

China's Alipay and WeChat Pay: Reaching Rural Users

Chinese information technology conglomerates Alibaba¹ and Tencent own or operate dozens of competing online businesses, and yet, their affiliate mobile wallets stand out for how they have fundamentally influenced everyday living in China's cities. Alibaba through its dominance in e-commerce and Tencent through its mobile social media and messaging platforms (WeChat and QQ) connect mass-market audiences with their respective wallet products: Alipay and WeChat Pay. Although these services are the product of unique market conditions, they offer many learning opportunities. Perhaps most extraordinary has been the companies' ability to build trust with users. Tencent and Ant Financial, Alibaba's financial affiliate, are redefining the relationship users have with finance. Finance is becoming simpler; it is also remarkably more social in nature. This holds great promise for advancing rural financial inclusion in China. However, challenges in serving last-mile clients remain.

Today, the Alipay and WeChat Pay mobile wallets, which link users' bank cards to a smartphone application, each has hundreds of millions of active users; combined they hold 92 percent of market share (most users have both wallets). China Internet Network Information Center (CNNIC), a government agency, reports that China now has 502 million unique mobile payment users—almost as many as the 556 million mobile money accounts found in the rest of the world (CNNIC 2017, GSMA 2016).² This widespread use of mobile payments has shown China, and in turn the world, a glimpse of a cashless future.

Despite these large numbers, defining Alipay and WeChat Pay's impact on the "average" Chinese household is less straightforward. The dynamic ecosystem of services built into these smartphone-enabled mobile wallets has driven unprecedented use for banked Chinese who have disposable income and who are technologically savvy. In fact, mobile payment apps are so pervasive in urban areas that they have become symbols of the country's newfound modernity. However, 44 percent of the country's population still live in the less developed rural areas (World Bank 2015). A lack of young workers in the countryside (a product of urbanization), a general lack of trust and awareness of digital services there, and an urban-rural infrastructure gap all impede the ability of mobile payment solutions to progress in these regions. This makes one wonder whether the sweeping change Alipay and WeChat Pay brought to cities might also transform China's rural landscape.

Replicating the experience of urban users in rural areas can help bring these solutions into the hands and minds of an older, more rural population. However, it may take a different approach and new design considerations to achieve this. Additionally, creating those same conditions for success in rural areas will take time, especially when considering that the rapid growth of Alipay and WeChat Pay in cities has been many years in the making. Their foray into digital payments began as early as 2004 when the companies developed online, escrow-based payment solutions to service their e-commerce and online gaming platforms, respectively.³ Online shoppers, who were concerned about scams and fraudulent dealings, suddenly had a mechanism for transacting with greater confidence. Users only had to link their bank cards to online accounts to get started.

When Alipay finally launched its first mobile version of the wallet in 2008, Alibaba was entering the market with strong

technical experience, a massive user base, and extensive bank networks, but transactions were predominantly still done on desktop devices for e-commerce. By the time Tencent rolled out its own wallet in 2013 as a part of its mobile-only WeChat application—a messaging and social media platform (Shrader 2014)—online activity was quickly shifting to mobile. WeChat's dominance in messaging paved the way for a rise in person-to-person (P2P) transfers. Users can exchange money directly in the same chat panes they use to talk with family, make plans with friends, and collaborate with co-workers.

Linking bank cards to mobile wallets works exactly as it does for the desktop versions. High bank account ownership levels in the country (79 percent) made this a practical model, but it was surging smartphone ownership, which rose from 39 percent in 2013 to 71 percent in 2016, that catalyzed the growth of these products (Findex 2014, BTCA 2017).

The accumulated experience of Tencent and Ant Financial in mobile payments comes from years of chasing after urban users with convenient and needs-based services. They have created a seemingly endless list of use cases by linking mobile wallets to various consumption or bill payment services—from taxi hailing and grocery delivery, to utilities and credit card payments, to booking wedding venues and investing in financial products. Each has fought for market share by aggressively marketing wallets and providing consumers with a greater variety of linked services. Competition has given rise to an abundance of features found in each app, a reflection of an evolving urban lifestyle in China.

For the rural countryside, many of these services or features simply do not relate to daily life in the same way. Even if requisite conditions are met (i.e., owning a bank account and having a smartphone with internet connection), a compelling reason for use is still needed. This calls for renewed exploration for how solutions can be designed to complement rural users' unique problems and needs.

The State of Rural Mobile Payment Adoption in China

This is not to suggest that mobile payments cannot reach rural users yet. Recent data from government sources show that rural mobile wallet adoption is already happening. Alibaba and Tencent's services have made steady progress in reaching part of the rural population. Using CNNIC

1 Alipay was officially spun out of Alibaba in 2011 and then reorganized under the entity now known as Ant Financial. While legally separated, Alibaba and Ant Financial are both managed by founder Jack Ma and often are treated as part of the Alibaba Group. For simplicity, Alibaba is used to refer to the affiliates' combined activities.

2 Mobile payment users and mobile money accounts are not a one-to-one comparison.

3 Early digital consumers did not trust online sellers out of fear of scams. The Alipay system is designed to hold paid amounts in escrow and release them to shop owners on Taobao, Alibaba's flagship e-commerce platform, only after delivery confirmation that a satisfactory product was received. This built trust in both online payments and the Taobao/Alipay brands.

figures from 2016, about 104 million rural users (about 17 percent of the rural population) were using mobile payments. It is an impressive number compared against the 398 million urban users. Today the total number is surely higher, but more important is the fact that rural residents are using these services. In fact, almost half of all rural internet users are already using mobile payments. This suggests that the adoption rate among rural people who own smartphones is actually quite high.

The dramatic increase in rural bank account ownership levels in China has been another key enabler (Duflos and Klapper 2015) of rural mobile payments adoption. From 2011 to 2014, bank account ownership among rural residents shot up from 53.7 percent to 74.3 percent, close to the national average. Government campaigns mandated state-owned banks to proactively open accounts for rural households. This facilitated delivery of government-to-person (G2P) subsidy transfers for healthcare and agriculture productivity (Shrader and Duflos 2014). It has also allowed a bank-card linked model for mobile payments to work efficiently. Sitting in between users and their bank accounts allows the wallets to provide users with improved customer experience and comply with know-your-customer procedures of banking. Alipay and WeChat Pay's Chinese label of "third party payment company" is a nod to their products' reliance on an underlying bank account.

The increase in smartphone ownership, too, has enabled many millions to use these solutions, but it is clear that connectivity is still a major barrier to serving more remote areas. Seventy-one percent of the rural population do not use internet compared to only 33 percent of urban residents who do not use the internet. In cases where the rural population is estimated to be closer to half of the total population, the gap in internet use is even wider (CNNIC 2017). Information on broadband coverage is scarce, but CNNIC studies imply that rural residents without an internet connection fail to gain access to the internet most often because of either a lack of awareness or a suitable device (CNNIC 2016).

Action is being taken to address the problem. In January 2017, the government's National Development and Reform Commission and Ministry of Industry and Information Technology announced 1.2 trillion yuan (about US\$170 billion) worth of investments in core infrastructure over the next three years that will target broadband and mobile network improvement. This investment and falling smartphone costs may help close some of this digital divide.

Providers Lead the Charge for Rural Mobile Wallet Adoption

While connectivity and bank account access are somewhat beyond the control of current providers, Ant Financial and Tencent have signaled a willingness to take rural mobile payment adoption head on in other ways. Jack Ma, founder of Alibaba, has been outspoken on how Ant Financial, the financial services-focused parent company of Alipay, is championing financial inclusion for China's development, especially for rural users. Alipay and WeChat Pay both link users' wallets directly to in-app platforms that offer low-barrier-to-entry investment and insurance products. More indirectly, a combination of online and proximity payment transactions provides data on users that ultimately enable Ant Financial and Tencent to offer users a host of credit products across their businesses.

The appeal of reaching more rural users is multifold. Once in the mobile wallet universe, a new user is immediately more likely to purchase services or goods from Tencent and Alibaba or on one of their platforms. This multiplies the commercial benefit to the companies and generates valuable data on individuals who have no credit score.

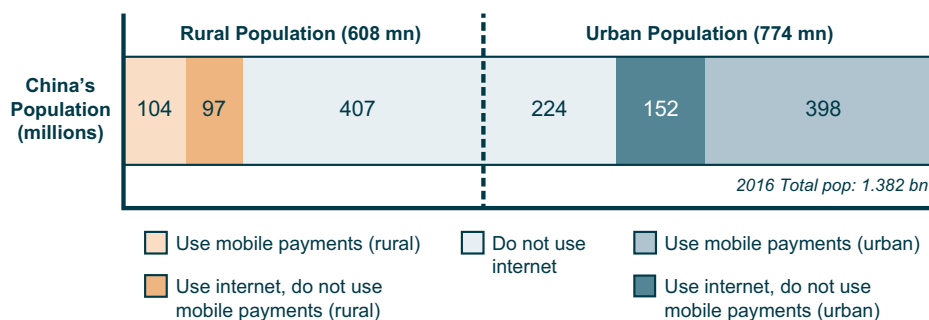
With a clear incentive to penetrate rural areas, the question is then how. For rural residents with both a bank account and a smartphone, two use cases seem positioned to win over new, rural users: e-commerce and proximity payments.

E-commerce

Relying on e-commerce adoption might be a gradual means of incentivizing digital payment adoption for rural users, but it has worked before in China, as it was the starting point for Alipay adoption in cities. Furthermore, e-commerce creates a powerful incentive for users to purchase a smartphone. To illustrate this, CNNIC statistics show just how important online shopping is to getting people to use digital payments in China. The percentage of internet users who use digital payments compared with the percentage of those who shop online is almost identical—65.5 percent compared to 65.1 percent for users in urban areas and 47.7 percent compared to 47.3 percent in rural areas, respectively (CNNIC 2016).

Rural e-commerce is not such a farfetched idea either. Households in villages are learning from one another about how to create small businesses that sell traditional

Figure 1. Rural-Urban Internet and Mobile Payments Penetration (2016)



Note: estimates of mobile payments users comes from 2016 year-end estimate of total mobile payment users and 2015 year-end percentages of online payment users in rural areas

Source: CNNIC

knick-knacks or fresh produce online. In other cases, people in rural counties are setting up small-scale factories to manufacture practical goods, which are later sold on Taobao, Alibaba's small business e-commerce platform. Alternatively, WeChat users promote their products or services directly through social media posts on WeChat or through one of WeChat's business accounts. For buyers and sellers on either end of the transaction, using the mobile wallet associated with the e-commerce channel is essential.

Plans from October 2014 has Alibaba investing 10 billion yuan (about US\$1.6 billion) through 2019 to build 1,000 county-level and 100,000 village-level rural service centers throughout China that help rural residents set-up their own online shops and offer access to digital devices (Alibaba n.d.). As of 2015, 70,000 "village marketers" had been deployed to promote the sale of rural products and services. In July 2017, 30,000 villages had rural service centers, more than double than that of the year before (CGTN 2017).

Private investment in modern logistics firms—parcel delivery businesses, characterized by electric carts and local drop-off centers—combined with public investment in roads and physical infrastructure have built the connections needed to make this happen. Alibaba's strategic investment in Cainiao, one of China's largest logistics companies, is but one example.

WeChat has also evolved to take on many e-commerce characteristics. Formally, businesses can set up official WeChat business accounts to market and sell products and services in-app. Informally, social users have learned to share products and services with groups of friends and those within extended friend circles. Pictures, a description, and a QR-code image linked to a WeChat account are all that is needed to get started.⁴ Users can then share these images, thus enabling broader viewership. This has created localized e-commerce opportunities that require less technology savvy. This trend suggests that e-commerce might be one of the core reasons rural users will adopt mobile wallets in greater numbers.

Merchant Payments

In cities, Alipay and WeChat Pay have also become ubiquitous tools for merchant payments. However,

merchant mobile payment adoption happened only after a critical mass of consumers were already on the platform. Merchants initially acted to seize generous promotional incentives offered by Ant Financial and Tencent, but many companies followed suit in reaction to rapidly changing customer preferences.

Formally, merchants can open merchant accounts that charge much lower payment fees than what China UnionPay has traditionally offered (0.6 percent for Alipay and 0.1–2.0 percent for WeChat Pay). A point-of-sale (POS) terminal is not required; users simply scan a QR-code provided by the shopkeeper and an in-app message confirms the transaction to both parties. When a smart POS terminal is used, typically at bigger retailers, merchants scan the QR-codes that customers generate from their phones to complete the transaction.

Informally, shop owners who are not willing to register or have only just begun using mobile payment apps can facilitate a simple P2P transfer between buyer and seller by printing out and displaying their personal account wallet QR-code. This serves as a stepping-stone to onboarding new merchants and effectively displaces cash-based transactions at little-to-no downside for merchants.

Today, Alipay and WeChat Pay have built 600,000- and 300,000-strong merchant networks, respectively. Already, convenience purchases have surpassed e-commerce shopping as the most common use case for WeChat Pay (China Tech Insights 2017).

This could be an opportunity in rural areas as well.

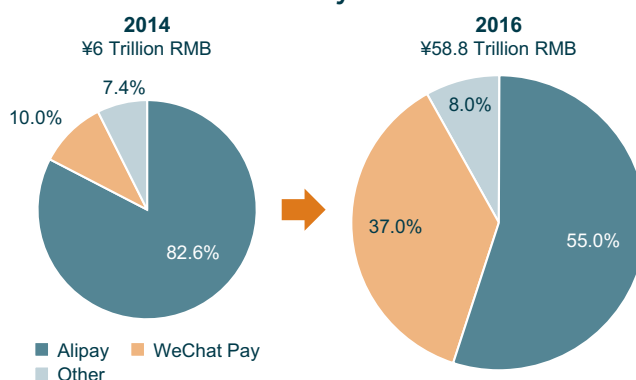
Although it is unclear how many of the current merchants reside in the countryside, offline payments offer a good mechanism to bring in users who may be less inclined to shop online or who cannot receive parcels. As some merchants begin accepting mobile payments, these outlets may also help rural residents gain broader in-person exposure to the technology, in turn raising awareness. Migrant workers who return home for Chinese New Year or to start their own businesses may also help educate rural families on the services and act as a catalyst for merchant adoption.

Figure 2. Alipay and WeChat Pay: Built on E-commerce and Social Platforms

Alibaba E-Commerce	WeChat
<ul style="list-style-type: none"> Alibaba E-commerce Shoppers (mobile): 493 million Single Day Sales: \$25.3 billion (2017) Share of Single Day Sales on Mobile: 90% 2016 E-commerce Sales Volume: US\$485 billion Village Rural Service Centers: 30,000 (2017) 	<ul style="list-style-type: none"> Daily Users: 902 million (2017) "Official Accounts" — i.e., Merchants: 3.5 million (Tencent 2017) 46 billion "Red Packets" sent during Chinese New Year (Tencent 2017)
Alipay	WeChat Pay
<ul style="list-style-type: none"> Alipay Accounts (desktop & mobile): 520 million Alipay Merchant Fee: 0.55%; free for P2P transfers Offline Merchants Accepting Alipay: >600K (2016) Fee for Transferring Wallet Balance to Bank: 0.1% 2016 Avg. Daily Transactions (desktop & mobile): 175 million 	<ul style="list-style-type: none"> WeChat & QQ accounts with Linked Cards combined: 600+ million WeChat Payment Merchant Fee: 0.1 – 2.0%; free for P2P transfers Fee for Transferring Wallet Balance to Bank: 0.1% Offline Merchants Accepting WeChat Pay: >300K (2016) 2016 Avg. Monthly Transaction Amount: US\$83.9

⁴ Equivalent to an account number, QR-codes are two-dimensional barcodes that are linked to a wallet (and chat or service account, in the case of WeChat). Customers may use the phone's built-in camera, launched via an in-app selection, to scan the code. This pulls up the option to pay a merchant directly.

Figure 3. The Rise of WeChat Pay



Note: 2014 Market share is from Q3, when Alipay had the highest market share; WeChat Pay here also include some "Ten Pay" transactions which occur online or on QQ mobile.
Source: iResearch

Concluding Thoughts

The incredible success of Alipay and WeChat Pay proves that social payments in a digital environment may not only address infrastructural and business model inadequacies, but they may also lessen longstanding psychological and educational barriers that limit use of financial services. The gifting of e-red envelopes perfectly defines this trend. China's custom of giving cash in red envelopes for Chinese New Year, when done digitally in chat groups, is both personal and fun. Its widespread appeal among China's urban and rural users alike, despite it being little more than a stylized P2P transfer, suggests that socializing payments may be an integral step in building trust and learning about digital services in the community setting.

For this reason, WeChat Pay appears better positioned than Alipay to develop quickly in rural areas. While many users remain wedded to Alipay for its e-commerce use case, urban users are already finding added convenience in having their main social and messaging application double as their payments and financial services provider, as is reflected in WeChat Pay's growing market share (see Figure 3). The trend will likely be even more pronounced in rural settings, where WeChat is widely popular among first-time smartphone owners.

Only time will tell if last-mile rural users will adopt these services, but in a country known for its breakneck pace of change, the wait may not be long.

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CGAP
1818 H Street, NW
MSN IS7-700
Washington, DC
20433 USA

Tel: 202-473-9594
Fax: 202-522-3744

Email:
cgap@worldbank.org

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