Technology reshaping banking

In the past decade, technology has completely transformed banking. Over the next decade, it will continue to do so.

While we don't anticipate many banks making the investment to replace their legacy core banking systems any time soon — in the past decade, barely a handful of banks have re-platformed — we do believe that achieving a digital and technology transformation will require continued investment in middleware. This is critical to drive efficiency, productivity and speed to market. However, to ensure real change, this investment must be strategic rather than solely for tactical fixes.

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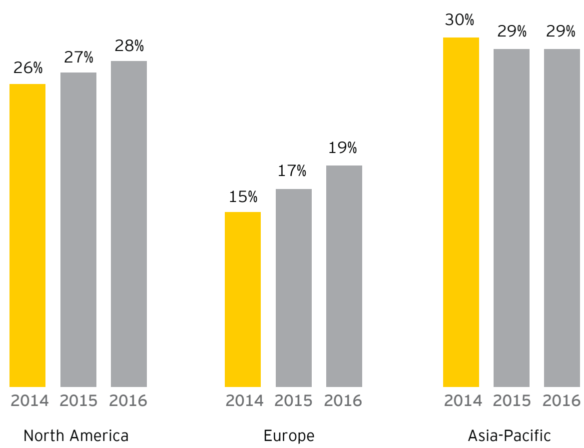
Building a better working world

Figure 1: Bang for buck will be critical — spend on new investment (% total IT spend)



Source: Celent, 2014

With only 24% of global IT spend going to investment (less than 20% in Europe), the choice of where to invest will be even more difficult (Figure 1). Nevertheless, it is clear that technology will not only reshape the experience of banking customers, but will revolutionize institutions' internal processes, making them more efficient and more productive.

Reshaping the customer experience

Many of the changes banks must make to the customer experience will be driven by the growth in mobile and smartphone ownership, which are transforming customer expectations. Mobile payments have already transformed financial services in some emerging markets, where mobile phone ownership significantly outstrips penetration of bank accounts. In fact, in some emerging markets, ownership of smartphones is already beginning to exceed bank account penetration. It is only six years since apps first appeared on mobile devices, and customers now expect to be able to check their balance and make transfers through their phones, at the minimum. Online banking has evolved too — with some banks even offering banking services through Facebook.

Customer expectations have moved beyond "omni-channel" — which has generally been seen by banks as a more consistent multi-channel strategy. They now want to interact with their bank whenever they want, however they want, and wherever they want, and to be able to shift seamlessly between channels. Customers want a ubiquitous experience. In the next decade, we expect to see banks increase their investment in social media as this becomes a more common route to interact with banks. We expect technologies like check and card imaging to become commonplace. We also believe multi-day cycles for re-issue of checkbooks or cards will no longer be acceptable. While some newer, more efficient institutions already have the capability to issue checkbooks and cards in-branch, the evolution of technologies such as digital printing may eventually enable customers to issue their own cards at home — if cards have not been usurped by mobile wallets.

In fact, with smartphone penetration across a sample of 48 developed and emerging markets at almost 45% (up from around 27% in 2011),[1] mobile wallets may become the primary way customers access their bank accounts. At their most advanced, they could offer a single gateway to access multiple accounts across multiple banks. Increased use of smartphones, combined with contactless technology, will potentially transform remittances — for which combined transaction fees and exchange rate margins can still cost more than 10%. They will also transform cash management in these markets. Should mobile wallets with enhanced biometric security become the norm, the cost of obtaining banking services in emerging markets will be dramatically reduced and penetration rates significantly increased.

However, it is not all about a shift to digital channels. While we expect self-service machines to replace cashiers and mobile wallets to become commonplace, we believe branch staff will still have a critical advisory and sales role. EY's *Global Consumer Banking Survey 2014* highlights that while digital channels are the most frequently used, they are principally for transactional banking. Customers still rely heavily on personal branch staff for advice, buying and selling investments (Figure 2).

1 *2013 Our Mobile Planet Smartphone Research*, http://think.withgoogle.com/mobileplanet/en/about-the-data/.

Nevertheless, the roles of branch staff in retail banking, as well as relationship managers in commercial, corporate and private banking, will be transformed by technology as tablets are increasingly used to deliver their training, provide customer account information and to ensure they stay within a pre-determined sales process. In such instances, technology will not replace people; it will enhance their capabilities and change the ways customers and staff interact.

Critically, as customers expect greater real-time services, some improvements will require cross-industry collaboration. We believe some of the greatest investments will be in real-time payments. The recent advances in mobile payments mean more customers expect to be able to transmit funds instantaneously. However, these mechanisms only support relatively small transfers. We believe banks in a number of countries will make significant investments to develop real-time, high-value, customer payment.

Better use of customer data will also transform the customer experience. Banks will be better placed to understand customer needs and behaviors. They will have greater connectivity with customers who, EY's *Global Consumer Banking Survey 2012* revealed, would be more willing to give more data to their bank if it led to their being offered more suitable products. With mobile banking apps potentially having access to GPS data, banks will in fact be able to offer personalized, real-time and location-based offers to their customers (see "The quest for growth").

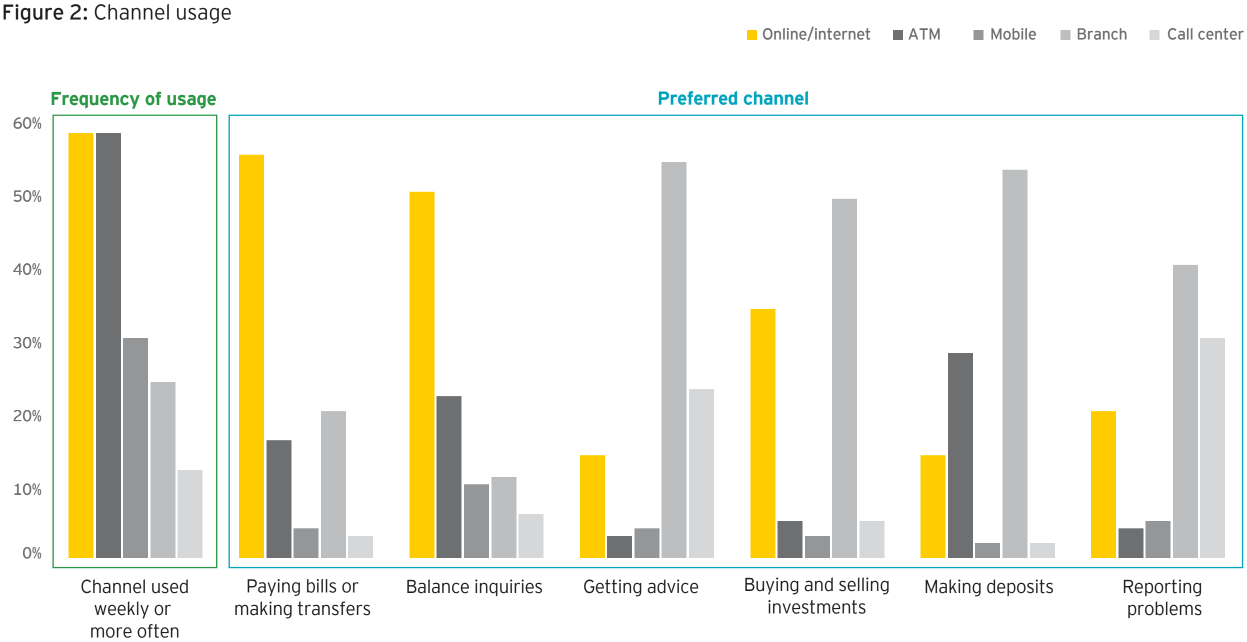
Reshaping banking processes

Changes in customer expectations will force banks to invest in their core systems and processes to make them fit for purpose. But technology spend will not only be driven by customers. Banks will need to make some tough choices about investment priorities.

Banks will deploy a raft of new technology internally. For example, we anticipate increased automation and digitization of processes, reducing the need for manual intervention. We expect greater use of "gamification" to help banks improve governance, and increased use of monitoring and surveillance tools to reduce conduct-related risks. Similarly, the deployment of digital tools such as tablets will help monitor and ensure adherence to sales processes and reduce the scope for misconduct.

Banks will also transform the way they use data internally as they respond to demands from multiple sources. Teams in banks

Figure 2: Channel usage



Source: EY *Global Consumer Banking Survey 2014* increasingly need more and better-quality data to drive decision-making — whether around resolution of customer issues or internal risk management issues.

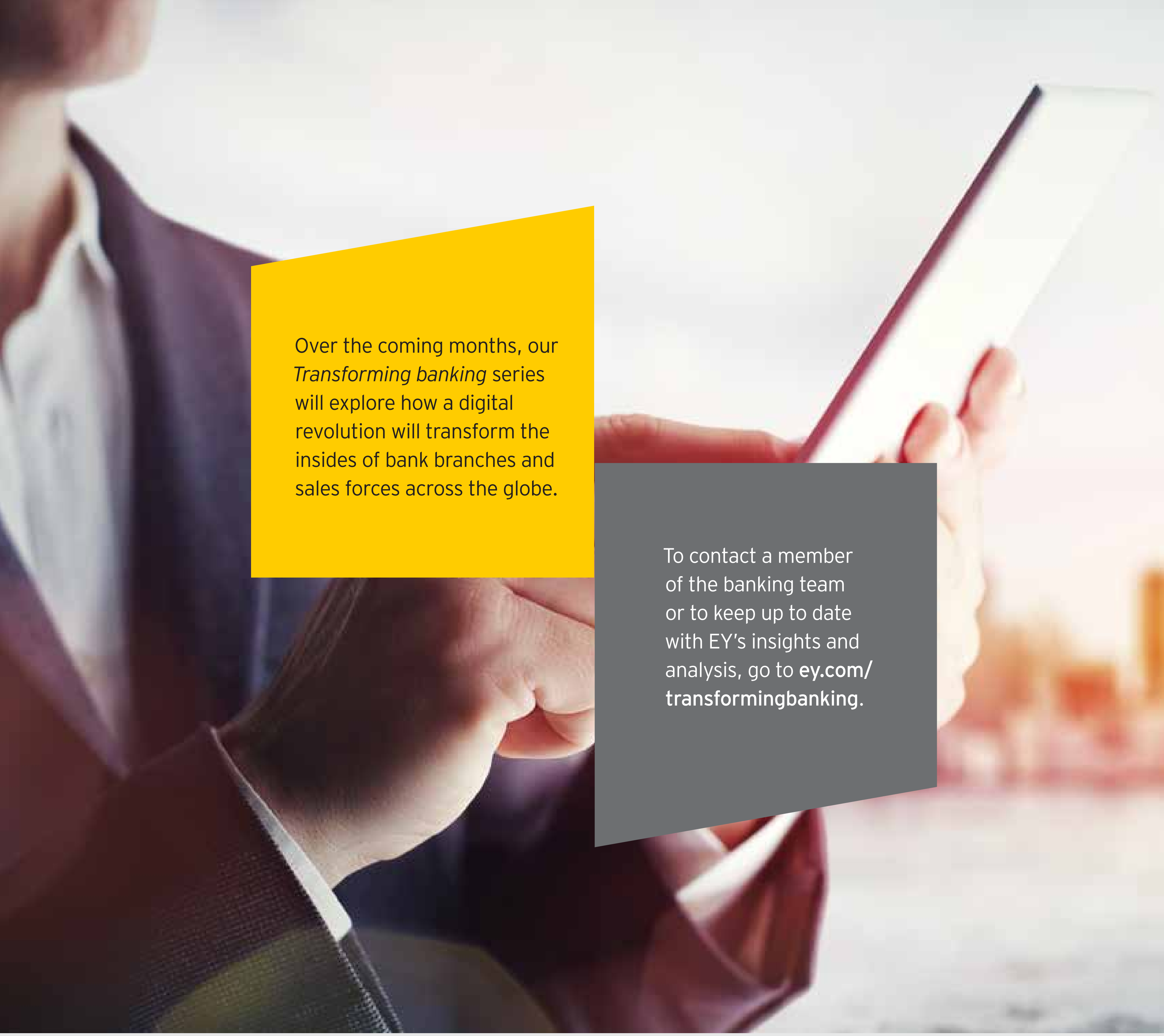
Data will be particularly important in dealing with cybersecurity issues, which our *European Banking Barometer 1H14* revealed as a top-three priority for major banks. EY's *Global Forensic Data Analytics Survey 2014* showed that 72% of respondents believed big data technologies had a role to play in fraud prevention and detection — but only 2% are already using them (Figure 3).

Figure 3: The importance of big data

Source: EY *Global Forensic Data Analytics Survey 2014*

At the same time, banks are facing increased demand for data from regulators, for example, for the recent Asset Quality Review in Europe, or for the Comprehensive Capital Analysis and Review in the US. Institutions are being asked to make increasingly frequent submissions of increasingly granular data. It has been argued by many that banks should look beyond merely complying with regulations to using these requirements to their advantage to support changing internal processes. To date, the volume and lack of clarity of regulatory change, combined with the cost of dealing with the aftermath of the global financial crisis, have made this difficult. As most post-crisis regulation becomes business as usual, banks will finally be better able to think strategically about how to transform their internal processes and how technology and data will help them do this.

It is clear that technology will reshape banking over the next decade. The challenge for the industry is to shift the balance of technology spend between maintenance and investment to drive internal change and protect against non-traditional competitors.



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