

VIEWPOINT

# WECHAT TO WHATSAPP: How the east could revolutionize payments in the west

Super-apps have reinvented the way businesses connect to customer needs in Asia. They give merchants a digital ecosystem to target, engage and service customers — with a payments network integrated into the platform. The model might soon appear in the West, threatening the incumbent payment networks and banking system.



What happens when you combine Google, Amazon, Uber, GrubHub, WhatsApp and a hundred other apps into one? You get WeChat and Alipay. Owned by Tencent and Ant Financial, respectively, these super-apps have reinvented the way merchants can target and take payments from consumers through their platforms.

Originally started as chat engines and payment processors, they now encompass an entire ecosystem of services for merchants. They provide merchants and businesses with the necessary tools to subscribe to a user base, search, target, interact, and transact with prospective and existing customers. The model works very well — these apps have become the dominant way products and services are paid for, with nearly 90% of consumers in China using them.<sup>1</sup> At 1.583 billion and growing, China's population of mobile users is by far the largest in the world.<sup>2</sup>

WeChat users spend a daily average of 66 minutes on the app. This time spent can increase to up to four hours for users who communicate, shop or entertain themselves on the platform.<sup>3</sup> Consumers love these apps because, like a Swiss army knife, WeChat and Alipay host a wide variety of services under one roof through the inclusion of "mini-apps." This enables consumers to access a large range of applications or services (e-commerce, games, productivity and content).

WeChat can be used for news services, hiring domestic help, donating to charity, investing and so on. But the app also caters to everyday consumer needs such as travel — riding the subway, booking tickets or paying for parking tickets. They cater to purchases made or services delivered online as well — e-commerce, buying air tickets or booking a taxi. These apps have become indispensable to both consumers and merchants.

The mini-apps available within these super apps are easily discoverable, fast

to load and quick to use, and provide a seamless payment experience. They don't need to be downloaded or installed on the phone. They simply disappear once the service is delivered. Smaller than 10 MB in size, they are an instant solution for a particular service.3 The user does not need to leave the super-app to use a mini-app, and once the service is delivered, the mini-app is out of sight. This is unlike apps downloaded from the Google Play Store or Apple iOS, which work independently from each other and use up valuable screen and storage space.

This "walled garden" approach is in sharp contrast to the Western norms, where multiple international and domestic payment schemes compete and coexist, linking consumers to merchants on a one-to-one basis. While merchants can access valueadded services from these payment providers, the options pale in contrast to the entire digital ecosystem that WeChat and Alipay provide.

### Super app, super value

Super-apps are just as attractive to merchants as they are to consumers. Not only do they provide a readymade digital and transactional marketplace, but they can also use it to cut operational costs, drive sales and improve in-store customer experiences.

WeChat's Official Account allows individuals and businesses to share updates and communicate with consumers who follow them. The Official Account allows businesses to create either a subscription account (content-focused), a service account, an enterprise account or a mini-program (apps built within WeChat that can give access to their application program interface).

The use could be as simple as publishing some information about a product or service. For example, Tesla has a mini-program that allows users to locate charging stations.<sup>4</sup> But the platform also supports more complex digital business models. For instance, Pinduoduo is one of the most popular e-commerce mini-apps. As a groupbuying platform, it enables consumers to get discounts on products as more of them register to buy — something that comes naturally on a platform such as WeChat.

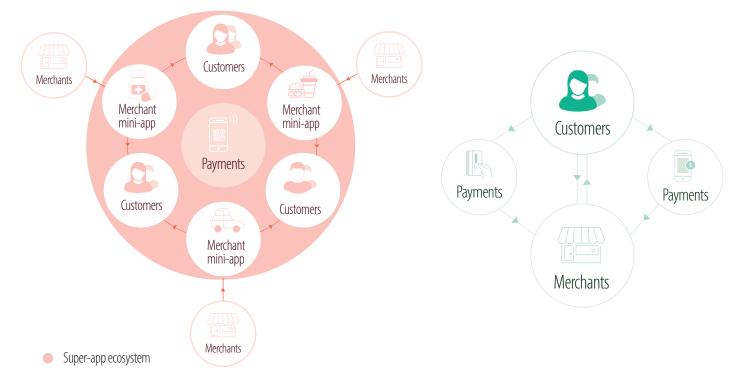
Physical stores also benefit — both from payments and from the general operational efficiencies of integrating digital services.

Restaurant chain Wufangzhai has walls covered by small lockers with glass doors but no serving staff. Instead, customers order food in the mini-app, pay with Alipay and get a confirmation QR code that unlocks the locker that has the prepared lunch. Wufangzhai reported that revenue in the first half of 2018 increased 30% year-over-year,<sup>5</sup> and the restaurant has cut staff from 13 to six employees, reducing annual labor costs by more than half from ¥600.000 (\$94.740).<sup>6</sup> In fact, nearly 34% of WeChat Official Account owners have affirmed that it has helped cut costs by more than 30%.<sup>3</sup>

Hong Kong-based Lung Fung Pharmaceutical is another example of the benefits for business. The pharmaceutical's transaction volumes have risen tenfold since integrating WeChat.<sup>7</sup> Using mini-apps, hospitals have shaved wait times for patients — by 43.6 minutes on average, according to WeChat statistics. This type of usage has resulted in a flurry of mini-apps published by Chinese health institutions with nearly 40% of them using WeChat for one purpose or another — communicating news and updates to patients, sharing information about doctors, allowing patients to make appointments, or accepting registration fees and payments for medical bills.<sup>3</sup>

The demand for mini-app programs has turned the super-apps into app

### Figure 1. The payments ecosystem — Super apps vs. Traditional



Source: Infosys

stores. The WeChat super-app now acts like it has built its own operating system — its mini-app inventory has crossed 2.3 million, versus 2.1 million apps on iOS and 2.6 million android apps in early 2019.<sup>8</sup> Alipay is WeChat's closest competitor, with over 120,000 mini-apps as of January 2019.<sup>9</sup>

### The impact of superapps on banks

Super-apps completely turn the traditional payment model on its head. They build a strong relationship between merchants and consumers based on communication, speed and ease of use. Moreover, they undercut the established systems. Merchant fees of 0.55% to 0.6% charged by WeChat and Alipay are at least 40% less than what banks charge for credit and debit cards.<sup>10</sup>

But the data collected by these super-apps is what creates the most fundamental shift. The apps have data on where the consumers buy goods, how they buy, how much they spend and what services they use. Merchants can get data analytics including the number of launches, number of shares, a comparison of app usage during different time periods, active user retention, average duration of visit, demographics, etc. In essence, they are social media marketing, online stores, communications systems and payment platforms combined.

This has posed a significant challenge to local banks. "Commercial banks have been disadvantaged in competing for mobile payment businesses because the big data related with the end users' payment and online behavior has been captured by Alipay and WeChat Pay," according to Hui Kau-lung, a professor at the Hong Kong University of Science and Technology's Department of Information Systems.<sup>1</sup>

In fact, the dominance of these super-app payment systems is cited as one of the reasons that the People's Bank of China is launching its own digital currency initiative. In early September 2019, Mu Changchun, deputy director of the central bank's payments department, cited monetary sovereignty and legal currency status as two of the main reasons for the launch. However, he added that a central bank-issued digital currency would provide a better option than payment platforms controlled by private companies such as Tencent and Alibaba, as it would not be tied to the stability of these businesses.<sup>11</sup>

The irony is that many consider the PBOC's digital currency to be inspired by the launch of Facebook's own Libra cryptocurrency. This is because the Libra could be said to have been inspired by WeChat and Alipay's successes. Indeed, Facebook is possibly the best-positioned Western firm to emulate the super-app concept.

Facebook, with 2.4 billion users worldwide, indicated in April 2019 that it intends to combine the functions of the Facebook app, Messenger, WhatsApp and Instagram to create a super-app.<sup>12</sup> Including Libra would enable users of its platforms, including those without bank accounts, to send and receive money globally, at a



low cost.<sup>13</sup> Facebook-owned WhatsApp has already begun testing P2P payments in India, its largest market of 400 million users.<sup>14</sup>

Banks in the West could lose serious ground if such super-apps have their way. If apps were to start grabbing market share in the U.S. at roughly the same rate they did in China, banks would lose nearly \$43 billion in revenue and a further \$3 billion in fees from overdraft, maintenance and ATM fees.<sup>15</sup> Banks may also expect to lose their contact with their customers. On the other hand, consumers and merchants stand to benefit from such super-apps. Merchants can get direct access to their customers and gain the data flow currently held by these banks.

### Super-apps in the West

The global rise of super-app-based payments is not going to come easy, however. Facebook's Libra is already mired in regulatory controversy. Regulators in the West are far more stringent and demanding than their counterparts in the East, if the Libra example is any indication. And with increased regulatory scrutiny of the project, key partners including MasterCard, Visa, eBay, Stripe and Mercado Pago have abandoned it.

Meanwhile, WeChat and Alipay are looking at expansion, but currently this is based on targeting the Chinesespeaking user base overseas. They are also taking advantage of an increase in Chinese tourists and the Chinese population overseas. These apps are now accepted at 7-Eleven in Canada, KK Super Mart in Malaysia and Cold Storage stores in Singapore.<sup>16</sup> They have also made headway in the U.S and U.K. Alipay has inked deals with payment processors that will allow it to bring its technology to the U.S. and U.K. The taxis in New York and Las Vegas accept them as payment options.<sup>17</sup> Alipay's partnership with U.K. mobility startup Splyt Technologies allows Chinese tourists to hail taxis from local mobility-service providers without downloading a new app when traveling overseas.<sup>18</sup>

Yet, these Asian super-apps will struggle to establish themselves as truly global players. This is in part due to stringent regulations, but mainly because their main asset, the chat platform, is not used widely outside of China. WeChat had a mere 2.47 million monthly active users in the U.S. as of July 2018.<sup>3</sup>

Nevertheless, Facebook's step into the payments space has caused ripples among the banking community. If it succeeds, it will transform the current payments paradigm — and beyond by offering merchants a one-stop shop for advertising, communicating, analyzing and transacting with customers. This could go beyond payments and may be the future of how we transact online. It could potentially threaten Amazon and Google as people move toward using a chat platform like WhatsApp as their main interface with individuals and businesses. It might have seemed farfetched, but WeChat's experience in China proves that a combination of communication and payment capabilities can dominate a market.

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