

Agenda Advancing economics in business

Will tech giants take over payments?

The Chinese payments industry has recently experienced significant disruptions from technology companies Alipay and WeChat. Although consumer preferences and the regulatory environment have played an important part in the success of Alipay and WeChat Pay in China, many factors are also applicable in the European context. With technology companies now evaluating opportunities in the European payments market (most recently, Facebook's Libra), what can the Chinese example tell us about its likely evolution?

The global payments industry has seen entry by technology companies that did not previously specialise in payments. This is particularly true in China, where Alipay and WeChat Pay have not only revolutionised payments at home, but also prompted companies in other parts of the world to follow suit. This article explores the factors that have contributed to the success of Alipay and WeChat Pay, and the implications of this trend for competition in the European payments market.

What are Alipay and WeChat Pay?

Alipay and WeChat Pay are well-known payment methods in China, supporting both peer-to-peer and consumer-to-business transactions. They were created by two technology giants—Alibaba and Tencent—that did not start out as payment service providers.

- Alipay was originally created by Alibaba to process online payments for its online shopping platforms.
- WeChat Pay was created by Tencent—the owner of WeChat, which is China's largest social media and messaging app.

Today, Alipay and WeChat Pay are the most important mobile payment applications in China. They can be used to pay at many retailers, in store and on the Internet, and for services such as public transport, utility bills, cinema tickets and investments.

In a similar way to PayPal, Alipay and WeChat Pay are digital wallets that can be prefunded using credit or debit cards. Users can also link these e-wallets directly to their bank accounts.¹ However, unlike PayPal, whose 'in-store' payment has traditionally been less developed (at least prior to its acquisition of iZettle in 2019),² both Alipay and WeChat Pay are widely used for in-store payments in China.

How did Alipay and WeChat Pay become so successful?

Alipay's online payment system started as an escrow service—a third-party trusted intermediary—to address the lack of trust between buyers and sellers on its ecommerce platform.³ In early 2000, ecommerce began to develop in China. The small average transaction value between online buyers and sellers meant that it was not sufficiently attractive for traditional banks to provide the required escrow service, so Alipay was created to act as a third party that provides a full guarantee to each party to a transaction.

Alipay and WeChat Pay have since matured to become substantial players in the Chinese retail payments industry more broadly. For example, the number of payments sent using WeChat Pay's 'Red Packets' payment product increased from 16m in 2014 to 46bn in 2017.⁴ How has this been possible?

The lack of a mature credit card market played an important role in the initial uptake of mobile payments. In early 2000, credit card usage in China was lower than in Europe.⁵ This meant that, at the time, Alibaba could not use credit cards as a means of payment for merchants to transact on its ecommerce platform. As a result, China bypassed the transition from fixed-line telephone banking to credit cards—typically an early stage in banking evolution—and 'leapfrogged' straight to third-party mobile payments.⁶

WeChat Pay entered the market at a much later stage. WeChat first launched its payment product 'Red Packets' to facilitate peer-to-peer transactions during Chinese New Year in 2014. Riding on the tradition of giving cash during the festival, the Red Packets quickly gained popularity through social media. Since entering the online payments market, WeChat Pay and Alipay have quickly expanded, making use of their strong positions in their original markets. WeChat was (and remains) the largest social media and messaging app in China, while Alibaba is China's largest online shopping platform. Today, Alipay has 1bn online and mobile users,⁷ and WeChat Pay has 900m users.⁸ High rates of growth in the mobile payment industry have been achieved to a large extent by drawing on these large, established customer bases.

After establishing themselves as online payment providers, WeChat and Alipay expanded into the in-store payments market. This expansion was facilitated by the use of Quick Response (QR) codes. QR codes are two-dimensional bar codes that can be used to store contact details. Each user of the system, consumer or business in the two platforms has a unique QR code. To initiate a payment, a customer can scan the vendor's QR code using a smartphone and enter the payment amount. Alternatively, the vendor can pre-enter the payment amount, and then scan the user's QR code. After verification of payment details, funds will be transferred from one wallet to another on the same platform.⁹ Such technology is appealing to merchants as it does not require an upfront investment in point-of-sale terminals; all that is required is a printed copy of the QR code.

A further driver of growth in these payment methods is that transactions are free of charge at the point of sale for both parties, provided that users keep money on the platform. Charges are levied for transferring money out from Alipay and WeChat Pay into the traditional banking system. However, as Alipay and WeChat Pay can be used to pay for an increasing range of goods and services, the need to transfer money out into the traditional banking system is decreasing.

To keep the money on their respective platforms, Alipay and WeChat have increased the diversity of purchases that can be made using the apps, through collaborations with third parties. These include the largest ride-sharing/ taxi apps, retailers, utility companies and, more recently, public transport companies.¹⁰ Both companies have also introduced rewards (often in the form of cashback) to incentivise consumers to make use of these partnerships, helping to bring about a significant change in consumers' payment habits.

Beyond payment—the power of platforms and data

These strategies have enabled Alipay and WeChat to become 'super apps' in China. By 2017, WeChat had 40 functions, and Alipay had 90.¹¹ These functions cover a wide range of service categories, enabling the applications to provide consumers with a 'one-stop-shop' for their daily activities—from paying tuition fees, booking medical appointments, and tracking physical activity to playing games, shopping and socialising.¹² Such integration has enabled Alipay and WeChat to deepen their relationships with customers in a way that traditional payment providers could not.

In addition, due to the diversity of services offered through their apps, Alipay and WeChat have access to vast amounts of valuable customer data, much of it in near-real-time. The more customers use the app, the better able Alipay and WeChat are to tailor their service offerings to individual customers. This positive feedback loop provides WeChat and Alipay with a competitive advantage.

As payments are free of charge, both companies have monetised their data to obtain revenues through targeted advertising and offering non-payment-related services. For instance, Tencent develops individually targeted advertising for movies based on data analytics. Alibaba developed Sesame Credit—a digital credit-rating service that calculates a social credit score based on the data held by Alibaba (including personal information, credit history, and ability to pay).¹³ Alibaba has been able to offer loans, particularly to those with little credit history, based on this information.

The impact on the Chinese payments market, and implications for Europe

The success of Alipay and WeChat has changed China's payments landscape significantly over a short period of time. China has historically been a cash-based society; in 2010, 61% of Chinese retail transactions (by value) were paid in cash and 35% were paid via card,¹⁴ with the majority of the latter going through China UnionPay, the domestic card scheme. By 2017, it is estimated that 23% of retail payments were made either online or through mobile phones.¹⁵ Over the same period, cash payments have been estimated to represent only 30% of transactions.¹⁶

Such substantial changes illustrate the potential for technology giants with large existing user bases to disrupt a region's payments landscape. In particular, their ability to create an ecosystem that maintains a close customer relationship by offering a wide range of services provides a mechanism for rapid market entry and growth.

It is clear that a number of firms are already assessing opportunities in this space. Both Alipay and WeChat Pay have now entered the European market and are gradually expanding their footprints.¹⁷ Other technology companies have also been making moves. For example, Amazon has launched Amazon Pay, and Facebook recently released a White Paper for its new cryptocurrency, 'Libra', which creates a new payment system based on blockchain technology.¹⁸ So far, Libra has already received backing from many established payment companies and platform technology companies.¹⁹ The Chinese experience shows that, with the right strategies, such players are capable of winning significant market shares within a very short time.

The right strategies for the European markets are unlikely to be the same as for the Chinese market. For example, the use of customers' payment data is likely to be subject to greater scrutiny in Europe than in China due to the EU's General Data Protection Regulation. In fact, the launch of Libra has already sparked concerns from regulators globally on issues relating to privacy and data protection.20 More broadly, the antitrust cases against Google, Facebook and Amazon signal that European regulators are increasingly concerned about the market powers of technology giants.²¹ There are also established payment providers in the European market, which are also investing in payment systems.

Whether the expansion of technology companies in payments will be successful, and which players, if any, will triumph over the coming decade, will depend on the interaction of all the above factors. This could mean that the European market evolves in a very different way to the Chinese market.

Nevertheless, it is clear that in the years ahead technology companies will be increasingly important competitors in the European payments market. Their significance comes from not only the scale of their existing user bases, but also their potential to introduce a number of new competitive dynamics. For example, technology companies may be able to cross-subsidise payment services on the consumer side using revenues from other services such as targeted advertising. Competition between payment infrastructures, as well as between services, may become increasingly important where technology companies are successful in driving high uptake in parts of the payments market. For instance, Facebook's cryptocurrency-based payment system could bypass existing payment infrastructures in peer-to-peer payments if users are happy to hold a balance of Libra for day-to-day payments, and only occasionally transfer a balance into or out of a traditional bank account.

Looking ahead

The success of Alipay and WeChat Pay demonstrates that technology companies with a significant customer base are well placed to disrupt the European payments industry. Their diversified revenue streams and ability to drive adoption can help them to quickly change the competition dynamics in the payments industry.

Although their success will depend on their ability to adapt their strategies to comply with EU data laws and the wider regulatory interventions, it is clear that in the years ahead technology companies will be increasingly important competitors in the European payments market.

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¹ The Brookings Institution (2019), 'Is China's new payment system the future?', June, p. 9.

² For further details on the merger between PayPal and iZettle, see Competition and Markets Authority (2018), 'PayPal Holdings, Inc./iZettle AB merger inquiry, 20 September, https://bit.ly/2U819KL.

³ Alibaba (2005), 'Alibaba.com launches online payment solutions in China', press release, 2 February, https://bit.ly/2FB9zRQ.

⁴ The Brookings Institution (2019), 'Is China's new payment system the future?', June, p. 12.

⁵ Alibaba (2005), 'Alibaba.com launches online payment solutions in China', press release, 2 February, https://bit.ly/2FB9zRQ.

⁶ Korella, J.L. (2017), 'Cash and cards vs smartphone?Outcomes of a comparative study on retail payment behaviour in China and Germany', 1 October, https://bit.ly/2X8shWC, p. 16.

⁷ Alipay's website, https://bit.ly/2ek5Sl4, accessed 3 May 2019.

⁸ Business of Apps (2019), 'WeChat Revenue and Usage Statistics (2019)', 27 February, https://bit.ly/2XcTWup.

⁹ The Brookings Institution (2019), 'Is China's new payment system the future?', June, pp. 10-12.

¹⁰ Xiao, E. (2017), 'How WeChat Pay become Alipay's largest rival', Tech in Asia, 20 April, https://bit.ly/2osinig.

¹¹ McKinsey Global Institute (2017), 'China's digital economy: a leading global force', August, https://mck.co/2PE7RFt, p. 11.

12 Ibid., pp. 12–13.

¹³ Ibid., p. 10.

¹⁴ Better than Cash Alliance (2017), 'Case study: Social Networks, e-Commerce Platforms, and the Growth of Digital Payment Ecosystems in China: What It Means for Other Countries', April.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Xizhi, L. and Qian, D. (2017), 'Roundup: China's mobile payment expands in Europe, marking profitable change for both', Xinhua Net, 20 December, https://bit.ly/2Xd0TMh.

¹⁸ Libra (2019), White Paper, https://bit.ly/2FtCCXt.

¹⁹ Libra, 'Founding Members', https://bit.ly/2WUbAOy.

²⁰ The Block (2019), 'Global regulators and politicians react to Facebook's Libra cryptocurrency initiative', 20 June, https://bit.ly/2IS8VkD.

²¹ Politico (2019), 'Want to regulate Big Tech? Sorry, Europe beat you to it', 11 April, https://politi.co/2IWWu7n.