KPMG

Strategic considerations on a remarkable week with China's fintechs

July 2018

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KPMG's China Fintech Week saw more than 20 KPMG member firm partners from 13 markets around the world – plus more than 20 of their clients – visit Beijing and Shenzhen to learn more about the country's booming financial services technology (fintech) ecosystem. We met with fintechs digital banks, fintech hubs and the Chinese banking regulator – and took part in KPMG events and a Retail Banking-Fintech conference.

Above all, it is the scale and pace of China's fintech sector that is so breath-taking.

For example, one of the businesses we met, aiBank, a new partnership between the technology company Baidu and the financial group CITIC, told us how it had been able to acquire 1.6 million customers in its first four months. At another meeting, we heard about a fintech that is now delivering 250,000 payment transactions a second on a typical day – 14,000 might be the norm for an incumbent financial services business back home.

Underpinning these businesses are cutting-edge technologies: cloud, big data and artificial intelligence sit at the heart of everything China's fintechs do. Indeed, in many cases, these businesses would be better described as techfins – it is the application of their technology expertise to financial services that powers their growth.

There is much to learn from the progress that China's fintechs have made in a relatively short space of time. Above all, we took one message home with us: our own financial services industries now need to think much more radically about digital transformation, in many cases starting over with a new model designed around customer needs rather than tinkering with the existing value proposition. In the meantime, here are just six reflections on a remarkable trip.

CEO of aiBank

1. The big picture – how China's government kickstarted the fintech boom

China's government can take a great deal of credit for the way in which the country's fintechs have developed so quickly and with such ambition. Four years ago, amid concern about financial exclusion, China's leaders more or less ordered the country's biggest technology companies to take action.

That exclusion was widespread. Hundreds of millions of China's citizens had little or no access to financial services, including payments and credit, and essentially operated in a cash economy.

The country's small and medium-sized enterprises faced similar problems, hampering their efforts to invest and grow. China's rural communities – so crucial to the national economy – were particularly excluded.

In the years since the Government's intervention, we've seen companies such as Baidu, ecommerce giant Alibaba and the telecoms-to-entertainment giant Tencent seize the initiative. Alibaba's payments affiliate, Ant Financial, is now the 10th largest banking group in the world.

In one sense, the issues that prompted China's government to act also represented an advantage for the country's nascent fintech industry. The lack of established financial services infrastructure or legacy systems allowed China to start with a clean slate, building operating models from scratch with supporting technologies, rather than repurposing existing models or engaging in difficult work-arounds.

Nevertheless, progress has been remarkable, both at the technology giants and within the community of start-up and scale-up businesses that have developed around this emerging ecosystem. This year looks set to see much of the work come to fruition with record-breaking investment activity; fund-raisings in the fintech market, including both carve-outs of subsidiaries from the giants and investments in young, high-growth businesses, have hit $100bn already this year and are expected to reach $400bn by the year-end.

The story of the past few years is a lesson in what can be achieved when technologists with no financial services legacy bring their perspective to the problems and challenges facing the financial services sector.

China is unique, of course, but the issues it has sought to tackle with technology are not really so different from those with which Western countries are struggling – access to financial services for all, the need for more customer-centric products and services, and greater openness and transparency.

Our own financial services industries must now take note – and not only because we need to step up to the challenge too. All of the companies we met in China talked about their international ambitions; incumbent Western providers that fail to learn from China's transformation story will face disruption from its leading protagonists, and probably far sooner than they expect.

Company in focus: **CreditEase**

Founded in 2006 with just four people, CreditEase now employs 3,500 fulll-time equivalents. The company targets financial inclusion with a business model focused on life-time value, acquiring customers when they most need finance – students for example – and retaining them as they become more profitable.

To achieve its goals, CreditEase pioneered the concept of marketplace lending and has played a leading role in building China's credit infrastructure, developing a credit bureau model and focusing on risk distribution and credit portfolio management.

CreditEase subsidiary Yirendai targets rural lending with innovative new technologies as part of the solution – micro leasing of machinery powered by Internet of Things tools for example, and microinsurance for cow sickness. It is now moving into insurance distribution and robo-advice.

2. The supportive watchdog - the Chinese regulator's benign take on fintech

China's financial services regulatory framework is fragmented, with financial services businesses including fintechs potentially licensed in different ways and by different bodies according to their focus or the range of their activities. Overall, however, this is a regulatory system built on the premise that technology will solve problems rather than cause difficulties to be carefully policed again.

We met with the China Banking Regulatory Commission (CBRC) for a fireside chat and came away with the following observations:

— The number one challenge facing financial services in China, the regulator told us, is how to accumulate enough information and data to drive smarter decision-making and increased provision.

— The rating of banking groups such as Ant Financial, which trade on significantly higher multiples than the industry's incumbents, is justified by the value of their technology and the scale of their data, the regulator argued.

— Officials said their assessment of applications for banking licenses looked in much greater detail at Fintechs use of cloud and their exploitation of data than their intentions to build branch networks; this physical infrastructure is seen as less important.

— Small to medium-sized banks, which are often regional, should operate as distribution channels, the regulator argued, rather than trying to compete as product originators. The watchdog wants to see a financial services market based on a horizontal infrastructure, rather than vertically integrated businesses.

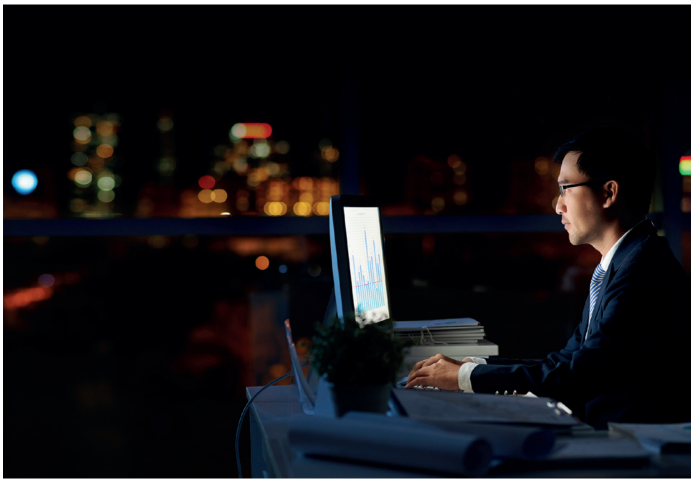
— The biggest issue for firms scaling up, officials told us, is access to talent – in particular, the shortage of data engineers. China has had some success in encouraging graduates to work overseas and then to bring their expertise back into the country, but talent is an ongoing challenge.

— The regulator is watching Europe's implementation of the General Data Protection Regulation (GDPR) with interest. Its own priority is to get more people's data into the system, with the question of who owns this data remaining secondary for now.

This final point reflects the Chinese view that the battle against financial exclusion has not yet been won in the country. The regulator remains focused on ensuring individuals have access to a full range of financial services – and particularly the next generation – and that the industry is able to support enterprise, including the agricultural economy. The potential of technology to drive this ambition means the regulatory view will remain benign.

3. Beyond digital - the ubiquity of cloud, AI and the IoT

The "digital transformation" we so often talk about in the West isn't even a thing in China. For one thing, with less financial infrastructure in place and fewer non-digital incumbents, transformation is not so relevant; more to the point, China's fintechs are focused on the power of specific technologies rather than generic digitalism.



Above all, China's fintechs excel in applying emerging technologies to exploit big data.

The huge population in China and its remarkable embrace of ecommerce and social media has given the big technology companies access to huge and growing pools of data. Powerful new artificial intelligence tools offer a means to exploit this data to generate actionable insight. Cloud structures provide storage, organisational and processing capability and capacity.

These technologies are now being employed throughout the financial services industry by both the large technology companies and the growing number of start-ups and scale-ups. Throughout our meetings with China's fintechs we heard stories of use cases and applications in areas including credit assessment, instant payments, micro lending, consumer finance, small business finance, rural finance, leasing, insurance, wealth management and enterprise solutions.

Moreover, the rapid growth of the connected devices and the internet of things represents an exciting new front for many fintechs. In the rural economy, for example, we are already seeing fintechs acquire data from sensors installed in farm equipment, as well as from drones and satellite connectivity; this data provides a means with which to serve an industry that has previously been difficult to reach, with new products in areas such as credit and insurance.

Other technologies are emerging rapidly too (or have already done so). Voice recognition and natural language processing, for example, are ubiquitous amongst Chinese fintechs – so much so that encounters with Westerners typing on their mobile devices prompts quizzical looks. Facial recognition is on its way to wider use, with Baidu in particular developing technologies with a broad range of applications, including to combat fraud.

The significance of these technologies lies not only in the speed with which they are being developed. The bigger point is that China's fintechs don't have to spend their time working out how to bolt on new tools and technologies to existing systems and structures; instead, they're focused on identifying specific problems, working out which technology might help and how, and then building from scratch accordingly.

Company in focus: **aiBank**

aiBank is China's first digital-only bank, a joint venture between Baidu and CITIC Group. Having been live for just four months, it has already acquired 1.6 million customers, amassed assets of RMB 10 million and extended credit worth RMB 20 million. It averages just 3 seconds for the time taken to grant a facility.

The bank believes China's digital maturity will span three phases, with a move from process automation through to digital products created for customer synergies and then on to an era defined by artificial intelligence, where the boundaries between industries become increasingly blurred.

aiBank's business model is built on smart marketing to acquire customers, with data sourced from multiple feeds, and sophisticated risk management leveraging tools such as deep learning and neural network monitoring. It aims to offer a full suite of banking products, with additional ventures in SME lending, wealth management and payments.

4. Financial services everywhere

Many of the biggest names in Chinese fintech have entered financial services from other industries, leveraging their technology expertise and experience to solve a new set of problems. Now fintechs are being encouraged to repeat the trick – to take the lessons learned from financial services to develop new products and services in other industries. This will be the era of financial services everywhere.

The healthcare sector provides a good example of what is possible. The social media and mobile payments platform WeChat, developed by Tencent, has learned much from Tencent's development of WeBank over the past three years.

Now it is applying its knowledge to healthcare with an application that helps Chinese citizens book doctors' appointments, pay for treatment and share ratings of the service with other users; it has already attracted 400 million users in 50 cities across the country.

Similarly, Tencent is exploring the power of crowdsourcing, another financial services industry phenomenon, to drive diagnostics. It has built a library of pictures from users sending in photos of their physical symptoms when ill; using artificial intelligence, it is now able to help patients diagnose ailments as it compares their photo with the pictures in its database.

Other industries will see similar developments. For instance, financial services companies are now focusing on the smart cities theme, where the constant throughput of people and traffic will power an exponential increase in data; the techniques brought to bear on these pools of information in financial services will enable more efficient urban management and logistics.

In mobility, meanwhile, the growth of autonomous and electric vehicles is another area where financial services expertise may be invaluable. From digital wallets for payments to pay-as-you-go insurance, fintech processes and technologies can power this new movement.

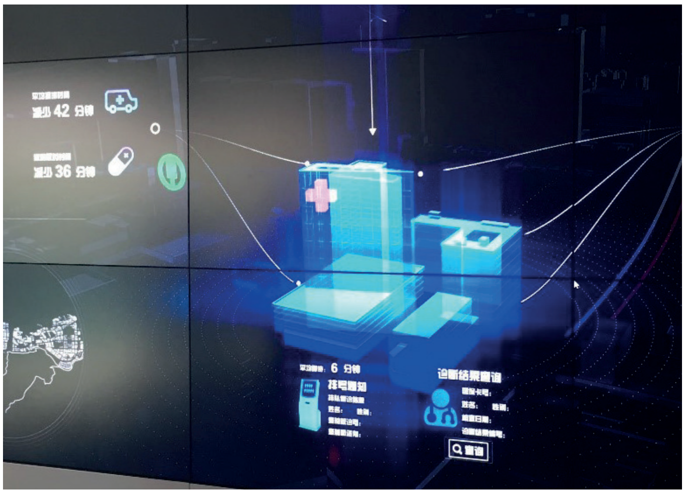
The potential is to take financial services well beyond its traditional barriers, building new solutions on emerging technologies to meet societal needs.

Company in focus: **Alipay**

Ant Financial's Alipay already has more than 800 million customers and is installed in more than 60 million stores – last year, the payments company saw its share of the market move ahead of both Visa and Mastercard.

Alipay is once fintech at the centre of the idea of financial services everywhere, with a government mandate to help drive the Smart Cities agenda, for example.

Alipay's model focuses on driving customer engagement, drawing on insights from users' data, to increase revenues, enhance risk management and lower cost. Key technologies include blockchain, artificial intelligence, security, the Internet of Things and cloud (BASIC).



Tencent’s move into smart cities using iot

China Tech loves their mascot

Creditease CEO, Ning Tang, in centre

5. Data drives development – deploying at speed by following the data

The numbers are staggering. To take just a single example, WeChat Financial Technology acquired 400 million customers in seven days when it launched a promotion centred around Chinese New Year – to put those numbers in context, one non-Chinese bank we know was delighted to acquire data for 5 million customers over a four-month period of activity on its messaging platform.

These data volumes are crucial to the business model that many Chinese fintechs follow: in simple terms, they follow the data.

A venture that begins in one area – credit, say – very quickly acquires vast amounts of data through its activities; it is then able to exploit that data to move on to a new business area. Even better, the data provides a means with which to move on at incredible pace, moving from concept to implementation in a matter of days rather than months or years.

Take Baidu Financial Services Group (now to be known as Du Xiaoman Financial), recently carved out of Baidu to become a standalone financial services company built on artificial intelligence. It leverages its parent's expertise in facial recognition, natural learning processing and similar technologies to predict risk behaviours with greater accuracy, but it is the data it has acquired in particular segments that is powering its development.

The business began in payments, with a financial wallet product that acquired customers at a very rapid rate. This gave it the data required to underpin a move into the RMB40bn consumer finance market – and the on to wealth management and insurance, which are even bigger markets. Crucially, Du Xiaoman Financial is applying similar technologies in each segment, but developing new products and services on the basis of the customer data it has accumulated.

This is a model to which Western business can aspire – they too have access to data that can help them move from one segment to an adjacent market, but only if they put this data at the centre of the business model. Bear in mind again that China's fintechs have global ambitions – and that the follow the data principle can work internationally, as well as in the domestic marketplace.

Company in focus: **Du Xiaoman Financial**

Du Xiaoman Financial is the new name for Baidu Financial Services Group, recently demerged from Baidu with $1.9bn of finance from international investors including the private equity groups TPG and Carlyle Group.

The business is pioneering the use of artificial intelligence in financial services with a "financial brain" model. On the left side of this model sits the company's decision engine, leveraging tools such as big data, machine learning and visual modelling; this is combined with the right hand side's perception engine, focused on voice and facial recognition, as well as natural language processing capabilities.

This technology powers Du Xiaoman's customer acquisition and credit modelling, driving growth through smarter exploitation of big data, verifying identity to reduce fraud and boost compliance, enhancing risk management and enabling new services in adjacent segments such as robo-advice.

6. The trust conundrum - delivering on the mandate

China's fintechs recognise that building trust – with the public, with regulators and with one another – is an integral part of their mandate. They have very deliberately set out to build reliable and consistent processes, systems and service to establish and maintain faith in their security and value proposition. This work has seen the development of a fintech ecosystem of increasing maturity.

This is not to suggest that China's fintechs are collaborative at the expense of competition.

Nevertheless, China's fintechs have done a remarkable job to develop the structures that other financial services industries take for granted – central bureau for credit checking, for example, and distribution channels to get products and services into the marketplace.

China's government continues to challenge the sector to do even more of this work, in the belief that additional improvements in industry infrastructure will reduce financial exclusion even further and support the broader economy. One important target, for example, is to move further towards the cashless society with significant reductions in the number of cash transactions taking place across China as a whole.

For the fintechs' part, they express willingness to play this role. But the leading firms are also eyeing further international expansion. One motivation for this is to learn from the innovation going on in other markets – investing in overseas technology in order to deploy it at home, in other words – but nonetheless, China's fintechs are set to become ever more significant players in global financial services.

Conclusion : seven reflections from back home

Back home, removed from the maelstrom of China's frenetic fintech ecosystem, what conclusions did we draw from our visit? The short answer to that question is simple: it is that Western financial institutions must stop thinking about competition from China as an emerging threat or a potentially disruptive force for the future; these fintechs are growing at an incredible pace, have already acquired considerable scale and have serious and credible international ambitions.

Even if that weren't the case, however, China's fintechs have much to teach their Western counterparts. Here are our key takeaways:

1. The regulatory systems may differ between West and East, but artificial intelligence is already the frontier for innovative financial services businesses.
2. In an era of open banking, your ability to build and maintain an ecosystem will drive competitive advantage from greater cost efficiency and enhanced customer experience.
3. Fintechs must maximise the advantage of their freedom from legacy burdens in order to operate at a fraction of the incumbents' costs; that applies both to their own operations and in their role as banking-as-a-service providers.
4. Incumbents launching greenfield banks (or investing in such ventures) have opportunities to drive new revenues and improve their cost profile – and do so in both a B2B and a B2C context.
5. For fintechs, an aggressive strategy to grow the customer footprint and build the offer will be a route to significant value creation.
6. Chinese fintechs' international aspirations will create opportunities for Western incumbents to forge partnerships and joint ventures.
7. To have any chance of success in China itself, international financial institutions need to identify their target proposition with great accuracy – and work out how to exploit their global capabilities to deliver value.

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CREATE | CRT100563 | Jul 2018