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How technology is shaping next-generation banking

As more challengers rise in the financial services industry, and artificial intelligence levels the playing field for banks and start-ups alike, humanising technology becomes increasingly relevant.

Creating a space where technology can seamlessly integrate a superior customer experience with increased data security requires new approaches to digital transformation and technological innovation.

As advances in technology have always been coupled with managing and securing bank-controlled IT systems, financial institutions have historically been at the forefront when it comes to the adoption of new technology.

However, while banks guard their systems and data closely, new regulations will see them releasing their hold on customer data through core system application programming interfaces (APIs) that have the potential for exploitation by third parties.

Seeing a new financial product or service advertised on Facebook or Google, and being able to buy into it quickly and easily through a subtle, yet stringent, authorisation process – without being routed through a bank's online platform – may seem impossible today. However, fuelled by exponential developments in the technology arena, customer needs, and the drive of regulations to deliver a healthy consumer economy, this kind of interaction could soon become the norm.

‘The open banking revolution should put the customer at the heart of banking interactions.’

– Chris Ibbitson, Enterprise Architect - Financial Services at Dimension Data

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Regulation driving innovation

By 2018, the revised Payment Service Directive (PSD2), will require banks throughout Europe to enable controlled access to customer data while enabling transactions through third-party service providers.

Far more involved than a series of checkboxes for banks to tick, PSD2 requires a change in how services are offered to customers. With 2017 acting as the crunch year for banks to ready themselves for compliance with PSD2, the adaptability of those who rise to the challenges and opportunities will become apparent.

Following similar timelines to PSD2 is the UK Open Banking initiative, which requires banks to allow customers to be able to share their data securely with other banks and third parties, ultimately providing customers with the services they want, where and when they want them. This move to an easier, more systematic form of interaction will see a much-needed break away from traditional banking practices which often require time-consuming, manual processes.

The upcoming Open Banking revolution is centred on transparency and innovation, and has been initiated to drive competition, which is good for customers, as it results in better services at lower prices.

With third-party APIs able to offer solutions and services as unique as customers themselves, the move to Open Banking can be likened to Apple's strategy in opening the iOS platform to approved developers APIs. Not every app in the application store is built by Apple themselves, yet they have still been able to offer their customers an abundant supply of games, tools and services by permitting third-party access to their development platform. The strict standards and checks Apple has enforced for third-party APIs has encouraged innovation without degrading their platform's – or their customers' – security.

As an example, ING recently launched Yolt, a free money management app. Yolt gives their UK customers an overview of all their bank accounts in one place, as well as their spending habits, effectively equipping customers with actionable insights.

The intention behind the app was to enable customers to better manage their money, regardless of the banks and other financial services they use.

The solution is built using open APIs in partnership with a number of FinTech start-up companies.

Going forward, banks will maintain security around customer data, but third-party APIs will be given authorised access to the data they need if a customer allows it. Thus, banks could be seen as fulfilling the role of a new kind of platform, which will empower the safe use of third-party services to meet the financial service demands in a fast-changing world.

Digital transformation

Digitalisation within banks could be seen as business as usual; however, the new regulations coming into play, such as PSD2 and Open Banking, are forcing banks to transform how services are offered. Concepts such as cloud computing and software-as-a-service are becoming the norm. Unfortunately, what is often forgotten in any transformational journey, is that culture is key to ensuring any change is a success. People must not be forgotten as they are crucial to any digital journey.

Since the emergence of FinTech companies, the view has been that they are competing with traditional banks. However, the recent noise around FinTech unicorns – start-ups worth over USD 1 billion – has eclipsed the truth that there is space for both traditional banks and start-ups who have set their eyes on the financial services space.

Many FinTech leaders come to the table with great products, but those products are only a small part of the financial services puzzle. Realistically, the requirements for the future of banking – from both customers and regulatory authorities – will call for a new approach in which FinTech companies work with banks to solve problems for customers.

This will see technology being used purposefully, instead of the old-school thinking of tech for tech's sake. It's no longer good enough to have the best and latest technology. Technology must be useful, and help relieve the stresses and demands placed on customers and staff – not only for millennials, but across every generation. Uptake of technology in this way is the only way to ensure a true digital transformation.

Artificial intelligence – friend or foe?

While Apple's Siri and Amazon's Alexa have brought nearer a future in which we will see artificial intelligence (AI) becoming more mainstream, it's important to remember that AI isn't new.

Rather, AI is maturing and becoming more personal. Innovations in AI will blur the lines between using a tool and interacting with a service provider, equipping customers with seamless services.

Just as the futuristic idea of a driverless car is becoming a reality, so AI has the potential to improve our experiences across all industries.

In banking, Nationwide* is looking to use AI to optimise human interactions – not replace them. AI has been harnessed to help banking staff make decisions more quickly and accurately, providing customers with advice they may otherwise have had to wait for. As such, artificial intelligence has bridged the gap between customers and trained staff experts who may have limited availability.

Another example is HSBC's proposed robo-advisor, Online Investment Advice**. Built with customers who have moderate incomes in mind, it will allow customers to provide information on their financial situation and their needs, and give customers the best possible investment options available to suit them.

Looking ahead to other applications, AI could further be exploited to improve the customer experience, including using emotional cognitive intelligence where a 'bot' could read a person's face to see that they have a quizzical look and need help, and then provide proactive solutions based on customer interaction. Another future use-case is as part of Social Robotics, which could be used in branches to provide data on how much time a customer spends looking at a poster, which area of the poster their eyes concentrated on, and even their expressions as they did so. All this information can be used to offer banking staff suggestions on products that may assist that specific customer.

One of the key challenges facing AI is the cultural shift required. Just as previous generations experienced the transition to telebanking and online banking, the integration of AI into financial services and institutions will require a similar shift in mainstream thinking. How smoothly the next transition evolves will depend largely on the decisions and measures market leaders make now.

Humanisation of technology

While artificial intelligence offers tangible benefits in data protection and customer retention, the effect on, and acceptance of AI by banking staff and customers cannot be overlooked.

Education will be key to the adoption of the powerful tool AI has the potential to be. While mindful of the business need to expand and adapt quickly, the transition must be made with sensitivity, transparency and honesty, which will allow the reasons and value of implementing AI to become clear to all.

Ultimately, financial services customers are human, and the services offered should not just be a process to be followed, but involve people as well. Adding AI to the equation should result in better-equipped staff and more satisfied customers, not in a robotic interface devoid of human empathy.

As AI expands into banking, the propensity for transformation increases, paving the way for new opportunities and better services within the industry.

The future of financial services

To a large extent, banking has traditionally required customer initiation – the customer approaches the bank for a loan; to open or close an account; to authorise payments and investments.

This reactive approach no longer meets the needs of today's customer. For banks to revolutionise their methodology, the data they collate on their customers, accounts and transactions, will need to be integrated with the world of intelligence, so that services become not only proactive, but relevant and personal.

Partnerships between financial institutions, technology experts and FinTech start-ups can be powerful when viewed through this lens. A Kenyan start-up, First Choice Global, has seen success with their SawaPay app, a free service

which allows customers to send money and pay bills in Africa from the USA. In addition to SawaPay enabling real-time international transfers, they've filled a need in helping Africans working abroad to support their families back home.

Harnessing the right expertise to achieve a new level of financial services

Throughout the thread of innovations and technological advances, runs the ever-present awareness that progress in the financial services industry becomes obsolete if it cannot be made secure.

Cybersecurity – keeping customer data safe – will play a major role in the future of banking. While customers want transactions to be easy and systematic, the last thing either the banks or their customers want is to see the security of their data, or their money, compromised in any way.

Regulation requirements such as PSD2 and General Data Protection Regulation (GDPR) are driving innovation in security, and in due course increase the trust customers have in financial institutions. Securing data, both tangible and in the cloud, becomes paramount in maintaining that trust.

Similarly, access and authorisation methods are critical. Advances and innovations in the health sector are starting to demonstrate how a move beyond biometrics may be possible by providing inspiration for subtle, yet inscrutable identification strategies. Among those being considered are digestible or invisible markers, as well as behavioural monitoring.

Combining technological and business expertise and experience with up-to-date knowledge of market trends, customer experience teams are uniquely placed to help both established financial institutions and the burgeoning entries to FinTech take the necessary steps to maintain relevance in the changing market.

As AI changes customer expectations of how financial transactions should work, so too will the need to create secure, trustworthy platforms and programs to enable those transactions to appear seamless, taking place in the background instead of requiring several logins and authentications.

Digital transformation is the future of financial services, as long as it remains centred on the development and implementation of new intelligences, which focus on optimising human interactions and improving the accuracy of authentication, as well as moving banks from a reactive to a proactive model.

The right technology and services partner can offer banks and FinTech companies an advantage in the elements of digital transformation, while keeping the customer at the heart of everything technology makes possible.

‘At Dimension Data, we understand banking; we understand the immediate changes taking place in the financial services industry and we are the people able to assist with digital transformation.’

– Steve van den Heever, Global Sales Director - Financial Services at Dimension Data

* Nationwide and the use of AI

<http://www.computerweekly.com/news/4500254343/Nationwide-Building-Society-deploys-artificial-intelligence-to-reduce-back-end-complexity>

** HSBC – Online Investment Advice

<http://www.businessinsider.com/hsbc-robo-advisor-online-investment-advice-2017-6>

