



7 digital questions for banks

Since the financial crisis banks have faced growing pressure from tougher regulations, new competitors such as ‘fintech’ companies, telecommunication providers and payment services from technology giants such as Apple. Banks are spending billions of euros digitising back-office functions and customer services in an attempt to cut costs, improve revenue, and attract and retain customers. But how well are they doing? This report analyses 48 European banks: the digital technology they are using and what they are doing well and badly.



Four major challenges that impact the banking industry

Although banks are spending billions of euros upgrading back-office functions and customer services to digital in an attempt to improve return on equity and remain an attractive customer experience, they also face a perfect storm from expensive regulations and more competition from new entrants to the market. After analysing 48 European banks we suggest how they can leverage digital more effectively to cut costs, boost growth and better satisfy customers.

Interest income

Interest rates in western developed economies are at a record low, which is bad news for banks as profit margins are squeezed. Now banks need to work harder to increase profits – by making bigger returns on their investments, making more money on products sold to customers, or by cutting their costs.

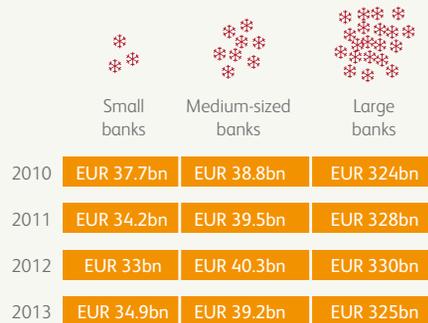
Interest income by bank size *



Tougher regulations

Perhaps the biggest regulatory challenge is Basel III. It requires banks to set aside more capital against losses. Banks have expanded their capital buffers to comply with regulations by mainly cutting the size of their balance sheets. But shrinking balance sheets haven't been accompanied by a proportionate fall in costs.

Operating costs by bank size *

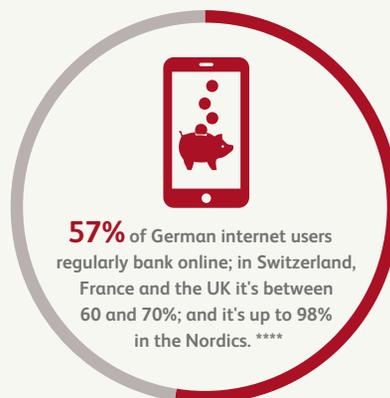
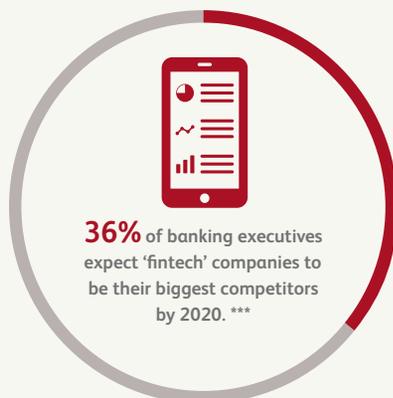


Growing competition

New competitors are entering the traditional banking market, using digital and mobile technology to attract customers without the cost of running hundreds of high-street branches.

Demanding customers

Customers are demanding more digital products and services from their banks. Research suggests that customers will switch banks if they're unhappy with digital banking services. One in four customers in the United States who changed banks did so partly because they wanted a better digital banking app.**



Source: BearingPoint Institute

7 digital questions for banks

Our survey with the Bavarian Finance Centre (BFZ)¹ of 48 European banks reveals what they think about the impact of digital and their adoption profiles

Over 2 million news pieces have been published on 'digital banking trends'.² Why has the 'D-word' come to epitomise the 'perfect storm' banks face? (see infographic)

Digital technologies have both the potential to help banks cut costs and seize new growth opportunities whilst at the same time being a vector for new competitors to challenge them.

To find out how banks approach this dual nature of digital – a threat and an opportunity – BearingPoint and the Bavarian Finance Centre (Bayerische Finanz Zentrum, BFZ) have surveyed 48 banks in Europe, representing a cross-section of bank types in Germany, Switzerland, Austria, France and other countries.



IN 30 SECONDS

- BearingPoint and the Bavarian Finance Centre (BFZ) have surveyed 48 European banks to get a unique perspective on their views and adoption of digital
- Regulatory restrictions, low interest rates, changing customer behaviour and emerging non-traditional players all challenge banks; these evolving market conditions have heightened the importance of strategically addressing digitalisation
- The successful adaptation of banks' business and operating models to the challenging environment in which they operate will be based on a big picture perspective, collaborative competitor approaches and enabling corporate cultures
- The results of our survey show that the implementation of digitalisation is in the expansion phase in most banks
- We offer guidance for the development of a target-oriented digitalisation strategy

17%

only of banks have reached a high level of digital in retail... yet 67% of banks say digital is very important to this area of their business³

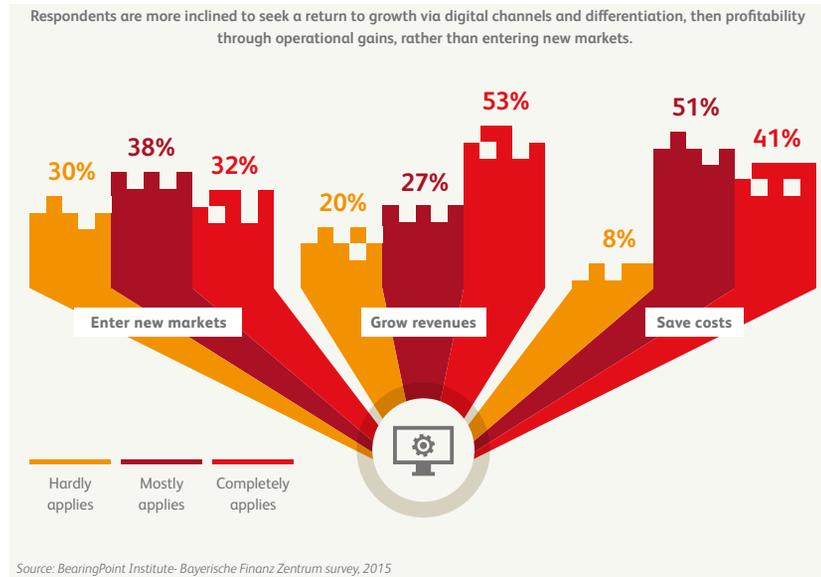
1 Why are banks investing in digital technologies?

Almost all banks are now keen to show off their technological prowess as digital technology transforms how we work, play and manage our money. Asking why banks are so keen to go digital may seem like a naïve question, but the answers go to the heart of banks' purpose, their financial health and their role in society.

The most common reasons for digitising are higher sales and lower costs. Growth is expected to come from giving customers more digital products, more efficient operations, and improved product differentiation and market penetration rather than entering new markets.

Consumer pressure is the most pressing digital issue for banks, with all banks surveyed saying internet and mobile platforms for banking services are vital.

Digital technology is becoming increasingly important for banks' retail businesses, helping them attract and retain customers and improve efficiency, as indicated by 67% of banks surveyed. Despite this, only



17% of banks surveyed say they have achieved a high degree of digitalisation for their retail business.

There's a digital hierarchy within bank's service lines. Banks surveyed said retail banking and private-wealth management are priorities for digital technology (91% and 81% respectively) and M&A business the least.

By business function, banks said that, unsurprisingly, IT was the most important function to digitise, followed by marketing, sales, and risk management.

There is a digital hierarchy within bank service lines: retail banking and private-wealth management are priorities for digital technology, with M&A business the least

'The need to grow top-line revenue through sales and customer conversion rates is driving investment into digital channels. Due to this, the areas that will see the greatest spending in 2015 are mobile and online banking, with 52% and 51% of banks respectively seeing their budgets grow.'

KIERAN HINES, PRACTICE LEAD, FINANCIAL SERVICES TECHNOLOGY, OVUM⁴

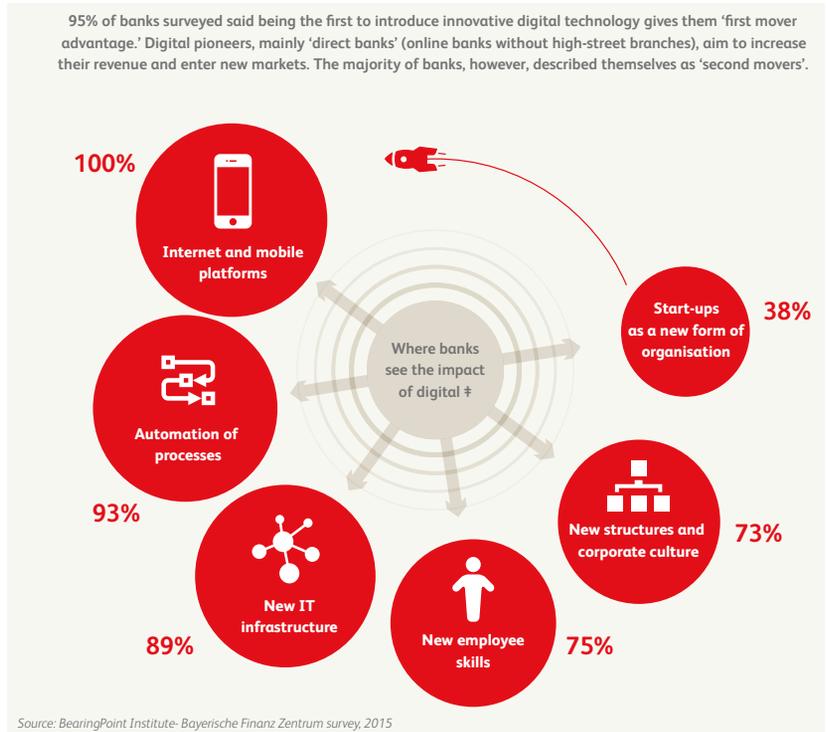
2 What is 'digital' for banks?

Most banks plan to spend 'high amounts' on digitising their business. Deutsche Bank said it plans to spend up to EUR 1 billion on digital technology until 2020⁵. About half (EUR 400-500 million) will be allocated to private and business clients.

According to Celent analyst, Gareth Lodge, banks in North America, Europe and Asia-Pacific are expected to spend USD 196.7 billion on IT in 2015, up 4.6% from 2014⁶.

Even so, are banks too cautious and complacent about digital technology? Nearly all (95%) banks we surveyed said being the first to introduce innovative digital technology provides 'first mover advantage' but, apart from the 'direct banks' (online banks without high-street branches), the majority of banks described themselves as 'second movers'.

For example, BPCE Group, France's second-largest bank, wants over 80% of its services to be available online by 2017. One of its subsidiaries, Caisse d'Épargne, has turned the nation's favourite 'piggy bank' account – the traditional 'Livret A' – into an instant savings account where parents or relatives can make a deposit online into a child's account and leave messages, even if the adults are not clients themselves. Cédric Mignon, Head of Development at Caisse d'Épargne, says '[Our online savings product] proves that with digital innovation even the most traditional products of the classic French brands, which



are cherished by the French, can be spruced up and given a new lift at any time'⁷.

Our survey also suggests that most banks have a passive attitude to digital technology and customer services: 61% of banks surveyed develop digital services in response to customers rather than using their initiative and developing technology they think will be popular with customers.

According to Ovum analyst, Kieran Hines, 'a major focus of digital channel investment is enhancing the customer experience and providing greater functionality. Enabling greater customisation in digital channels is a top investment priority for 21% of banks, but enhancing platform functionality is the leading objective for digital channel

investment. This includes the ability to offer statement searches or to set-up payments, and 53% of banks have indicated this is an investment priority'⁸.

Our survey also found an apparent gap between what banks say and what they actually do. Take new technology and how to develop it. Seven in ten (69%) of the biggest commercial banks recognise that start-ups are an important new form of organisation. But only 38% of banks BearingPoint surveyed said creating tech start-ups was important.

All the banks that think they are digital pioneers are aiming to increase their revenue and enter new markets rather than make cost savings.

'Our online savings product proves that with digital innovation even the most traditional products of the classic French brands, which are cherished by the French, can be spruced up and given a new lift at any time.'

CÉDRIC MIGNON, HEAD OF DEVELOPMENT, CAISSE D'ÉPARGNE⁷

3 How are banks facing new digital competitors?

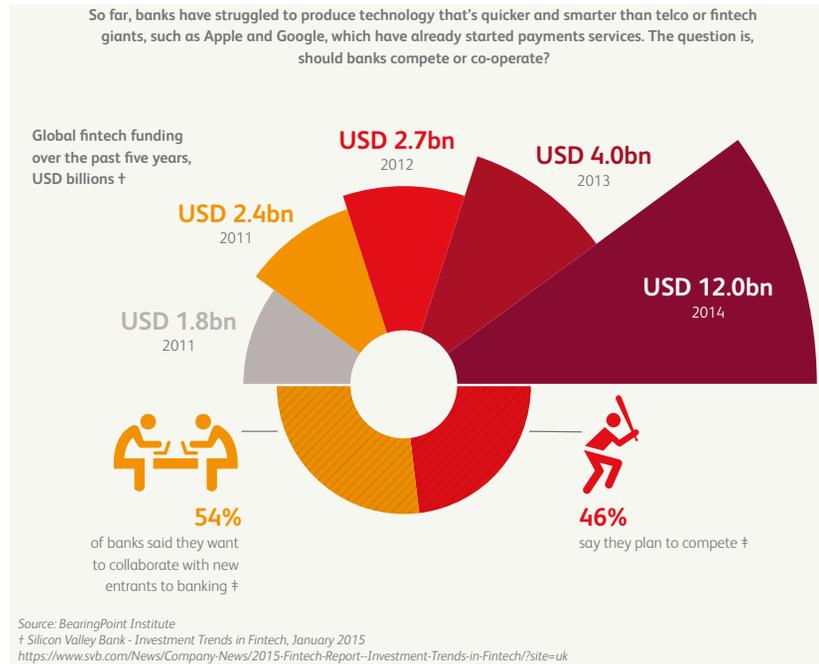
Established banks are facing growing competition from hundreds of 'fintech' companies, telecommunication companies and technology giants, such as Apple and Google, which have recently started payment services.

Compete or co-operate? A small majority (54%) of banks surveyed say they want to cooperate with new entrants in banking, 46% say they plan to compete with them.

Although banks have some advantage over new rivals (for example, large and well-established customer bases, experience of complying with regulations), they also have some possible disadvantages. They are much larger and more complicated organisations than newer and smaller rivals, which are often not weighed down by much old IT kit and bureaucracy. So far, banks have struggled to produce technology that's quicker and smarter than fintech rivals.

There are signs, however, that this balance of power is changing. Some banks are partnering with fintechs to improve their technology and keep up with customer demands.

Deutsche Bank, for instance, plans to meet 500 fintechs each year and sign several agreements to co-operate



with some of them via its 'Deutsche Bank Labs'.

Another example is Crédit Agricole which, like other major banks, has launched a joint-venture initiative. 'The Village by CA' is a start-up incubator, with office hub space in Paris (with expansion into French regions planned), aiming to co-create new products and services⁹.

Cooperating with fintechs give banks access to innovative technology, saving them from having to invest in it themselves. In return, fintechs get access to capital and to a large customer base, which enables them to achieve economies of scale and turn a profit.

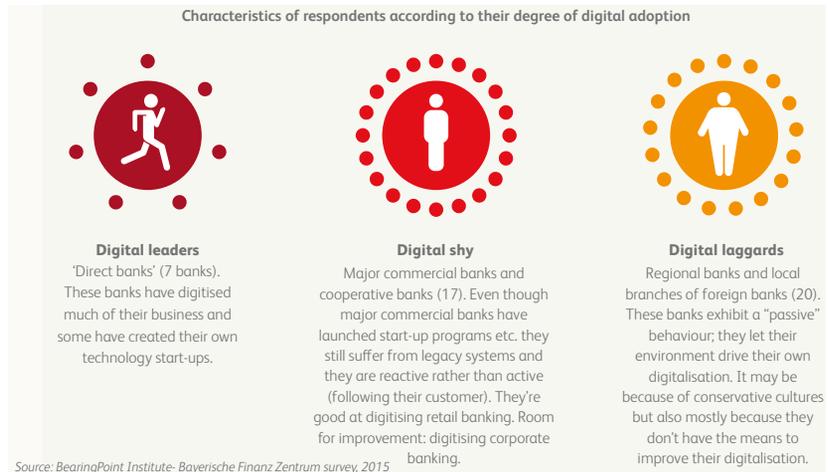
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4 How do banks' digital performance compare?

Each bank is different in its approach to digitisation, but some patterns emerged in our survey. The European banks fall into three broad categories:

Digital pioneers (direct banks/online only)

These banks, such as ING DiBa (the successful online banking operation of German bank ING), have digitised much of their business and some have created their own technology start-ups. They encourage innovation, and their organisational structure and culture helps drive digitalisation across the business. Online technology, mobile apps etc. are integral to their business.



Digital shy

Major commercial banks and cooperative banks are in the digital mid-table. They offer a lot of different services. They are good at digitising retail banking although there's still a long way to go before they're fully digitised.

Most of their processes are automated. Online technology is part of their daily business.

Digital laggards

These banks in the survey (often regional banks and small banks) rely predominantly on old legacy IT systems. A significant number of business processes are paper based and/or performed manually.

DEFINING DIGITAL

Digital technology is a surprisingly slippery concept. Online technology is reaching into and transforming almost all parts of our life and work. The technology, like a lens, is even changing how we see and understand the world. Think of digital technology as five lenses.

The first lens is **intelligence and instant analysis**. For example, just as consumers now have access to price comparison sites, employees can gather information on all their projects and suppliers. Smart analytics is creating an unprecedented data trove not only for a few executives, but enabling and empowering everyone in the value chain.

Lens two is the **intelligent machine**. Machines are also increasingly connected and autonomous. Examples of this so-called Internet of Things range from tracking your pet through a microchipped collar connected to an app on your smartphone to 'smart' energy grids. As devices generate and act on information with ever less need for human intervention, so new opportunities are created for efficiency improvements and service delivery.

Lens three is **technology that enables new approaches to staffing and workforce management**. Increased availability of mobile and low-to-zero cost online services is changing the way people work and interact. Consequently, job-for-life posts, which were common until a few decades ago, are being replaced with a more fluid workforce in which employees may have three or four careers in different sectors and have higher expectations for their careers.

The fourth lens is that **technology platforms** (such as social media, communication systems and free open-source software) allow vast numbers of people with shared interests and goals to connect and share views. In effect, these information ecosystems are shrinking the world. These platforms create opportunities for companies as well as challenges, such as how to communicate round-the-clock with more demanding consumers and citizens

The fifth and final lens is **trust**. We put increasing trust in machines and data but, at the same time, collectively we are increasingly sceptical of corporations and governments, placing them under great scrutiny. Access to data has to be balanced against the right to privacy.

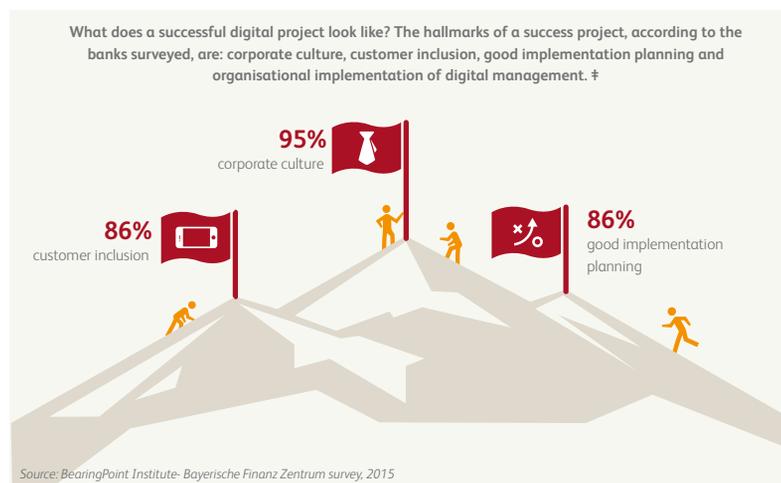
5 When are digital projects successful?

What does a successful digital project look like?

The hallmarks of a success project, according to the banks surveyed, are corporate culture, customer inclusion and good implementation.

Barclays bank, for example, has trained thousands of its staff as 'digital eagles' to help customers understand online technology over 'tea and tech' sessions in the UK¹⁰.

Factors that hinder digital projects include lack of financial resources and staff (particularly for cooperative and regional banks). For regional banks and local branches of foreign banks a bigger problem is



management's lack of awareness of digital technology and its reluctance to take risks.



BANK TECH: FOUR BIG TRENDS

- 1. Cloud computing.** Storing and sharing data on large clusters of internet servers rather than on the customer's premises has been one of the most influential trends in business IT, whether it's email, customer relationship management (CRM) or bookkeeping software. It hasn't taken off in banking yet, but some experts reckon it will soon. Early in 2015 the chairman of Santander told the Financial Times¹¹ that the bank was considering allowing corporate clients to rent data-storage services in the cloud from Santander.
- 2. Big Data and analytics.** Like utility companies and supermarkets, banks hold huge amounts of data about their customers. After cleaning and organising that data banks can make use of analytics and artificial intelligence software to better understand customers' habits and needs. Some banks are already well advanced in this, mixing data insight with location-based technology and smart-phones. Bank of America, for example, has a mobile app that can offer customers personalised deals on nearby stores¹².
- 3. Incubators.** Working with fintechs is a developing pattern. If banks can't out-innovate fintechs they
- 4. New ways to pay.** Contactless payments (payment systems for credit cards and debit cards, key fobs, and other devices, including smartphones and other mobile devices, that use radio-frequency identification or near field communication) are starting to enter the mainstream. More banks, credit-card companies, tech companies (e.g. Apple's Apple Pay) are offering them. It's also possible to make payment using a 'smart watch', for example from Apple and Samsung.

6 What is the future of digital banking?

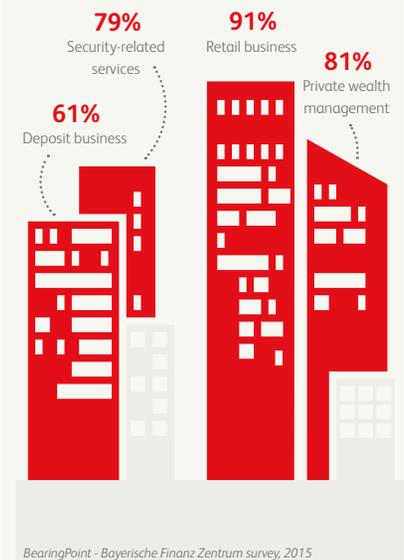
Within five years most of the banks surveyed expect a medium-to-high degree of digitisation in all their departments. Banks reckon the parts of their business with the highest level of digitisation will be sales, business operations, risk management, IT and private banking. The M&A business is expected to be the least digitised part of banks.

Automating areas such as deposit business and capital-market trades is fairly straightforward. Business tasks that are more complicated and require more human intervention, however, such as the acceptance and implementation of a loan, may be trickier. It may only be possible to automate these functions partly.

The bottom line for banks is that they need to invest heavily in digital technology. Our survey suggests that despite some digital pioneers, many (perhaps a majority of European banks) have to refine their digital strategies and become more ambitious and bold in their use of technology to help them cut costs and increase profits, compete against fintechs and satisfy increasingly tech-savvy customers.

And as banks digitise more of their business they may finally replace old back-office systems (a major organisational challenge, potentially at a cost of hundreds of millions or even billions of euros) to gain better value from new digital technology and stop information getting stuck in IT silos.

Banks expect a medium-to-high degree of digitisation in all their departments, but believe the following areas of their business will benefit most from digitisation. †



DIGITAL MATURITY LEVELS

In the present study, three degrees of digitalisation were defined to determine the level to which companies integrated this topic into their daily business operations.

- **A low level of digitalisation** describes an organisational area in which legacy systems are predominant and several processes are paper-based and/or performed manually. Furthermore, the organisational area is characterised by a rather conservative and traditional culture.
- **An intermediate level of digitalisation** is described by the automation of a majority of processes in the organisational area. Additionally, in these areas the internet and intranet are part of the daily business.
- A high degree of automation of both the organisational area and its processes characterises **a high level of digitalisation**. Because they allow for innovations to take place, the organisational structure and culture are strongly enabling a continuous progress of digitalisation. The internet, intranet, mobile apps and mobile phones are a central part of the work in these areas.

7 Which tips for digitising your bank?

1. Digitalisation should be considered across all business areas of banks and link in all their value chain.

Have a broad and holistic view of digitisation: it's about the bank as a whole, not just retail. Digitisation includes not only interactions with suppliers and customers but also back-office functions such as human resources and finance, the corporate business and security trading.

2. Digitalisation should be seen as an opportunity to boost growth and improve service rather than only as a way of cost saving.

It's also about educating customers about how digital technology can make banking more convenient for them. It's more about educating the customers than following them.¹¹

3. Banks should engage in collaborative activities with new market entrants to foster digitalisation and to stay competitive.

They have much to gain, including helping them to bridge the gap with fast-moving technological evolutions and rapidly getting new product and services to market by leveraging a partner ecosystem.

4. Digital innovation should be decentralised and supported by an enabling corporate culture of openness and receptiveness.

In addition, make someone responsible for your bank's digital technology – perhaps a digital officer with their own budget, or make your chief technology officer responsible.

5. Check your IT security. Your ground-breaking technology can become a liability if it leaks customer data or is hacked.

Review your security software and security policies. Fraud-detection and analytics technology can help prevent intruders from breaching your network and highlight suspicious transactions at an early stage. The ubiquity of digital technology in banking makes security a much bigger issue.



Digitalisation should be considered across all business areas of banks and all links in their value chain.



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Banks should engage in collaborative activities with new market entrants to foster digitalisation and stay competitive.



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KEY TAKEAWAYS

- Our survey with the Bavarian Finance Centre (BFZ) shows that all European banks surveyed are trying to digitise more of their departments, processes and customer services
- Banks' digital priorities: all banks surveyed said accessing the internet and mobile applications for banking services is very important; most banks are investing in new IT (89%) and about seven in ten (72%) said digitisation will create a new organisational and corporate culture
- Cost saving is the most common goal pursued through digitalisation among most bank types, except for direct banks which compete to enter new markets
- Banks surveyed said retail banking and private-wealth management were the most important areas in which to leverage digital technology (91% and 81% respectively) and M&A business the least
- The most important business functions to digitise are IT, marketing, sales and risk management
- Retail banking divisions and direct banks are the most digitally advanced; regional banks the least
- Most banks (88%) are adding digital technology to older IT and business processes technology rather than creating separate digital departments or incubator units
- Most banks plan to spend 'high amounts' on digitising their business, even if the exact amount is hard to estimate; differentiating between digital technology and other technology can be tricky
- Nearly all banks surveyed said being the first to introduce innovative digital technology provides 'first mover advantage' but, apart from the 'direct banks' (online banks without high-street branches), the majority of banks described themselves as 'second movers'
- Established banks are facing growing competition from 'fintech' companies, telecommunication companies and technology giants, such as Apple and Google, which have recently started payment services
- A small majority (54%) of banks surveyed say they want to co-operate with new entrants into banking; the rest say they will compete with them, collaboration with new market entrants will bring more opportunities for banks than will competing approaches
- Corporate culture, customer inclusion, organisational implementation of 'digital management' and good implementation planning are recognised as the most important success factors for digital projects
- Hampering factors differ across bank types: most banks recognise lack of resource allocation as the most impeding influence whilst some large commercial banks regret a lack of management awareness and risk aversion to innovation



ABOUT THE RESEARCH

This study – Digitalisation in Banks – was based on the results of a survey conducted jointly by the Bavarian Finance Centre (Bayerische Finanz Zentrum, BFZ¹⁷) and BearingPoint between September 2014 and March 2015. The survey concentrated on financial institutions in Europe and was completed by respondents using a written questionnaire.

The data came from the analysis of 48 responses from banks. The respondents consisted of managers in European financial institutions: 37% of them are based in Germany, 19% in Switzerland, 15% in France, 2% in Austria, 2% in Liechtenstein and 2% in Spain (23% of the respondents did not state their country of origin). Broken down by type, 27% are major commercial banks, 23% private banks, branch of foreign bank or other, 23% regional banks, 15% direct banks, 6% saving banks, central institution, 6% cooperative banks, central institution, 4% capital investment companies, 4% mortgage banks and 4% banks with special function (multiple answers possible).



INTERVIEW



Prof Dr Wolfgang Gerke
President of the Bavarian Center of Finance (Bayerisches Finanz Zentrum, BFZ) and professor emeritus at the department for banking and stock markets at the University of Erlangen-Nürnberg.

Prof. Dr Gerke discusses digital strategy, fintechs and why many bank boards still don't really understand digital technology.

BearingPoint Institute: What do you think digital banking will look like in 10 years' time?

Prof. Dr Gerke: In the world of the internet 10 years is a very long time. I'm sure we shall have digital solutions for banking we can't even imagine. Transparency, security and fairness will be a matter of course for all banking services. The winner will be the bank with the best software for exploiting the individual needs of a client. But there will be places for only a few banks on the winning side. I'm not a software specialist, but I think how you implement digital technology is probably more important than the technology you pick.

BearingPoint Institute: Who are the right people to manage it?

Prof. Dr Gerke: You need the right CIO, who sets the right strategy. But also bear in mind your customers. The main question for customers is what's the advantage of digital

technology? The main advantages are that it costs less and it's faster. Banks should offer more services not less. As a customer I don't want to use a special bank or fintech for each different service. I want one bank to fulfil all my wishes, and digitisation makes this easier.

BearingPoint Institute: Will there still be lots of bank branches on high streets in 10 years' time?

Prof. Dr Gerke: I don't think so. Branches are too costly and less efficient compared with digital banking. It's much easier to communicate online and with web cameras, etc. In the future, if customers have specific needs – for example, advice on a complex transaction such as a business merger – a bank employee could visit your home after discussing it online first etc.

BearingPoint Institute: Do banks understand digital technology?

Prof. Dr Gerke: There are lots of people who are highly skilled in using digital technology but there is a big shortage of digital specialists in many banks. But perhaps the main problem is the traditional banking background of the board. Many CEOs are not ready yet for the digital banking revolution.

BearingPoint Institute: What worries bank directors about digital technology?

Prof. Dr Gerke: Bank CIOs and digital directors fear they might miss the future but don't know how exactly to manage the problem. Even when you get a big bank investing heavily in digitising its business it's rare to get a proper explanation of its strategy. Partly I think it's because banks don't know themselves. I think they're experimenting with digital technology to see what

works. You can try the new technology in a contained territory, at a subsidiary, or on a small number of clients.

Banks should review their digital strategies. Many banks will disappear because of competition from fintechs and a growing number of banks.

BearingPoint Institute: How can banks make better use of digital technology?

Prof. Dr Gerke: The last and only chance for traditional banks is find ways to get 'untraditional'. They have to leave behind their defensive attitudes towards technology and become digital first-movers. Banks have the money to buy fintechs or technology services. It's a question of operation and acquisition. But first bank boards have to change.

BearingPoint Institute: Can you offer any other advice?

Prof. Dr Gerke: In the past banks experienced the first digital revolution in the back office. The second digital revolution happens directly in the connection between banks and their clients. Banks do not make the most use of the vast amount of data they hold on their customers. They should mine these troves of data as effectively as companies like Google, Amazon or Facebook. Banks can agree with customers how they'll use their data – for example to improve service, give customers better financial advice and discounted deals on real estate, insurance etc. Banks should start by reviewing their digital strategies. Many banks will disappear because of competition from fintechs and competition between banks.

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Robert's experience at BearingPoint is mostly focused around financial services, including supporting banks, helping formulate business strategies and the optimisation of organisational structures and processes. A strong capital market focus includes experience of issues such as post-merger integration, both front- and back-office processes, product management, risk management and regulation.

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