



# Realizing tomorrow today

*Digital Reinvention in banking*

IBM Institute for Business Value

## **Executive Report**

### Digital Strategy

#### **How IBM Digital Strategy & iX can help**

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## Reimagining the enterprise

*Reports of banking's demise have been greatly exaggerated. Banking and banks are here to stay. However, the way banking is conducted – and at times who conducts it – is changing. Intense focus on cost cutting and efficiency is ceding to expansion and growth. But growth extends beyond traditional pursuits of new markets and customers. Leading bankers are now prioritizing creation of secure platforms and ecosystems. And these new capabilities rely on sophisticated digital technologies. By conceiving and creating the structures that define banking's future, banks are rethinking their roles and activities from the ground up and from the outside in. We call this process Digital Reinvention™.*

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## Not your grandmother's bank

The global banking industry continues its advance through a period of dramatic change. Navigating high levels of regulation, and political and economic uncertainty, leadership of major global banks continues to experience poor perceptions from the media and public alike. But traditional banks are by no means in a terminal condition. The underlying chain through which funds are transferred among economies is slow to change. However, the ways that banking is conducted and which entities actually perform banking transactions are both experiencing rapid evolution.

A majority of the global bankers we surveyed recognize the changes occurring around them. In a recent IBM Institute for Business Value survey conducted in collaboration with the Economist Intelligence Unit, 66 percent of global banking executives told us that their traditional value chains are being replaced. Fifty-seven percent concluded that the boundaries between the banking industry and other industries such as retail and telecommunications are blurring. And 61 percent said the competition they face is coming from new, unexpected areas.<sup>1</sup>

Technological innovation is occurring in and around banks at what many consider an alarming rate. The face of today's banking is changing, largely due to:

- Ubiquitous digitization, combined with pervasive mobility and cloud computing, major advances in artificial intelligence (AI) and cognitive computing
- A customer base in both retail and institutional segments that is dramatically more technologically sophisticated and demanding.



**66 percent**  
of global banking executives surveyed  
said that traditional value chains are  
being replaced<sup>2</sup>



**57 percent**  
of global banking executives surveyed  
tell us that the boundaries between  
industries are blurring<sup>3</sup>



**61 percent**  
of global banking executives surveyed  
see competition coming from new and  
unexpected places<sup>4</sup>

Confronted by such broad-based and dramatic change, the first instinct of many traditional banks has been to protect and defend. The rapid evolution of financial technology companies – known as fintechs – was often either ignored or attacked. However for many leading banks, this insular strategy is quickly giving way to a more accommodating strategy that is conducive to capturing, facilitating and expanding innovation. Leading banks are increasingly positioning themselves at the center of what are now referred to as banking ecosystems.

With their substantial experience and expertise in compliance and regulation, and with deep, broad customer relationships, banks are increasingly partnering with, investing in or purchasing the most successful and dynamic fintech insurgents. By doing so, banks increasingly play the role of ecosystem orchestrator. They create a platform, environment and governance through which third parties such as fintechs can engage, collaborate and innovate for the benefit of customers, ecosystem partners and themselves.

Having been stable for decades, if not centuries, the role of banks is changing. Traditionally, banks dominated all facets of their business. They accepted deposits and made loans with sophisticated risk modeling and assessment and channel management. In the institutional environment, a bank acted as trusted intermediary or service provider, and also as asset manager and market maker.

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With more organizations participating, innovating and competing in an ecosystem environment, the first effect is that banking activities are becoming more dynamic and specialized. In addition to orchestration, banks are increasingly acting as specialist (as opposed to generalist) service providers and intermediaries among customers, providers, buyers and sellers.

Second, banks are increasingly operating as distributors rather than originators. With channels and relationships built over decades, banks are expected to use their own channels to distribute innovative products built by ecosystem partners, in addition to themselves.

And third, also aligned with forces promoting greater specialization, banks are increasingly playing the role of asset or instrument factory, creating new products that are distributed through ecosystem partners, as well as on their own platforms.

As ecosystems continue to become more embedded in the psyche of bankers, they will increasingly manage transparent distribution of products and services on their own platforms – enabling them to create compelling customer experiences that offer competitive advantage.

## Propagating the platform

### **BBVA builds new business models in dynamic innovation platforms**

Spanish bank Banco Bilbao Vizcaya Argentaria (BBVA) is opening its customer banking data application programming interfaces (APIs) to ecosystem collaborators to build new products and services within its own platform. BBVA's Banking-as-a-Service (BaaS) or Banking-as-a-Platform (BaaP) approach promotes business model and product innovation and growth. BBVA also applies open innovation principles to identify and work with the "best of the best" in the world of fintech and digital banking, building industry-leading expertise in data analytics and emerging technologies like blockchain. BBVA has accelerated its shift toward digital through an organization-wide cultural change. In 2015, the bank promoted its head of digital banking to CEO and has been embedding pro-digital leaders at the highest levels of the organization.<sup>5</sup>

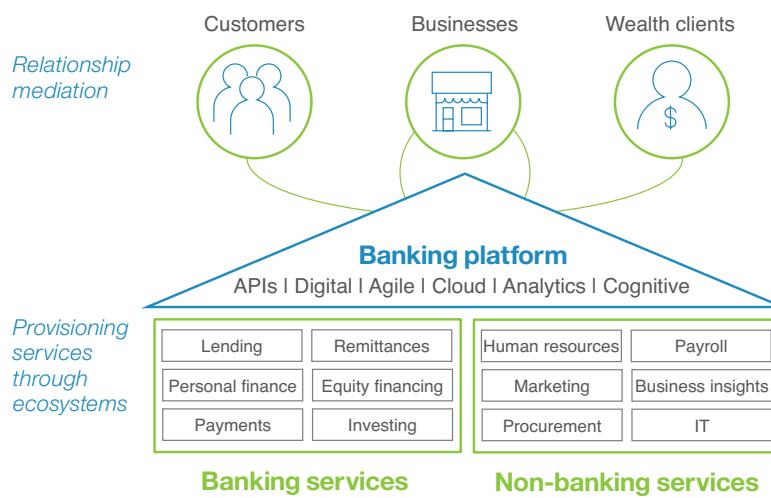
Deep data pools, and sophisticated AI and associated technologies characterize the future of banking and banks. And the data and tools to analyze it may be sourced from virtually anywhere in the world. Connecting disparate data types within and outside the bank to help motivate insights and decisions will be central to the success of banks and ecosystems.

The combination of traditional banking data – such as customer records, transactional systems and predictive models, among others – with externally sourced, often unstructured data – such as news and events, social media and communications, weather and geospatial data – affords a rich source of contextual information. And as captured data and the tools that analyze it become ever more sophisticated, banks that do not position themselves at the center of data-fueled ecosystems could find themselves at a distinct disadvantage.

By assuming responsibility for building open platforms of engagement, banks are able to pursue multiple strategic goals. They can:

- Mediate relationships among customers, businesses and clients within a frictionless, well-governed environment
- More easily integrate their products and services within partner activities and innovations
- Provide the tools, scale and scope to enrich, expand and deepen customer experience in new and unexpected ways (see Figure 1).

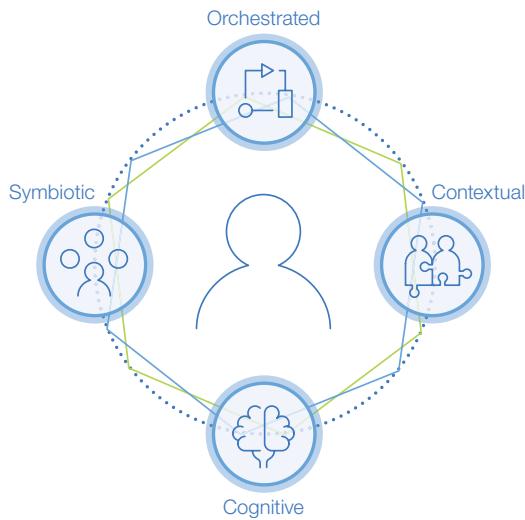
**Figure 1**  
*Building the banking platform*



Source: IBM Institute for Business Value analysis.

**Figure 2**

*The E2E economy consists of four elements*



*Source: IBM Institute for Business Value analysis.*

## You and me and E2E

The dynamic and disruptive environment in which banks and their customers find themselves can best be understood within the context of what we call the everyone-to-everyone (E2E) economy. The E2E economy has four distinct elements:

- Orchestrated, based on business ecosystems that are both collaborative and seamless
- Contextual, in that customer and partner experiences are calibrated and relevant to their specific actions and needs
- Symbiotic, in that everyone and everything, including customers and businesses, are mutually interdependent
- Cognitive, characterized by data-enabled, self-supported learning and predictive capabilities (see Figure 2).

The E2E business environment is deeply digital. And from the earliest days of computerization with the installation of some computers and development of electronic check processing in the 1950s, the banking industry has been at the vanguard of digital innovation.<sup>5</sup> Understandably, some large banking corporations are more characteristic of information technology businesses than a local or regional bank.<sup>7</sup> As computerization became more common, banking became ever more digital. Multibank electronic funds transfers became possible between accounts.<sup>8</sup> Advances in digitization also made automatic teller machines (ATM) pervasive following Barclays's 1967 installation of the first one in London, England.<sup>9</sup>

This incremental progression toward digitization reflects the first phase in the digital journey of banking: digitization through transformation of digital processes and finally Digital Reinvention.

Digital transformation in banking is more holistic and complete. It involves integration of digital functions or processes across the enterprise. By combining sets of digital systems and processes, digitally transformed banks are able to offer customers both individualized and

omnichannel experiences. Efforts to obtain a single view of customers, break down product or departmental silos, and enable cross-channel consistency are included within the concept of digital transformation.

Digital Reinvention of banking goes further. With the aid of digital technologies, digitally reinvented banking involves a fundamental reimaging of the way banks operate and engage with their customers and other stakeholders. Digital Reinvention at its most fundamental level reconceives banking using a customer-first or customer-centric perspective. It entails forming or redesigning actual banks and their ecosystem partners to most effectively deliver compelling, unique customer experiences (see Figure 3).

**Figure 3**

*Digital Reinvention follows a path from digitization through digital transformation*



*Source: IBM Institute for Business Value analysis.*

## Macquarie Bank reinvents itself as an open banking platform

Macquarie Bank, based in Australia, has invested in a slew of digital initiatives and is rolling out the Australian market's first open banking platform. It built a data layer between legacy systems and customers, and is applying advanced data analytics and machine learning to build a 360-degree view of the customer.

Powered by APIs, the "Macquarie open platform" will allow fintechs and other startups to plug directly into the Macquarie banking system to build and offer more relevant products and services to its customers.<sup>10</sup>

Applying concepts of Digital Reinvention to traditional banking value chains and banks can yield dramatically expanded benefits beyond traditional process reengineering and organizational redesign. Traditional approaches of efficiency improvement and cost reduction have characterized bank strategies over the past decade. These approaches are internal-looking and not conducive to customer expansion and revenue growth.

By contrast, Digital Reinvention is holistic, beginning and ending with what customers want and how they want it. It employs multiple digital technologies and approaches – including cloud, blockchain, mobile, the Internet of Things (IoT), AI, automation, DevOps, Agile and Lean, among others. Digital Reinvention is not tied to any particular technology, but rather is an approach that might encapsulate multiple innovative technologies – now or in the future.

For example, a prominent North American banking organization is improving its customer rewards program by using blockchain technology. The use of blockchain results in its customers enjoying real-time data about their rewards account and a much better user experience.

A European bank has launched a Facebook app that not only allows customers to perform most banking functionality on standalone applications, but supports creation of personalized cards with photos, as well as mechanisms that facilitate customers making micro-donations to charities most aligned to their interests.

And Turkey-based DenizBank is linking together its digital payment subsidiary fastPay with fintech start-up Qapel to launch an interactive TV quiz show. The show allows viewers to win Qapel cryptocurrency that is spent exclusively through the fastPay network, allowing DenizBank to acquire new customers and increase transactions on its network.<sup>11</sup>

## Readyng for reinvention

For successful Digital Reinvention, banks need to pursue a new strategic focus, build new expertise and establish new ways of working (see Figure 4).

### Pursue a new focus

Banks and their ecosystem partners need to continue developing more secure ways of creating compelling experiences, building and hardening platforms and monetizing new value opportunities. Initiatives might include spawning new business models, tapping new forms of financing and developing better, more holistic ways of conducting risk assessments. Leaders will also need to create deep, AI-enabled contextual capabilities.

### Build new expertise

Banks should also continue digitizing processes, functions and activities enterprise-wide, where it has not been done already. Analog or manual processes are not conducive to efficiency or agility. Banks can pursue new forms of intelligent automation that are fully integrated into operations. Reconceived processes will need to be flexible and agile. To the extent allowed by regulation, these new processes will need to support individualized experiences, and ecosystem connectivity and transparency.

### Establish new ways of working

Banks should identify, assemble and retain the talent necessary to create and sustain a highly digital organization. It will be essential to create, embrace and perpetuate innovation within the bank and across the ecosystem. Innovation-infused culture will inevitably incorporate design thinking, agile working and fearless experimentation.

### Adopt a self-funding approach

To protect and expand their platforms, banks will need to deploy new technologies quickly and in ways that support scalable growth and sustainability. They will need to use the latest digital tools to optimize operations and increase earnings which can, in turn, be used to fund additional investment in innovation and growth.

**Figure 4**

*The Digital Reinvention operating environment revolves around new experiences*

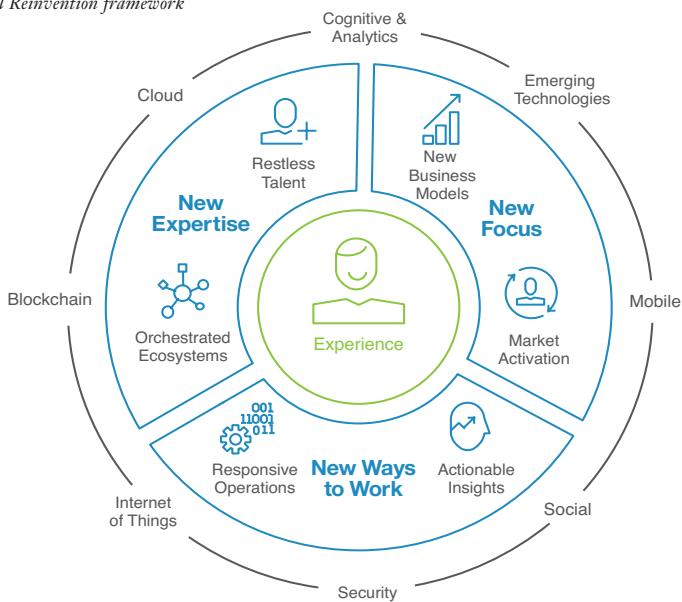


*Source: IBM Institute for Business Value analysis.*

### Embrace digital drivers

Banks will also need to remain digital leaders. Technology underpins platforms and ecosystems, and it is foundational to the creation of the reinvented customer experiences. Embracing Digital Reinvention rather than incrementalism provides a pathway for the most visionary banks to adopt an “experience-first” planning approach, employing the strengths of ecosystem partners and themselves (see Figure 5).

**Figure 5**  
*Digital Reinvention framework*



*Source: IBM Institute for Business Value analysis.*

## Deep dive on digital

To set out on the path toward Digital Reinvention, banking industry leaders can take four initial steps.

### **Step 1: Envision possibilities**

Conduct envisioning sessions based on design thinking to produce a definitive reinvention blueprint. Through deep conversations and in-depth marketing analysis, develop a better understanding of customer needs, aspirations and desires. Brainstorm new ideas to enhance engagement and visualize unexpected customer scenarios. Incorporate external stakeholders, including customers, in these sessions to encourage thinking that goes beyond business as usual.

### **Step 2: Create pilots**

Develop prototypes using agile development, test them with customers and get them to market quickly to promote feedback and iteration. Establish communities of interest to create “safe” environments to beta test innovations and include them as a central part of design and development processes.

### **Step 3: Deepen capabilities**

Augment digital capabilities with strategic initiatives. Continue to build and deploy necessary applications aligned to the targeted Digital Reinvention operating model, platform and ecosystem strategy. As pilots evolve, impediments to development will emerge, highlighting limitations in existing capabilities. Enact a continuous, iterative strategy to address limitations by building new or extending existing capabilities.

### **Step 4: Orchestrate ecosystems**

Embrace a strategy based on holistic reinvention rather than a series of point solutions, maintaining a clear focus on deep needs, aspirations and desires of customers, clients (such as partners) and colleagues (such as service providers). Use ecosystems to expand and align a broader set of capabilities and to help create and deliver on customer promises.

### **solarisBank is a tech company with a banking license**

Founded in 2016 and based in Berlin, solarisBank is a banking platform with a full banking license.<sup>12</sup> Through its technology platform, it allows startups and other businesses to offer various financial services. Partners can access solarisBank software modules in e-money, instant credit and digital banking, as well as services from third-party providers integrated on the platform via API. Autoscout24, Europe’s largest online car marketplace, integrated solarisBank rapid credit onto its platform to offer instant loans to buyers and significantly reduce the barriers to purchase, increasing deals and activity.<sup>13</sup> solarisBank also acts as a regulatory banking and technology partner to fashioncheque, Europe’s largest gift card issuer in fashion and textiles, which previously would have required an electronic money license to operate.<sup>14</sup>

## Key questions

- How can you make your digital strategy ambitious enough to deal with disruption?
- How do you make your bank more agile and secure, so it is better equipped to respond to unexpected challenges and opportunities?
- What steps can you take to make your banking workforce open and flexible, and more risk-aware?
- How can you help your banking leadership become more visionary, conceiving what customers want before they know it themselves?

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