CORE DATA

THE FUTURE OF BANKING IN AUSTRALIA

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EXECUTIVE SUMMARY

Australia's financial services sector is the biggest contributor to the national economy, employing 450,000 people, with a rocksteady reputation. Yet despite the envious strength of our major banks and their often significant investments in technology, some may already be falling behind customer expectations. The success of tap-and-go technology in cards has quickly become yesterday's glory, with many Australians already eager to embrace digital versions of a bank's flagship product - the home loan.

Technology also means banks must shift their efforts to compete on customer experience from bricks and mortar branches to the digital world. Big data in their enormous legacy databases presents tremendous opportunities for the banks to better understand and deliver a great customer experience, but even as the banks learn to harness this valuable information, the importance of social media is rising rapidly. To retain the loyalty of customers, banks must accept such digital arenas are the branches of tomorrow.

In this ongoing transition to digital, they are also confronted by financial technology firms who are making waves in banking with their innovation and agility. Fintechs are Australia's hottest startup story, filling gaps in the banking experience where the inherently conservative nature of Australia's banks have held them back from innovation. Both old and new players can play a role in each others' future.

But technology in banking is not just about improving the customer experience. It can also help banks tackle their cost base, with technologies such as blockchain and automated staff that until recently were unthinkable. Whether it's better understanding and serving customers or boosting profitability, technological change is shaping the future of banking faster than many could have imagined.

AUSTRALIA'S RAPID DIGITAL ADOPTION

When it comes to adopting new technology, Australians are fast. Some 77% of the Australian population owns a smartphone, outpacing the United States and second only to South Korea[1]. A day in the life of the typical worker is rarely unconnected.

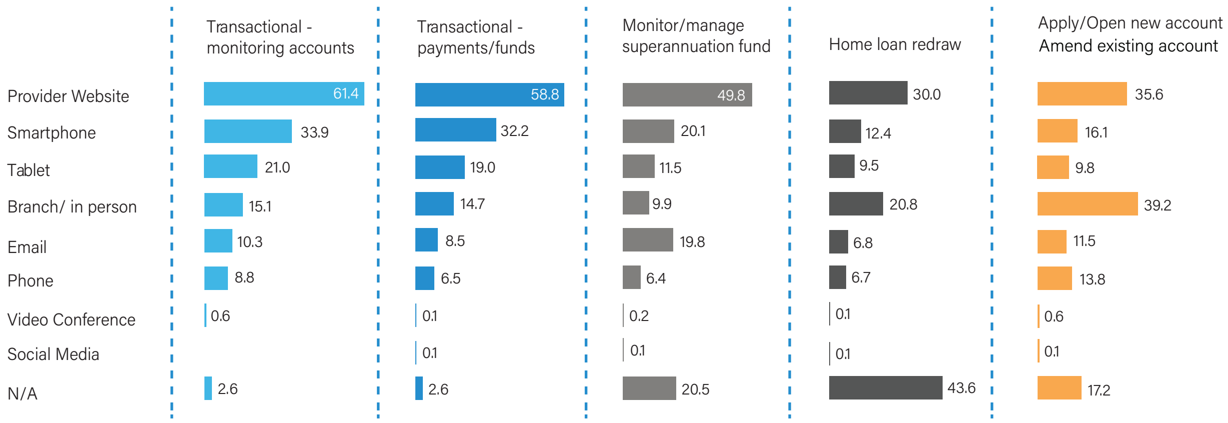
In the morning they catch the train to work, entertained and informed by social media sites such as Facebook and Instagram, watching Netflix or YouTube videos, or listening to streaming music services such as Apple Music or Pandora.

Whatever their work may be and whatever its software needs are, communication is the backbone of their day, with emails, chats and documents increasingly found on cloud-based services such as Google Apps or Office 365.

Back at home, many turn to food delivery services such as Menulog and Foodora. They can pay their bills online if they haven't already done so automatically, spend hours researching their next holiday, gadget or fashion purchase - influenced by internet reviews and friends' Facebook 'likes' - and they'll pay online too.

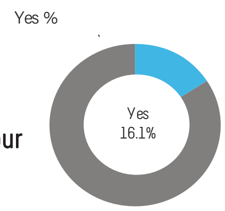
With so many aspects of our lives played out in a digital environment, Australians now enjoy and demand high standards and easy technology solutions from anyone providing them with a service. Banking is no different - customers now prefer to do almost every banking activity digitally, be it via a desktop computer or a mobile device app. By contrast, branches are rapidly losing relevance for day-to-day banking. CoreData's research shows that opening or modification of accounts is the single behaviour in which branch access is most preferred (39.2%).

Which of the following channels would you prefer to use when undertaking the following financial activities?



*Multiple responses allowed

Does this differ to how you currently communicate with your main bank?



1 Poushter, Jacob. "Smartphone Ownership and Internet Usage Continues to Climb in Emerging Economies", Pewglobal.org. Retrieved 2016-02-23.

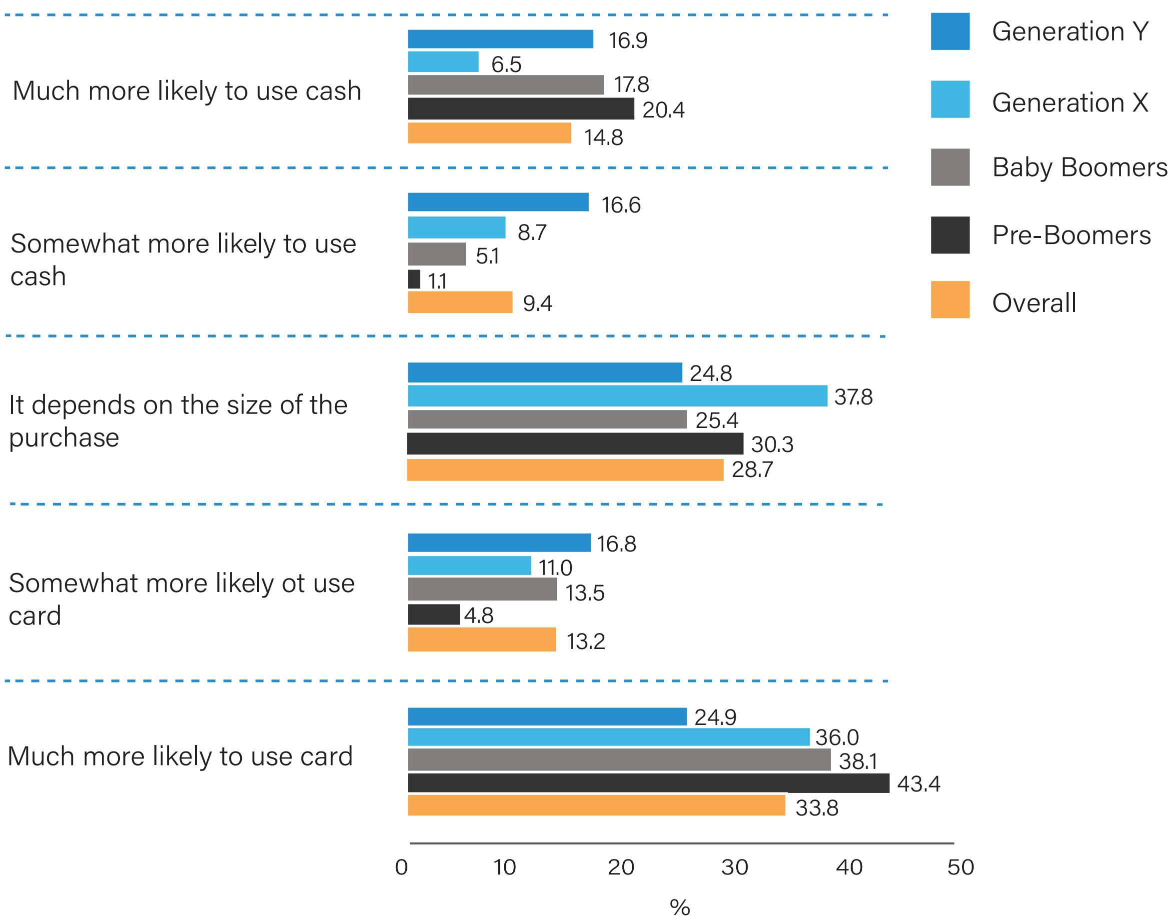
Contactless transactions adopted by all

The banking sector must keep up with customers' high expectations. It has already made big gains with digital solutions that have changed lives, most obviously with day-to-day transactions. Some Australian banks claim 74% of their MasterCard in-store transactions are now via contactless chips embedded in debit and credit cards and per capita, we rank amongst the highest in the world[2]. Over 80% of total Australian cash transactions are under $50, and banks have seized the opportunity to replace hard cash with a tap-and-go flick of the wrist[3].

It's not just younger customers who have grown up with technology who are embracing these technological advances. CoreData's research shows Baby Boomers are the age group most likely to use a card rather than cash for everyday transactions (51.6%). Further confirming this is a cross-generational trend, more than two in five (43.4%) Pre-boomers - those born before the end of the second World War - are 'much more likely' to use card when making everyday purchases.

Banks are already responding in Australia, with Citibank Australia the first to announce it would go cashless, with its branches no longer handling notes and coins, following the example of 900 of 1600 Swedish bank branches[4].

When making an everyday purchase/transaction, are you more likely to use cash or card to pay for this?



2 Worthington, S 2016 "Apple Pay: Big bank dispute with mobile phone payments might be right", The Conversation, 20 October

3 Deloitte Consulting 2014, "Digital Transaction Banking: Opportunities and Challenges" p15

4 Yoo, T 2016, "Citibank is the first Australian bank to stop taking cash", 9 November

From plastic to mobile

Given Australia's ready takeup of contactless payments, it's no surprise that transaction technology is already leaping from plastic cards in our wallets to ever-present mobile and wearable devices.

While there have been commercial road bumps in deals between the big banks and mobile phone giants, mobile phone contactless payments are inevitable given convenience has become so sacred to consumers. Already Westpac has teamed with the Android-powered Samsung and American Express and more importantly ANZ with Apple Pay for iPhone payments. Deals between banks with Android Pay will almost certainly soon follow.

Australia's fast adoption tendencies extend to the next stage of mobile convenience: wearable technology. Smartwatches such as the Apple Watch and fitness trackers such as the Fitbit range enjoy a far higher penetration rate amongst Australians than in the UK and US and many such devices can already perform contactless payments, such as Jawbone's UP4 tracker's built in American Express chip and the Apple Watch's Apple Pay.

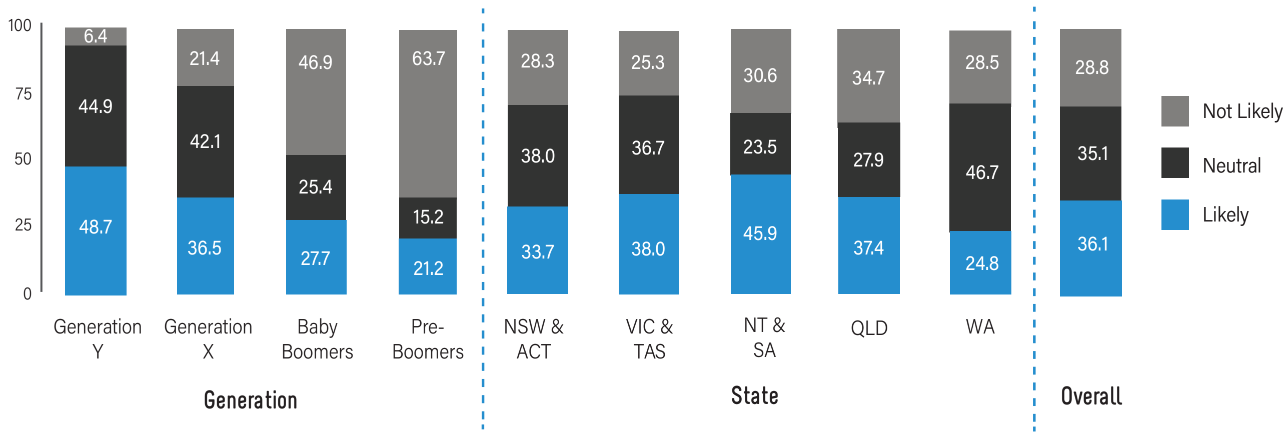
The Scandinavian experience presents a glimpse into the potential of mobile phone payments beyond just tap-and-go. Customers can transfer money in real time money from one bank to another via the Swish app, which was developed jointly by major banks and has been adopted by nearly half the population. Denmark's MobilePay was used by over 3 million citizens to make about 90 million transactions in 2015[5].

Digital home loans

Currently digital transactions may be seen as the domain of smaller purchases, but the biggest transaction of most customers' lives, and the dominant part of a bank's retail revenue base, will also soon take place digitally. CoreData's research shows 36% of potential home loan applicants are open to taking out a 100% digital mortgage.

The consideration of such a service ranges from nearly half of Generation Y (48.7%) through to more than one in five (21.1%) Pre-boomers - a generation for whom the internet did not exist for most of their lives.

If you were to apply for a new home loan, how likely would you be to use a service that is 100% digital (i.e. the entire application process is online)?



5 Henley J, 2016, "Sweden leads the race to become cashless society", The Guardian, 5 June

REFOCUS ON THE CUTOMER EXPERIENCE

If convenience is now the name of the game, banks must refocus their culture on understanding and enhancing the customer experience as their competitive edge. With technology providing many touch points with a customer, banks must become better at meeting service expectations.

The first step to delivering a better customer experience is to better understand your customer. This includes not only traditional background traits such as demographic data, but more importantly, their behaviour patterns.

The amount of data available to learn about a customer is increasing not just for the banks - but for the planet. IBM believes the 5 billion gigabytes of data generated by the world in 2002 is now being generated every two days[6]. The ways data can change the customer experience are myriad.

Cross-selling: on point and on time

The most well known opportunity of customer data has evolved. Data means cross-selling products to customers not only can be better informed, but also more timely. Mobile device “push” technology means banking apps can proactively suggest products to customers at important decision-making moments, rather than waiting for them to contact their bank. With the right partnerships and careful compliance with customer privacy expectations and consent, internet cookie data collected from a customer’s visit to a real estate or motoring website could alert them that their bank has pre-approved them for a home or car loan based on their salary.

If a bank can tap an airline’s data, they could offer a passenger relevant financial services such as travel insurance and also ensure overseas transactions in the destination country are green-lighted by the bank’s transaction security systems. Qantas, National Australia Bank and Westpac have teamed with start-up Data Republic, designer of a platform which allows companies and government to exchange data securely.

Be present in your customers’ research process

A bank’s main opportunity to sell to their customer is no longer in the branch. Even for home loan customers who “sign on the dotted line” in person, their buying decision process started long before they sat down in a branch. Consumers rely on multiple channels (an average of three or more) when “prospecting” for new products, relying most on a bank’s website and online expert/comparison sites, followed by word of-mouth, online reviews and only then the traditional young-couple-sitting-with-branch-staff beloved of television commercials.[7]

A bank’s own website thus deserves substantial investment to stick with the customer for more of the prospecting process. Today, banks often have simple, attractive “first stop” websites, but the finer details of a product that a customer will demand before buying, such as those in Product Disclosure Statements, are still often lazily provided in cumbersome PDF files, which are particularly difficult to

6 Eyers, J 2016, “Banks planning big data deals to target customers”, The Australian Financial Review 23 May
7 Accenture, “Banking Customer 2020: Rising Expectations Point to the Everyday Bank” p6

view on a mobile device. Even the application process can be painful, requiring customers to retype personal details already in their internet banking.

Social media: your customers' digital neighbourhood

Social media as a community and communication tool

Already, 90% of customers trust recommendations posted on social media websites, and 71% are more likely to make a purchase based on social media referrals[8]. Customers use social media to talk about the bank with their social networks, for better or worse. Banks leading the way in social media and banking are not only there to try to hose down complaints, but also engage with their community.

For example, Barclays' Ring card crowdsources its design from customers, using social media to choose the most valuable features. That attentiveness has helped make the Ring community surprisingly sticky. Australia's banks boast no such social media community success.

> **BANKS CAN SPEND AS MUCH MONEY AS THEY LIKE ON BRANDING BUT IF MY SOCIAL NETWORK FRIENDS TELL ME THAT YOU SUCK NO AMOUNT OF ADVERTISING WILL CONVINCE ME OTHERWISE**
>
> Brett King,
> Author, Banking 2.0

Being part of their customers' online community shares many of the benefits of branches, in that a large number of staff can directly speak with a large number of customers, and add that knowledge to the bank's understanding of the customer.

A bank's Facebook page is often a popular destination for customer enquiries, and banks should invest in hiring and training staff to resolve queries and complaints over this medium. Banks must understand the typical customer experience with this platform. Customers are accustomed, for example, to rapid responses from their social networks - within hours in the case of public posts and within minutes in the case of its messenger service.

A diligent and swift response can be crucial to prevent public complaints going viral and staining a company's reputation. The humiliating #Vodafail campaign launched against Vodafone fuelled the exodus of millions of customers and continues to weigh on its reputation years later[9]. Private social media engagement is also important, with many Australian companies already providing online private chat support to customers via the bank's own web pages, and similar functions are available through all major social media platforms.

Bank staff could also apply traditional forms of community engagement such as sponsorships to the online world, such as having staff visit pages where they are partners, such as universities. Rather than simply paid advertisements, bank staff could respond to active threads amongst students on financial matters.

8 PwC, "Retail Banking 2020" p34
9 Swan D 2016, "'Vodafail' plagues Vodafone network", The Australian, 26 September

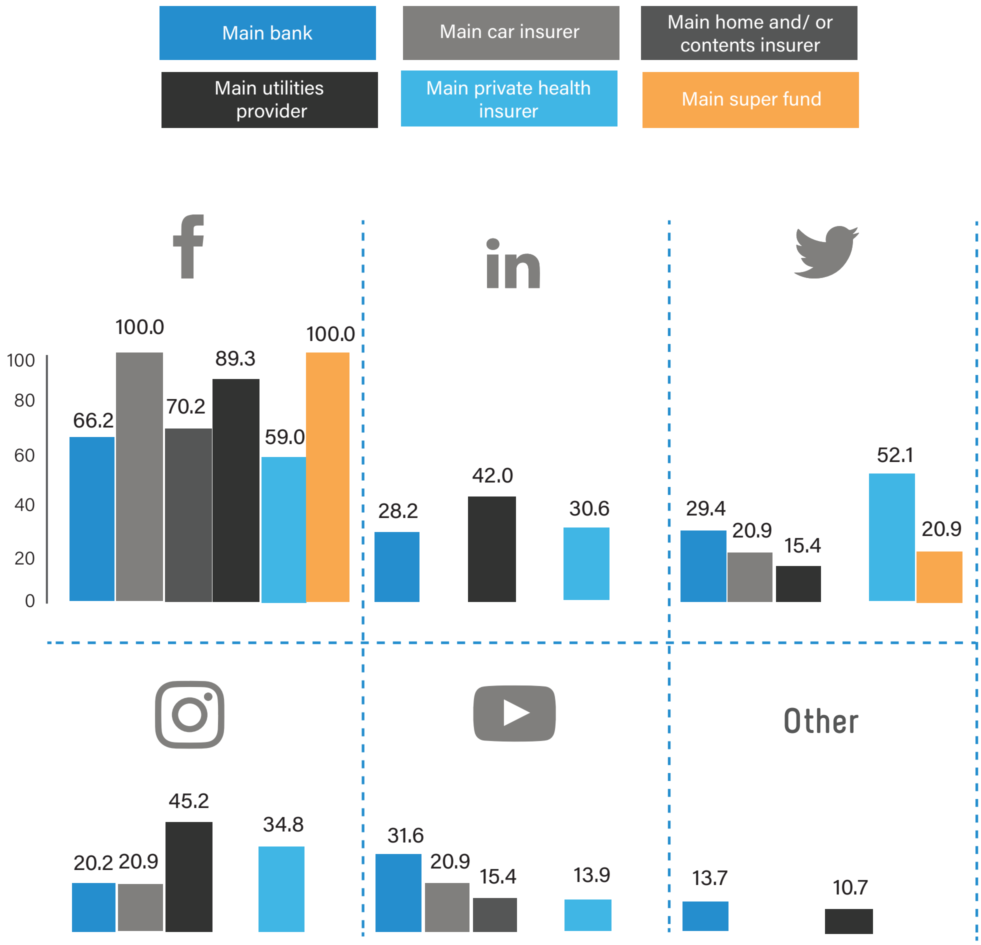
Social media as a platform and gateway

China's WeBank app is part of the country's biggest social and messaging platform, WeChat. Well ahead of Western counterparts such as WhatsApp, WeBank allows banking via users' mobile phones.

While the Commonwealth Bank's 2013 attempt at Facebook banking failed to take off, banks should not close the door to this concept. Facebook's dominance amongst social media since then shows trust and ease with it may be growing - it is now, for example, the primary source of political news for 61% of Millennials and 39% of Baby Boomers[10]. As trust rises in the social media giant, as well as others such as Twitter which are common destinations for complaints, banks should be ready to move again.

Facebook's dominance is also evident in the choice of platform among consumers with a preference for communicating with their service providers via social media; across banking, insurance, utilities, super and private health - Facebook is winning the social media platform war.

Through which communication channels would you prefer to communicate with the following service providers?



10 Mitchell A, Gottfried J and Matsa K 2015, "Millennials and Political News", Pew Research, 1 June

Helping customers avoid financial trouble

Banks can use customer data, including that available on social media, to enhance their credit, risk and pricing models (adding, for example, social media reputation scoring). A bank may be able to detect signs of trouble at a business customer by identifying negative trends in social media such as multiple customer complaints and negative product reviews well before the accounting numbers materialise, enabling a much higher quality of risk management and customer service.

Similarly, mobile transaction apps using contactless technology can do more than simply transfer funds - they can coach customers. Users of fitness trackers often lose interest within a few months, and may even stop viewing apps, because there's little that changes about them to justify repeat visits. Implementing "smart coaches" that actually provide tips based on the collected data improves engagement, and could work well for banking customers.

Many bank customers, for example, already can see their account balance on the screen when they make a mobile phone contactless payment, which is still the number one enquiry made with the expensive, labour intensive call centres of Australia's retail banks[11]. A customer might not be so quick to buy a pricey OLED TV if their phone has been reminding them for the last several coffee transactions that a big purchase might tip them into default on their mortgage payment due in three days. By working with the right fintechs or with their own in-house software developers, banks could provide additional useful tips.

> "WHETHER IT'S DIGITAL OR FACE-TO-FACE, SERVICE CONTINUES TO BE ONE OF THE FUNDAMENTAL DIMENSIONS OF AN ENGAGED AND LOYAL CUSTOMER"

Problem resolution: more than just IT investment

Around the world, 80% of consumers who switch providers say they could have been retained, mainly if their issue had been resolved on their first contact with the bank. Yet first-contact resolution has been the top frustration factor for consumers for five years, with little or no progress on others such as failure to deliver on their promises, inefficient and slow customer service, and lack of interaction convenience.[12]

Technology alone cannot give you an edge. It is the enabler to improve engagement, which will become even more important than technology at decade's end[13]. Banks need to train their staff to deliver good service digitally, but branches can continue to serve an important role for more complex customer interactions, such as disputes. While customers are turning to digital platforms for most of their banking needs, a continuing and effective bricks and mortar presence, even if in reduced numbers, gives customers confidence in a bank's durability and commitment to resolve matters that may be more challenging to explain via text-based chats.

Whether it's digital or face-to-face, service continues to be one of the fundamental dimensions of an engaged and loyal customer and long-time customer service principles still apply: don't keep customers waiting, train, empower and incentivise your staff to deal with enquiries and complaints.

11 FST Media, "Trends and Innovations Shaping the Future of Banking 2.0" p2

12 Accenture, "Banking Customer 2020: Rising Expectations Point to the Everyday Bank" p5

13 Financial Review Business Intelligence "2025: The future of wholesale banking - and what it means for Australia"

MANAGING THE RISKS OF BIG DATA

While the opportunities of big data to boost the customer experience are compelling, banking service providers must also invest in keeping those details secure, particularly if partnering with external parties.

Such data security is more important than for other industries: at the heart of banking is the promise that a bank will keep what you value safe and private, whether it's money or personal details. Failures in a trust-based industry can be disastrous. Banks are a popular target for cybercriminals, as US bank JP Morgan discovered in 2014 when hackers sucked up customer names, phone numbers and email addresses from 83 million accounts.

> "BANKS MUST BE CLEAR AND UPFRONT WITH CUSTOMERS ABOUT WHEN THEY ACCESS THEIR DATA AND HOW THEY USE IT"

Investment in preventative measures, such as "fire drills" and training so all staff can take responsibility for data safety, can help the banks retain the confidence of customers as guardians of sensitive data.

Similarly, Australians still value their privacy, notwithstanding younger Australians who have been conditioned to a more exposed existence by social media. Whether it's sharing useful cross-sell data or using accounting software integration to get the jump on future financial strife, banks must be clear and upfront with customers about when they access their data and how they use it, and stay on top of privacy compliance requirements that reflect community concerns. Tapping a banking app's access to a smartphone's GPS to offer a loan when you walk into a car dealership, for example, may be seen as useful by some customers but intrusive by others.

In the case of Data Republic, personal information from NAB, Westpac and Qantas customers is never actually stored on the young startup's infrastructure, and a bank-standard security system has been built around the platform.

FINTECHS AND BANKS: PARTNER OR COMPETE?

With such a rapidly transforming technological landscape, established players must strike a balance between developing an in-house capability and partnerships.

While innovation labs and headhunted startup founders are already sprouting up in traditional banking providers such as the Commonwealth Bank, there are inherent challenges to developing innovative products, such as the conservative culture within an institution for whom safety and security is paramount, and the significant funds needed simply to keep things running.

> "THERE ARE MUTUAL BENEFITS TO BE ENJOYED FROM PARTNERSHIPS BETWEEN TRADITIONAL FIRMS AND NEWCOMERS"

Banks can seek to develop internal teams that are somewhat separated from their historical culture, such as ING Bank and its ING Direct subsidiary, or they can ambitiously try to build innovation into the wider organisational culture from the bottom up, as Bankwest attempts with its 'Hack Days' where employees are empowered to develop creative solutions.

Moving from such innovative ideation to product development can also be a long process in a bank. A small fintech needs only one venture capitalist to say yes to allow it to launch its product; at a big bank, it's likely a product manager would need to talk to a large number of stakeholders, of whom it only takes one 'no' and the product doesn't eventuate.

Fintechs trying to go it alone face their own challenges, especially if they rely on bank data. A bank can make it technologically difficult for a fintech's beautifully designed mobile app to access and read a customer's bank data, killing the reliability that customers will demand.

Customers with security concerns about a relative unknown may also stay away from young fintechs; a 2016 Capgemini global study showed 37% of customers trusted traditional firms compared to 24% of non-traditional firms.[14]

Fintechs can succeed in their own right - for example, by concentrating on areas such as peer-to-peer lending where prudentially conservative banks may be less active. There's no doubt, however, there are mutual benefits to be enjoyed from partnerships between traditional firms and newcomers such as the Data Republic deal, and Westpac's stake in peer-to-peer lender SocietyOne through its Rein-venture venture capital fund.

14 Capgemini Financial Services Analysis, 2016; "Capgemini and LinkedIn WFTR Voice of the Customer Survey"

TECHNOLOGY & PROFITABILITY

Technology also can play a crucial role in reducing the cost base. Bank customers will always place price as a very high priority, so the ability to price products competitively will remain crucial.

Banks will need to be particularly fierce in defending their deposit base. Many customers who begin their relationship with their bank via deposits have a strong tendency to then tie the knot with a home loan that is far more profitable to the bank, giving their first bank a large and lasting share of wallet.

Cost efficiencies from technology could be used to subsidise more attractive deposit savings rates and features, helping to safeguard this strategically important product. Banks have already demonstrated a willingness to lift deposit rates even when cutting home loan rates, to protect against volatile offshore credit markets and tougher prudential requirements.

Centralisation of back office

Outsourcing is a well-worn cost reduction move for banks, but that will move away from the stereotypical shift of jobs to overseas call centres. Instead, the centralisation and/or automation of many back office functions across the entire banking industry, or at least multiple banks, could save enormous amounts.

One example of the "many dining rooms, one kitchen" concept is the increasing investment of banks in blockchain technology. The use of a secure and instantly shared digital ledger can save significant costs in the settlement of interbank transactions. Australia's Commonwealth Bank has been an early mover, conducting the first global trade transaction between two independent banks with Wells Fargo, as part of a payment for a Brighann Cotton cotton shipment[15].

Centralisation of resources, however, will have some limits, at least in the short term. Dominant lenders may be reluctant to centralise functions across the industry such as the registration and assessment of Know Your Client new account applications, for example, as this would make it easier for customers to switch to competitors.

> "THE USE OF A SECURE AND INSTANTLY SHARED DIGITAL LEDGER CAN SAVE SIGNIFICANT COSTS IN THE SETTLEMENT OF INTERBANK TRANSACTIONS"

Rise of the robots

The rise of robot software systems reveals yet another opportunity for startups to partner with cost-conscious banks. Working with US vendors, ANZ has already begun incorporating Robotic Process Automation in areas such as payroll administration and IT helpdesk support, automating more monotonous jobs previously done by overseas workers. Cost savings could be as high as 30% within about a year across finance, accounting, human resources and supply chain functions.

15 Commonwealth Bank media release 2016, "Cotton Pioneer Landmark Blockchain Trade Transaction", 24 October

“Chatbots” have already been announced in mainstream customer service roles. Bank of America’s new chatbot “Erica” can answer online chat questions about a customer’s accounts, initiate transactions and offer financial advice based on savings patterns.

The banking sector’s answer to Apple’s Siri assistant has great potential, but banks must carefully deploy in line with customer expectations, particularly in the early days when a reputation will be heavily scrutinised. Customers may welcome the faster response of a chatbot across different media for simple requests such as increasing their account balance, but may resent the bank’s service culture if raising a complaint or dispute and are given obviously templated - and irrelevant - answers.

CONCLUSION

Technology is transforming almost every aspect of the banking world. Better and more data creates a deeper understanding of the customer and the ability to engage them at the right time with the right offerings. Customers with mobile devices expect the same convenience from their bank as they enjoy from other technology companies and will become frustrated with any banking service provider who doesn't measure up.

The focus on convenience means banks must invest in improving the customer experience, and they must follow the customers in their shift away from branches and onto mobile and social media platforms. Pricing will remain a key focus, and technology can provide new opportunities through centralisation and automation to lift profitability.

All of these technological advances mean banks and fintechs alike must consider partnerships given their respective advantages and limitations.

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