THE RISE OF FINTECH

opportunities and challenges

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Financial technology (fintech) is experiencing rapid growth internationally. This paper examines the key drivers of the growth of fintech, its role in redefining the financial services industry, and the likely impact on industry business models. The paper also analyses the trends in fintech investment in global and regional markets and Australia's alternative finance market, and highlights a series of strategic challenges and opportunities for incumbent financial institutions. An earlier version of this paper was presented at the 21st Melbourne Money and Finance Conference.

A decade ago brands such as Wealthfront, OnDeck, Zopa, Square and even PayPal had not attracted significant attention within the financial services industry. Today, financial technology (fintech) is one of the fastest growing sectors in the industry, with global fintech investment rising from $US100 million in 2008 to over $US19 billion in 2015. The rapid rise of fintech embodies the transformation of the industry by digital means, with significant implications for consumers, businesses and government. Furthermore, this phenomenon has been fuelled by the rhetoric of business and government leaders stressing the importance of innovation to growth, and the challenges and opportunities provided by digital disruption and new business models.

Recent quotes from Australian bank CEOs include: 'We are a fintech company ourselves. We have to have the mindset of a fintech company'; 'We need to think and act like a 200-year-old start-up company'; and 'If we don't innovate we're toast'. These remarks highlight three important strategic considerations for the industry. First, digital disruption is changing the competitive landscape, lowering entry barriers for new players and creating new business models. Second, investing in digital innovation is critical to meet increasingly demanding customer needs. And third, partnering with and sourcing capability from fintech companies will form an important part of the strategic response for established financial institutions.

Understanding fintech

KPMG defines fintech simply as technology-based businesses that compete against, enable and/or collaborate with financial institutions. This ranges from creating software to processes that enable financial institutions to enhance their customers' experience and streamline their operations, or enable consumers to fulfil their financial needs (saving, investment, make payments). The sector includes: new start-ups and ventures (in fintech); the activities and investment in technology innovation from established financial services institutions, as well as ICT/technology providers; and collaboration between these parties or 'disruptive innovation' by any of them individually.

Fintech developments are affecting all sectors of the financial services industry, such as banking, capital markets, payments, insurance, wealth management and real estate, as well as industry platforms, systems and infrastructure. This agglomeration of technology and financial services is not new. The application of IT&T to financial services has been present for many decades and has typically focused industry innovation efforts on enhancing the efficiency of technology infrastructure and improving systems stability, resilience and security. These still remain of critical importance to the industry's effective operation. However, a more contemporary application of fintech has emerged in the past 10 years, enabling the delivery of new and innovative services, through digital channels, redefining the customer experience and creating new business models.

We have seen (and will continue to see) the emergence of fintech companies that seek to directly compete with incumbent financial institutions, best described as ‘carnivores’. While these types of fintech companies gain a lot of market attention due to their potential to disrupt traditional value chains, this threat is often overstated. Many fintech companies are looking to partner with or sell their services to financial institutions (i.e. these fintech companies are the ‘herbivores’) and they are attracting a more significant share of investment into the fintech sector. More recently, as some fintech companies mature, we are seeing the rise of another type of fintech, the ‘omnivores’, i.e. those that are seeking to both disrupt incumbents in certain areas or markets and also collaborate (e.g. through white labelling arrangements) in others.

There are benefits for both parties in a collaborative model. For fintech start-ups, they gain access to a range of important growth levers: customers, distribution, data, capital, experience, licences, a trusted brand and an ability to scale much more quickly. For incumbents, this means gaining access to new ideas, solutions, capability, knowledge and potential investment opportunities in new players that are typically focused on a specific problem or opportunity and have significantly lower cost structures. It ultimately allows incumbents to be more agile, providing strategic optionality, by embracing the number of helpful fintech innovators.

Drivers of fintech

There are seven primary drivers of fintech.

1. Changing consumer behaviour and preferences

Changing consumer behaviour and attitudes are playing a key role in the industry’s evolution, as a transition in power occurs from corporations to customers. In most cases, technology is facilitating this shift of control. Consumers are embracing new technology (at a rapid rate), seeking advice from alternative sources, and they are increasingly less loyal to their financial institutions and demanding greater levels of personalisation, convenience and immediacy.

The rising tide of millennials, or Gen Y, will become increasingly important, with their share of financial assets increasing from around a third today to 70 per cent by 2030. This group is currently undergoing major life events such as starting full-time work, applying for credit cards and car loans, and applying for a mortgage for the first time. As a result, this group is likely to drive future trends and developments in the broader marketplace and their preferences are very different from other demographic groups. As evidence of this, the findings from the Millennial Disruption Index, a three-year US study of industry disruption at the hands of Gen Y, revealed that they believe the banking industry is most at risk of being disrupted, they are counting on tech start-ups to overhaul the way banks work; and would be more excited about a new offering in financial services from Google, Amazon, Apple, PayPal, or Square than from their own bank.

2. Digital and mobile devices

A few years ago, people performed daily tasks in conventional ways. Today, ‘convention’ has shifted to digital platforms and mobile devices. Over the past decade, we have seen the proliferation and widespread adoption of mobile devices, with over 70 per cent of Australians now owning a smartphone. We have also seen an explosion in data, fuelled by social media platforms. And this revolution is set to continue over the medium term, facilitated by the adoption of new technology infrastructure in Australia, such as the National Broadband Network (NBN) and the transition to the New Payments Platform (NPP), which will go live in 2017. Furthermore, developments such as the Internet of Things (with some experts suggesting there will be 75 billion devices connected globally by 2020) and the maturing of artificial intelligence and robotics in the longer-term will have a significant impact on delivery of banking and financial services products and services, and redefine the customer experience.

3. The accelerating pace of change

In many arenas, the pace of change is accelerating over time, with more players competing and barriers to entry falling. Technology adoption is occurring much more quickly. For example, it took five decades for the telephone to reach a penetration of 50 per cent of US households. Unbelievably, it took five years or less for mobile phones to accomplish the same penetration levels.

By extension, firms with competitive advantages in those areas will need to move faster to capture those opportunities that present themselves. To highlight the pace of innovation and the impact disruption can have, looking at the US as an example, corporations that were in the S&P 500 in 1937 remained in the index for 75 years on average. In 2011, the average tenure had shrunk to about 15 years. In around 10 years' time (2025), it is projected to drop to five years. Therefore, in a world of increasing digital commerce, winners and losers will come and go much more quickly.

4. Declining levels of trust
A fundamental shift is underway, towards what author and collaborative economy expert Rachel Botsman calls 'distributed power', where we are moving away from a business and a society that places trust in top-down, centralised institutions and moving towards a world of distributed, connected communities. This shift is changing who has power, who we trust, our perceptions of brands and how we access products and services.

This decline in the levels of trust in major institutions is seeing the rise of trust between strangers. The lack of trust in financial institutions, and the prevalence of social media in millennials' everyday life, has seen the emergence of a 'review community', whereby customers are more inclined to place their trust in the opinion of a stranger. These review communities are helping to shape customers' opinions of financial institutions and their products and services, more than the information provided by an institution's own website.

5. Barriers to entry for digital disruptors are falling
Another key driver is that the barriers to entry for digital disruption are falling quickly. It has never been cheaper or easier to commence a technology start-up, with the advent of open source software and low-cost development tools. Unsurprisingly, falling start-up costs are seeing a rapid increase in the number of start-up companies.

6. Attractive profit pools which are accessible
The technology is now in place to substantially transform financial services (e.g. cheap IT, widespread mobile penetration, regulation, such as the Financial Claims Scheme requiring Single Customer View and the move to real time payments). There is $A27 billion of current revenue at risk, with the areas of financial services most at risk of digital disruption being lending, payments and merchant acquiring.

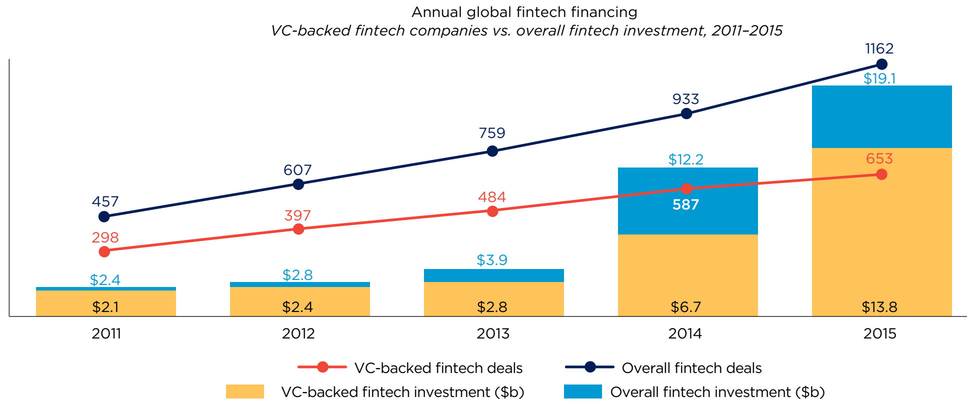
In the near term, it is expected that shorter-tenure, high turnover products like credit cards, loans and payments will see the most digital transformation. Looking further ahead, bank accounts and mortgages, which together typically drive more than 50 per cent of many banks' revenues and usually provide 'sticky' annuity streams, will be brought into the fray.

7. Supporting policy and regulatory environment
Policy makers and regulators are increasingly aware of the potential of the fintech sector in addressing issues of financial inclusion, affordability and literacy. They are investing to increase their own awareness and education of the sector and engaging more frequently with fintech companies, helping them to understand new technology developments and emerging practices in the industry. In turn, this will allow them to be more effective in balancing any actual or perceived increase in risk, with the benefits that consumers, investors and the economy more broadly stand to gain from new innovation and inform, what, if any, policy or regulatory response is appropriate.

Global fintech investment

Fintech is experiencing rapid growth internationally. 2015 marked a record high in the fintech sector, with total global investment in fintech companies exceeding $US19 billion and global funding to VC-backed fintech companies rising by 106 per cent from the previous year. In 2015, there was more than six times the level of funding deployed to VC-backed fintech companies as there was in 2011.

Figure 1: 2015 Global fintech investment trends



Source: Venture Pulse, Q4'15, Global Analysis of Fintech Venture Funding, KPMG International and CB Insights (data provided by CB Insights) February, 2016

From a regional perspective, Asian fintech start-ups had a record year for investment activity in 2015, raising a total of $US4.5 billion (more than the previous four years combined). Asia experienced the highest level of corporate involvement in fintech investment in 2015, rising to 47 per cent in the third quarter of 2015. Europe, in contrast, experienced the lowest level of corporate participation, falling below 15 per cent in four of the past five quarters.

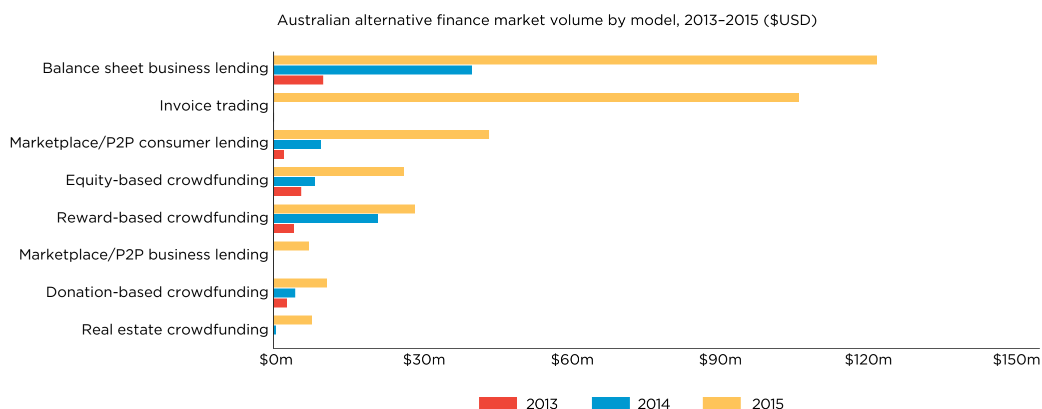
From a sectoral standpoint, lending and payments continue to dominate the investment landscape, representing three quarters of deals in 2015. However, this is starting to diversify, with investment growing in insurtech, wealthtech and blockchain. Last year was a record year for funding to VC-backed blockchain and bitcoin startups, which jumped 59 per cent to $US474 million.

Fintech investment activity in Australia

In Australia, the growth in fintech activity is starting to translate into larger investment deals and funding rounds, including fintech companies such as Tyro, Prospa, SocietyOne, Moula and MoneyMe.

The total volume of alternative finance (Alt-Fi) in Australia grew from $US24 million in 2013, to over $US348.37 million in 2015 with an average annual growth rate of 28 1 per cent between 2013 and 2015. On a per capita basis, Australia also ranks third in funding for Alt-Fi in 2015 ($US14 million), with China in top place at $US75 million and New Zealand in second place at $US59 million.

Figure 2: Australian alternative finance market by model



Source: Harnessing the Potential, KPMG International, Cambridge University, Sydney University and Tsinghua University, February, 2016.

The largest share of Australia's Alt-Fi market volume in 2015 was balance sheet business lending, accounting for over $US120 million. Invoice trading came in second at over $US105 million. Marketplace/peer-to-peer consumer lending, the next largest segment of Australia's Alt-Fi market grew from $US2 million in loans in 2013 to $US9.5 million in 2014 and then to over $US43 million in 2015.

Fintech companies

Fintech is an increasingly global phenomenon and, as evidenced in the KPMG and H2 Ventures *Fintech100 report*, leading fintech ventures and start-ups are emerging across many international cities, in both developed and developing markets. In particular, with the rise of Asia as an emerging trend, fintech ventures from the region are now attracting substantial funding rounds. For example, Ant Financial Services Group, the financial services affiliate of e-commerce giant Alibaba Group closed the world's largest private fundraising round for an Internet company at $US 4.5 billion in April. In addition, the scale of new fintech partnerships is also gaining momentum. A notable example of this is ZhongAn, a joint venture between Alibaba, TenCent and PingAn, which was established in 2013 and has quickly increased in scale to become the dominant online insurer in China, having sold more than 3.5 billion policies.

Business model transformation

Digitisation has had an impact on many industries, fragmenting traditional value chains and causing companies in those industries to reposition themselves and their business models. Invariably, disruption and the reconfiguration of established companies is centred upon platforms, leveraging network effects and underscoring the importance of collaborating with third-parties, such as fintech companies, to create ecosystems of value.

As the unbundling movement continues and influence shifts towards platform players, a natural conclusion is that to compete and maintain market share, financial services institutions must operate to some extent on a platform level, although 'platform plays' are not the answer for every situation. A recent article by Marshall Van Alstyne et al. in *Harvard Business Review*, ('Pipelines, platforms and the new rules of strategy') contended that the focus of organisational strategy in the future will require a number of key transitions: 'from product to platforms, from controlling to orchestrating resources, and from increasing customer value to maximising ecosystem value'.

Large multinational technology giants may pose the biggest threat in terms of disruption to the financial services industry, given their dominant market positions (and user bases), access to data, strong brands, low-cost operations and platform-based business models. While traditional competitors and disruptive start-ups could cause significant challenges to incumbent organisations, corporates from other industries may pose the biggest threat: companies like Google, Apple and Amazon are already looking for ways to expand their reach into other industries. Regional players like Alibaba, Tencent (as presented in the ZhongAn example) and Baidu in Asia could also take market share from financial institutions that are unprepared.

In an industry traditionally dominated by large players, with historically product centric operating models such as financial services, the emergence of platform businesses in and outside of the sector will likely result in a shift in the balance of power towards both platform providers themselves and the end customer.

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Financial institutions respond

Clearly, the financial services industry is not standing still. Incumbent financial organisations are increasingly recognising that investments in and collaboration with early stage start-ups offer a broader range of new ideas and possibilities. Historically, a financial services firm may have relied on one or two IT vendors to deliver technology innovation to them as part of their contractual obligations. However, a different model is emerging whereby financial services firms are directly engaging with a range of fintech start-ups.

According to the Wharton Business School: 'Disruptive innovations need not lead to an incumbent's fall, despite prevailing academic theory arguing otherwise. Start-ups introducing disruptive technologies are more likely to end up licensing to incumbents, forming alliances or merging with market leaders rather than turning into rivals'.[1]

Financial institutions globally are taking a wide range of approaches in trying to keep up with the wave of technology innovation, with fintech emerging as an enabler, and banks setting up their own accelerators, incubator programs or corporate VC funds. However, global leaders in this area tend to have a more holistic and integrated approach to innovation across their business. BBVA in Spain is a notable example. They are globally regarded as a digital leader in banking and recently restructured their business, creating units with responsibility for Open Innovation Centres which they use to engage local fintech communities, M&A for full acquisitions (e.g. Simple), and investing $US250 million in a newly established VC fund, Propel Venture Partners.

Financial services companies are also investing significantly in the fintech sector, with more than a quarter of 2015 fintech deals involving corporate investors, ranging from 40 per cent in Asia to 25 per cent in North America and 12 per cent in Europe. These numbers suggest that financial institutions are beginning to see fintech companies as enablers rather than competitors. Collaboration between incumbent institutions and fintech herbivores is an example of the philosophy espoused by Henry Chesbrough, the University of California, Berkeley academic, in his 2003 book *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Chesbrough's thesis is that there are many more smart people outside any company than inside it, however big that company happens to be. Therefore, advancement can't happen by relying on internal thinking only; innovation requires tapping into external ideas and technologies.

A number of banks have set the pace when it comes to fintech investing. Over the past five years, Citigroup, through its VC arm Citi Ventures, has invested in 13 fintech companies, while Goldman Sachs has invested in 10 companies, including Square and Circle Internet Financial. JPMorgan Chase, Morgan Stanley, Wells Fargo and others have also made a number of fintech investments. Locally, Westpac, through its VC fund, Reinventure Group, has invested in a variety of companies over the past 18 months, in areas of financial services, such as payments and peer-to-peer lending, as well as big data and analytics.

In response to digital disruption, financial institutions can take two different approaches — defend and/or grow. Financial institutions may elect to use the defence approach when there is a high threat of disruption from fintech providers providing better services and new experiences. By comparison, an established financial institution may decide to approach new technological innovations by expanding their selection of services to meet adjacent customer needs or by repurposing their existing capabilities into new markets. This has the potential to generate new sources of value.

Conclusion

There is no doubt that the financial services industry of the future will look very different from what it does today. The landscape will be more competitive, more efficient and provide more customer choice. New products, services, distribution methods and business models will emerge and some will take hold very quickly (e.g. ZhongAn). Financial institutions will come under increasing competitive pressure unless they can leverage technology to slice costs closer to leaner new 'fintech' operators.

The institutions that will thrive in this environment are those that are constantly striving to understand, influence and respond to the transformational forces impacting the industry, and possess the ability to quickly make modifications in their strategies and approach to execution of their strategies along the way. Furthermore, the 'agile incumbents' that are efficient distributors or acquirers of leading fintech capability will outperform, while investing in the enablers/herbivores of the shift will also offer opportunities for financial institutions.

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Note

1. See *Knowledge at Wharton*, August 2014.