

# Digital banking in a post-app era

by David Rimmer



## Contents

The digital landscape in the post-app era	2
Contextual commerce	2
Platforms	2
Smart agents	3
Harnessing the opportunities	5

## Digital banking in a post-app era

In the constant noise about financial technology (FinTech) disruption, it is increasingly difficult to identify and understand the really significant trends.

### The digital landscape in the post-app era

One trend to watch is the “post-app era”, which Gartner defines as: “... a world where mobile apps will be joined by many alternative approaches to providing functions and experiences for mobile users, and rewards for developers and service providers.”<sup>1</sup>

Given that the centrepiece of most banks’ digital strategies is the mobile banking app, this heralds a marked about-face. At first it may sound like a purely technical issue; it is not.

In the post-app era, every aspect of a bank will have to be rethought — just as the entire music business was reconfigured for the era of music streaming via platforms such as iTunes, Spotify and Tidal. Banks have gone through the first stage of digitisation, akin to replacing vinyl with CDs and selling CDs online; they now need to fully digitise their business.

To see why, we need to start with a picture of the digital landscape in which banks and their customers will reside, with a focus on three particular trends: contextual commerce, platforms and smart agents.

### Contextual commerce

In retail, the term “contextual commerce” is used to describe a pervasive trend where shopping opportunities are embedded in customers’ digital lives so they can buy anything, anywhere, anytime. Purchasing information is triggered by the context of what customers are doing and where they are: What have they searched for? What have they purchased? What are they chatting about? What’s the time of day? How’s the weather?

Context is derived from online tracking tools, GPS, WiFi, beacons and “things” connected to the internet of things (IoT). In the same way, financial products will be marketed and purchased in the context of customers’ digital lives, though with the additional spin that the trigger often will follow the purchase of another product. For example, customers may purchase holiday insurance as an add-on to a trip, or a customer who buys a mobile phone may also take out a loan. This reflects the reality that for customers, financial products are a means to an end, not an end in themselves. Nobody really wants travel insurance; people just want an enjoyable and worry-free holiday.

### Platforms

The natural venue for contextual commerce consists of the networked markets created by platforms such as Google, Amazon, Apple, Alibaba, eBay and Facebook. That’s because this is where customers will live their digital lives and where companies will come to sell their products.

1. “Defining Mobile Solutions in a Post-App Era” by Gartner analyst Marty Resnick.

Everyone is talking about the platform revolution — where producers and consumers are matched in a multi-sided marketplace and network effects create a virtuous circle that attracts ever more producers and consumers to the platform. However, by definition, not everyone can be a platform. The reality is that no bank comes close to the 2 million third-party merchants that sell through Amazon, the 247 million U.S. unique visitors who use Google or the more than 50 minutes that the average Facebook customer spends each day on his or her suite of apps.

Moreover, platforms have an additional advantage, since many of their apps — such as geolocation services and chat, including WeChat and Facebook’s WhatsApp — are the likeliest to be left running live. This makes them best-placed to understand and act on context.

The upshot of the platform revolution is that, with one exception (see below), banks will, in a literal sense, be the last place consumers will go for their banking. This applies not only to a physical bank but also to banking websites and apps, because the trigger for customers to purchase an item and add on financial products will come through the platform.

For the banks of the past, it was essential to have a *physical* presence on High Street; for the banks of the future, the critical presence will be on the *digital* High Street, which will take the form of one of the platforms. A shopping mall may be a better metaphor, since platforms will have a stronger say about what gets sold, and how, inside their “shopping malls” — more influence than any single company has in a physical location.

Of course, one complication is that the platforms themselves offer basic transactional banking services such as payments, foreign exchange and even credit cards in the case of Amazon, with its “5% off” at Amazon.com. In this sense, the platforms will be competitors to banks. But transactional services have already been commoditised because so many new players can enter the market by piggy-backing on existing banking infrastructure. ApplePay is probably the most prominent example.

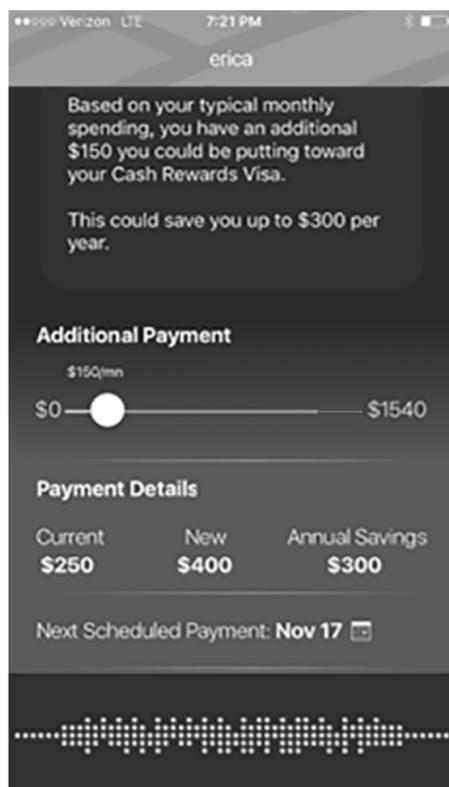
This commodification will be hastened by the EU’s Second Payment Services Directive (PSD2) and the UK’s Open Banking, which will allow any type of organisation to initiate payments and provide services based on aggregated transaction data.

Banks should be planning to move up the hierarchy of customer needs and provide more value-adding services focused on money management. They should regard platforms more as distribution channels than as competitors — in fact, as the *principal* distribution channel.

## Smart agents

A third technology trend consists of using smart agents and virtual private assistants such as Google Now, Cortana, Siri and Alexa. These are predicted to become the primary interfaces to platforms. Customers interact with smart agents through voice recognition and chatbots. In addition, third parties such as banks can integrate with smart agents to give their customers a voice or chat interface to products and services.

Smart agents will accompany us everywhere, not just at home and in the workplace but even in our commute to work. For example, Ford is already incorporating smart agents in new models. The use of smart agents for voice will become pervasive for all devices, but above all for mobile. After all, mobile phones are designed for talking and listening. As a result, Gartner predicts that by 2020, smart agents will facilitate 40% of mobile interactions.



from Bank of America

**Figure 1.** Example of a smart banking agent mobile device screen from Bank of America

An early example of a smart banking agent is Bank of America's Erica, a play on the bank's name. Erica will act as a "personal advocate" to help consumers adopt better money-management habits. Customers can chat with Erica via voice or text message. For example, Erica might send the customer a text that reads, "Michelle, I found a great opportunity for you to reduce your debt and save you \$300."

If Michelle wants to learn more, she can ask Erica and learn that: "Based on your typical monthly spending, you have an additional \$150 you can be putting toward your cash rewards Visa. This can save you up to \$300 per year." The customer can then use a voice command to go ahead with the new instruction.

Under the covers, Erica is driven by artificial intelligence and predictive analytics. Customers can access Erica through Bank of America's banking app, but it's expected that in the long run, customers will not use a separate banking smart agent when all day every day, they interact with the smart agent of their preferred platform — one that is trained to recognise their voice and understand their preferences. The strategy for banks will be to integrate with platform smart agents.

## Harnessing the opportunities

The digital landscape of contextual commerce, platforms and smart agents has profound implications not only for digital banking but also for how banks market, distribute, manufacture and monetise financial products.

**Partnerships:** The trigger for customers to purchase an item and add on financial products often will come through platforms. That's why banks will need to form partnerships with retailers, telcos, travel companies and other companies that will sell their wares through platforms.

Banks will also seek to create new joint offerings with partners, not just distribute today's products. In a fully digitised business where products are purchased and supplied on demand and where manufacturing costs are lower, all sorts of new products and services become possible. For example, loans and insurance can be linked to any digitally purchased product and pay-as-you-go products triggered by any IoT-connected device. To paraphrase George Westerman of MIT, true digital transformation is about turning caterpillars into butterflies, not just making faster caterpillars.

**People use apps, machines use APIs:** To make banking services accessible to platforms and partners, banks will need to expose application programming interfaces (APIs) that enable developers in or outside the bank to write code that exploits bank data and services. The API may push marketing messages, supply information about a customer's transactions, initiate a payment or make a transaction, writing back to a bank's core system.

The point here is that although people use apps, machines use APIs. Because the new digital landscape is characterised by machine-to-machine (M2M) interactions, APIs will become central — whether to communicate with an IoT sensor, a chatbot linked to a voice interface or a platform's electronic marketplace. This model has already emerged in industries such as travel, where distribution has moved overwhelmingly to digital channels. As an example, DXC Technology enabled an airline's customers to search and book flights via Facebook Messenger, where the customer's chat is the trigger for an advertisement and flight booking.

**Money management platforms:** Apps will not disappear completely — the term “post-app era” is too absolute — but the prominence of apps will decline sharply as services shift to M2M interactions served by APIs. Moreover, the bar for the banking apps that remain will be raised.

To persuade consumers to “come direct” by downloading and accessing banking apps, banks will have to offer a much richer set of services than commoditised transactional banking. They will need to offer “money management” services such as budgeting, Erica-like financial management and help with longer-term financial goals. To extend the earlier analogy, if you want customers to drive past their usual shopping mall and come to your standalone, out-of-town store, it had better be outstanding and offer many products that consumers can’t get at the mall — and with exceptional service.

In this instance, the aspiration to become a platform in the shape of a financial management marketplace makes sense — with banks aggregating money management services spanning every aspect of their customers’ financial well-being. Third parties will look to banks as being logical distribution partners for their products; the trick for banks will be to create the right mix of in-house and partner products.

**Multi-sided business models:** A characteristic of platforms is multi-sided business models. Today’s banking models are one-sided — where a bank sells directly to a customer — or two-sided, with brokers and comparison sites sitting between banks and their customers.

In the future, business models will often have three sides or more, with a platform, a retailer, a bank and the customer. Here, monetisation becomes a complex question. For example: How much is a bank prepared to pay to be introduced by a retailer or a platform? What happens if it is the bank that makes the introduction to the retailer? What if a product such as holiday insurance has a low margin but brings with it the chance to establish a relationship with a new customer?

The most expensive ad word on Google is “insurance” at the cost of US\$54.91 per click. Is it worth it? I doubt if many banks have the required level of expertise in pricing algorithms to consistently reach the right answers.

**Truly mobile banking:** In contextual commerce, the mobile element is critical — for example, someone is at a given place at a specific time, at the check-out screen about to buy a camera and wanting a loan. Few of today’s mobile banking services are intrinsically mobile; they are standard banking services that just happen to be accessed via a mobile device.

Mobile banking services will have to be personalised not only to a customer but to a customer at an exact place and time. So banks will need much more sophisticated analytics that they can run in real time.

At a technical level, banks will need the ability to exploit bi-directional APIs, where an external API communicates in real time with a bank API, allowing data to flow in both directions. An example is where a customer’s online action alerts the bank to a customer’s presence, and the bank is able to push offering information and respond to the customer’s action in the same session — recording the outcome of the “conversation” in the bank’s customer relationship management (CRM) system.

**About the author**

**David Rimmer** (david.rimmer@dxc.com), director of innovation, DXC Technology, is responsible for strategy and innovation in DXC's UK banking business, where his role is to assist banking clients in competing successfully in the digital economy. Previously, he managed HPE's business with challenger banks and building societies. With a background in consulting at A.T. Kearney, he has worked with numerous clients to design and execute multi-year transformation programmes. David has managed three start-ups, including Europe's first stock-lending platform (now part of NYSE Euronext) and an artificial intelligence software company in France.

**Learn more at**

**[www.dxc.technology/banking](http://www.dxc.technology/banking)**

**The hardest change of all — complete digitisation of operations:** To support the full range of real-time digital interactions expected, it will not be enough to automate only the front end. The complete digitisation of operations is required, or the seamless customer experience will be derailed at the first manual step.

Products will have to be digitally manufactured, compliance checks automated and embedded, IT infrastructure spun up in real time, and many management decisions performed digitally. Not hitting this month's profit targets for holiday insurance via tour operators? Then automatically set up a randomised test to see whether the higher volumes from a cheaper white-label product outweigh the increased margins of an own-brand product. When you get the answer, you can instantly apply adjusted pricing across all digital channels

## Conclusion

Three key features in tomorrow's digital landscape are contextual commerce, platforms and smart agents, all of which are characterised by machine-to-machine interaction. Since machines use APIs rather than apps, banking is inevitably entering a post-app era, or at least a decreasing-app era. For banks, this will bring change across every aspect of the business, from products and pricing to manufacturing, distribution and marketing.

Of course, this requires new capabilities, but perhaps more challenging will be the need for a different mind-set around what a bank is and what its position in the digital landscape should be.

**About DXC Technology**

DXC Technology (NYSE: DXC) is the world's leading independent, end-to-end IT services company, helping clients harness the power of innovation to thrive on change. Created by the merger of CSC and the Enterprise Services business of Hewlett Packard Enterprise, DXC Technology serves nearly 6,000 private and public sector clients across 70 countries. The company's technology independence, global talent and extensive partner network combine to deliver powerful next-generation IT services and solutions. DXC Technology is recognized among the best corporate citizens globally. For more information, visit [www.dxc.technology](http://www.dxc.technology).