers selling the appropriate financial packages."

Already, Hammerstein says, the work Barclays has done to enhance experiences for its customers has had substantial benefits, but there is much more to do. "Deeper levels of engagement lead to far more activity. Some customers go from 2.5 interactions per month to 35. How do we get them to do more business at the same time? That's the next big question."



Starting From Scratch

With around \$13 billion in assets, Equitable is a relatively small Canadian bank compared with market leaders Royal Bank of Canada and Toronto-Dominion, but it has some big ideas about building its digital-only savings products.

"Digital is a model that works very well for savings, because the overhead reductions allow you to offer a better interest rate for your customers," says Dan Dickinson, Vice President of Equitable's digital banking operations. "What we're adding is a little something in terms of the user interface and the experience."

Quite what that user interface and experience look like will be unveiled when the product is launched later this year, but Dickinson says that the real challenge is not just in building the interfaces, it's figuring out what customers want from them.

"We're starting from scratch," says Dickinson. "We're designing for digital-only customers – their only relationship will be with their phones or tablets, not branches or tellers." That is not always straightforward, he says: "There's a view that digital customers are all very young, but in the savings there's actually a very broad age range, and that changes how you have to think about design."

Dickinson highlights another issue presenting problems across every commercial sector – consumers are moving faster than most banks' ability to keep up with what they're asking for.

"The ongoing challenge is to give consumers places where they can talk to you", he says, whether they're public social media platforms or dedicated websites. "We're asking customers about what's good and what's bad, even if it's not what we want to hear. It's important to engage with the people who might even be a bit angry with you."

One way of getting to the heart of real customer behaviour is not just talking to them but looking at what they're actually doing, and that means examining data, usually lots of it. "We're putting data at the heart of everything we do. We can't just look at samples any more – the only way we're going to get this done is by looking at what all the data tells us."



Conclusion

Technology and data are the new battlefields in finance, and if banks want to retain customer loyalty they will need to invest, break down silos and allow a more holistic approach to customer service and retention.

Banking customers of all types are demanding that their banks become more involved in their financial and commercial lives, helping them to make better decisions and offering the right products at the right time and across the right channels.

Those banks that do not improve their handling and usage of data risk falling by the wayside, ceding the advantages they have spent decades accumulating to upstart technology competitors. A common yet flexible software architecture, underpinned by the right software components, can accommodate these pressures across all lines of business.

Banks will need to be bold and adapt a flexible channel strategy that addresses scalability, security and privacy issues. The only place where they can realistically do this, while remaining profitable in the face of their new rivals, is the cloud.

"An increasing number of consumers now want to interact with their bank 24/7 via the channel of their choice and by whatever device they choose," says Mistry, "and, for banks to remain competitive, they have to change the ways they attract and serve their customers. Many banks see the warning lights ahead and some are already responding."

The next chapter in customer service, which will offer clients the kind of experience that they are already used to receiving elsewhere, is just starting to be drafted. With the right partners, banks can build on this beginning, overcome the shocks of the financial crisis and thrive in a new world of growing customer expectations.



About the

Ben Robinson is Chief Strategy and Marketing Officer at Temenos, with global responsibility for Strategy, Communications, Marketing and Innovation. Ben joined Temenos in 2007 and held roles in investor relations and corporate development before assuming his current role in 2013.

Prior to Temenos, Ben worked as an equity analyst at Exane BNP Paribas, covering the European software and IT services sector, and as an auditor at Deloitte. Ben is prize-winning UK chartered accountant and holds a first-class degree in Economics from the University of

When not working, Ben, a father of two, is a keen runner, movie-goer and skier. He regularly blogs about innovation and fintech and runs the "Swiss Technology Group", a networking group aimed at promoting the technology industry in Switzerland.

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About Temenos

Temenos AG (SIX: TEMN), headquartered in Geneva, is the world's leader in banking software, partnering with banks and other financial institutions to transform their businesses and stay ahead of a changing marketplace. Over 3,000 firms across the globe, including 41 of the top 50 banks, rely on Temenos to process both the daily transactions and client interactions of more than 500 million banking customers. Temenos offers cloud-native, cloud-agnostic front office and core banking, payments, fund management and wealth management software products enabling banks to deliver consistent, frictionless customer journeys and gain operational excellence. Temenos customers are proven to be more profitable than their peers: over a seven-year period, they enjoyed on average a 31% higher return on assets, a 36% higher return on equity and an 8.6 percentage point lower cost/income ratio than banks running legacy applications.

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