

CIOs at the epicenter of the digital revolution

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While cyber security and operational resilience will continue to be a priority for CIOs, this cannot reduce the need to improve agility and drive innovation.

— **Phil Crozier**

The banking industry is going through one of the largest transformations in its history. Traditional banks are not only dealing with increasing competition from fintechs and technology giants trying to take market share away from banks, but also the rising pressures from new and increasingly complex regulations worldwide.

Bank Chief Information Officers (CIOs), with their oversight of core banking and back-office systems, find themselves at the epicenter of this digital revolution. They face a two-sided challenge: they must keep the legacy technology operational to maintain current revenue streams, while simultaneously pushing the organization to innovate to remain relevant in the years to come.

These internal and external pressures result in a driving need for innovation. According to the *2017 Harvey Nash/KPMG CIO Survey*, 63 percent of banking respondents indicated that “developing innovative new products and services” was among the top five key business issues their management board are looking for IT to address — noticeably above the average of 51 percent across all industries.¹

Managing conflicting pressures

Despite the clamor within the banking organization for innovation, additional

factors work to monopolize the CIO’s time, attention and budget. Banks and other financial services organizations looking to implement digital capabilities face greater challenges from compliance and related legal issues than do corporations in other industries. Forty-five percent of respondents indicated that “dealing with legal and regulatory compliance issues” was among the top five greatest challenges their organization faced in successful implementation of digital capabilities.²

Key regulatory issues around risk and control loom large in many CIOs’ windshields, diverting attention and budget away from the drive to innovate. The resilience of technology has become a significant issue for many CIOs, with concerns increasing around the risk of systemic failure, security breaches and customer impacts from major tech outages. These factors push many banks into a mindset of safety and protection, which is essential but can also have the effect of stifling the agility needed to spur innovation.

Forging a path forward

Despite current challenges, banks remain well positioned to compete with fintech startups and large technology players — if they act quickly. Many of the fintech innovations in the market today focus on front-end innovation, providing a digital interface between a customer and existing core banking systems. Yet as technological

¹ *Harvey Nash/KPMG CIO Survey 2017*, KPMG International, 22 May 2017, kpmg.com/ciosurvey.

² *Ibid.*

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change pushes towards mid- and back-office functions, CIOs must make significant moves to innovate while banks still hold customer trust and market share.

CIOs should consider the following three steps on their route forward:

1. Keep innovation separate for traditional, large-scale delivery.

Given the current pace of technological change, CIOs need to be in an 'act fast mode' and create an environment to test new services and digital technology outside of the core banking system. This provides the freedom to iterate quickly and prove the effectiveness of a new service or system, before bringing that service into the main business.

2. Minimize integration between legacy systems and new technology.

Look to develop agile platforms as core strategic assets to enable digital delivery, with minimal legacy integration for the sharing of data, through cloud and middleware technologies. Understand, too, that the future of banking will see the mid- to back-office functions becoming completely digital and automated, powered by technologies such as AI, big data and blockchain. This prospect presents a significant opportunity for banks to rethink their business with a digital focus and use technological change as a catalyst for innovation throughout the organization.

3. Create greater flexibility through business collaboration. A new business model is required to support innovation, with closer alignment between business, operations, marketing and IT. As innovation becomes increasingly critical to banks' strategic direction and profitability, CIOs and other business leaders must collaborate earlier versus downstream when critical business decisions have already been made.

Technology to advance the customer experience

Traditional financial institutions are now in the position where they can form a relationship with startups and technology companies to

develop innovation that not only improves back-end efficiencies and reduce costs, but also provides customers with the experience they have come to expect.

A step-by-step approach that includes the three stages cited above requires having a clear understanding of the specific needs or problem to solve in order to design a solution that addresses the business need.

Once the appropriate solution is developed, instead of widely deploying and trying to integrate it into existing systems, banks need to take a page from how startups introduce new products. New technology should be treated as a proof of concept, to be tested in an environment that's separate from the main legacy system and main IT and operations systems. Once solutions show promising signs of market scalability, they can then be brought into the firm to integrate with legacy systems, if possible to do so. If not, the CIO needs to devise a new approach to host and maintain the solution and underlying technology.

Driving cultural change at an organizational level

Despite the excitement around innovation within the banking industry, internal stumbling blocks nonetheless bar the way forward. The traditional culture fostered within banks is often at odds with what is needed to drive and deliver agile innovation consistently and at scale. Thus, the digital evolution is as much about pushing for a change in banking culture as it is about technological innovation. Banks should seize this opportunity to rethink their culture and governance model to become more like a startup — nimble, constantly experimenting and iterating, and launching products quickly — while delivering production services in a resilient environment.

However, innovation cannot be driven by the CIO alone. Though the CIO has a role of significant influence, innovation must also be within the CEO's purview. As banks look to remain relevant in an increasingly competitive digital environment, every department needs to look for opportunities to innovate and drive digital transformation or be left behind.

As technology pushes the industry forward, banks must evolve their digital capabilities to meet changing customer needs and expectations. By using a three-stage approach that embraces agile innovation and pushes for change throughout the banking organization, the CIO can help drive the bank to new heights of success. ■



Innovation should be distributed across all key stakeholders in the organization. It's not only the CIO's responsibility, but also that of the CEO. ”

— Safwan Zaheer

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