

Features of Digital Payment Systems in China and the Prospects for Their Implementation Around the World

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Abstract: Today in China, the digital payment system Alipay is actively developing - an important trend in China, which serves more than 1 billion users and 80 million sellers around the world^[5]. Unfortunately, today a lot of questions arise among such services. Misunderstanding of how they work, what these systems are for, what new they bring to the market, how security and privacy are ensured for consumers of these services. Thus, the relevance of the topic of the article is determined by the active growth of digital contactless payment technology in China.

Keywords: Information Technology, Payment Systems, Mobile Payment Systems, Contactless Payments, Digital Platform.

1 INTRODUCTION

The Chinese banking system is one of the most technologically advanced in the world, which has long been beyond doubt. Digitalization has made mobile apps, online banking, and the combination of financial and non-financial services a part of the daily life of the entire population of China.

In the past few years, we have seen a stable growth in sales via the Internet, an increase in the share of non-cash payments, and an entry into the electronic payments market. The development of non-cash payments should, of course, be stimulated not only by the Central Bank of China, as a regulator, but also by the participants of the banking market by introducing fintech innovations.

Contactless transactions are becoming an important step towards moving away from cash. The article reveals the essence and significance of the Chinese digital payment system Alipay, the features of its use, and the identification of competitive advantages. The article discusses the mechanism of the payment system in China, notes the problems that it may face in the process of implementation and use.

2 ANALYSIS OF THE CHINESE DIGITAL PAYMENT PLATFORM ALIPAY

Ant Group was formerly known as Ant Financial and Alipay. The company is a subsidiary of the Chinese Alibaba Group. Ant Group is the most valuable FinTech company in the world and the most expensive unicorn company. The group owns Alipay, the largest digital payment platform in China. The total volume of transactions in June 2020 alone reached 118 trillion yuan^[5].

Financial services company Ant Group is the largest mobile payment operator in China. The company also deals with insurance, lending, investments and online banking.

Alipay is the main asset of the Ant Group. The application allows you to pay other people, keep money, make investments, buy insurance, get financing, credit cards. Parents can approve their children's spending in the app. Anyone can pay for their purchase using a QR code, this is the most popular payment method in China.

Alipay is an all-in-one financial application that is used all over China. At the same time, Alipay works in most countries in Asia, Russia, in some European countries and in North America. These are mainly destinations that are very popular with Chinese tourists.

Alipay is a unique platform, unparalleled in the US and Europe. It is not just a payment system like Visa or Mastercard. This system has a very clear financial management structure and high social value among consumers in China and other countries.

Ant Group, which entered the market 15 years ago as an escrow service, is now valued at \$ 150 billion. Therefore, it is not surprising that it has become a cause for concern among the leaders of large Western competitors. Many financial companies are impressed and at the same time excited by the rapid development of Ant Group and its payment service Alipay. Moreover, today it is the main payment instrument in China. With the help of the service, Chinese users pay for purchases, services, take instant microloans, open lines of credit, buy insurance, and save for retirement. In total, 730 million Chinese use Alipay every month, for comparison: PayPal has 346 million users^[6].

Another example, in 2020, an American company processed \$ 764 billion in payments. During this time, Alipay processed \$ 18 trillion in mainland China alone.

The Ant Group company plans to raise \$ 34.5 billion during the sale of its shares in the near future. If the company does this, it will reach an estimate of \$ 313.3 billion. This will allow it to bypass many large giants in terms of capitalization (Figure 1).

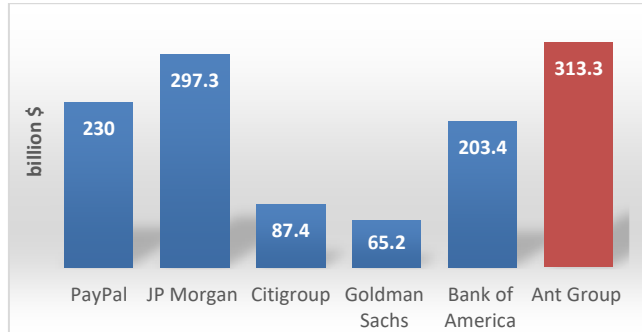


Figure 1. Opportunities of Ant Group when selling its shares^[7]

Behind this amount is the powerful structure of the Ant Group, its impact on China's financial sector, financial performance and global risks.

The main competitive pressure on Ant is only Tencent Holdings Ltd. (WePay platform). However, Ant is significantly ahead of its competitor^[2].

The real challenge for the company is to maintain an edge in China's complex rules and regulations in obtaining and maintaining proper business permits.

3 ALIPAY DIGITAL PLATFORM STRUCTURE

3.1 Digital Payments

Alipay has a wide range of financial services and super applications compared to its competitors.

The Alipay platform includes digital payments, digital finance, and digital everyday services (Figure 2).



Figure 2. Digital Platform Alipay^[8]

Alipay payment system provides:

- management of bank accounts;
- buying tickets for transport, ordering food, renting a car;
- storage of digital documents;
- shopping on Taobao, Tmall, Alibaba;
- payment of utility bills^[8].

Alipay supports almost all types of mobile devices, as well as seamless integration with online assets such as an e-commerce website. Many payment plugins are already supported or under development.

As a result, the company receives revenue from digital payments. It charges sellers and platforms a 0.1% commission for every transaction carried out. The company charges users for transfers to bank accounts and credit card payments.

3.2 Smart Loans

On the lending side, Alipay connects about 100 Chinese banks with consumers and start-ups and small businesses looking for short-term loans. Partners take on debt and credit risk, but take interest on loans, and Ant Group takes commission on transactions.

Since 2014, Ant has been offering a range of unsecured revolving loan products to consumers and merchants. Loan products are aimed at small and medium-sized companies, as well as residents of small Chinese cities who do not have the opportunity to purchase a bank card^[1].

Ant Group operates a lending payment platform but relies on third-party financial institutions. In 2020, about 98% of loans on the platform were serviced by intermediaries.

Ant Group uses over 100 models to assess the creditworthiness of a borrower. The company assesses the borrower's payment history, his occupation, the amount of money he wants to borrow and other parameters.

Based on the assessment carried out, the borrower is offered personal loan conditions and loan rates. The indicator of delinquencies in payments in the system is 1.5%, when compared with the United States, it is 2.5% for credit cards.

For small and medium-sized businesses, Ant Group offers fairly flexible business development loans with instant repayment on average at 11.6% per annum. These loans are usually repaid in three months.

Ant Group uses the 3-1-0 principle: 3 minutes are allotted for submitting a questionnaire for borrowed funds, in 1 second the payment service decides to issue a loan, all this with 0 interactions with service consumers.

Although the platform has good availability of private finance, users still need a good credit history. For its formation, there is the Huabei tool - quick loans from \$ 7 to \$ 7000 for online purchases on Taobao, as well as other platforms, and for responsible payers there is the Jiebei tool, which provides loans for amounts from \$ 10 thousand^[7].

3.3 Investment Instruments

InvestTech's wealth management product gives consumers and businesses access to 6,000 investment products from over 170 funds. Consumers can open an individual investment account right in the Alipay app. Ant uses artificial intelligence technologies to assess risks and offer clients suitable investment options.

Yu'eobao (Residual Wealth) product allows customers to generate income from unused money in their Alipay digital wallet, while the funds can be spent. The service has a low entry threshold - you only need to deposit 1 yuan (\$ 0.15). The yield on the offer is 1.7%, which is higher than most interest rates on debit accounts. In June 2020, it was the largest monetary fund in the world market in terms of assets.

3.4 Insurance

The payment platform offers over 2,000 individual insurance products, including health insurance and retirement benefits. Ant Group was the first to provide insurance products to villagers in China.

The payment platform allows insurers to cheaply access millions of customers and process claims online. Ant Group uses natural language processing technologies to validate insurance claims and identify fraudulent claims.

For example, Ant launched Haoyibao, a cancer insurance service. This is the first insurance in China that a customer can renew for their entire life for 89 yuan (\$ 13) per year^[7].

Let's look at how the Ant payment system works.

In each of the product areas, the company follows three general principles.

1) Data is superpower

Digital payments are important to Ant Group not because of the revenue, but because of the data that can be obtained. Transactions carry, among other things, information about the demographic, socio-economic and civil status of clients and transfer it to other elements of the financial system.

The same goes for business. The data on the number of orders from the seller for six months can be used to predict future cash flows. This information can be used to build a working model of credit history.

2) The first and best customer is Alibaba

The company is entering ever new areas for itself, primarily with its own product, as does Amazon. For example, Ant's first and foremost retail customer is Alibaba, whose needs and data are the driving force behind Ant's next innovation.

First, it's hard to convince legacy financial institutions to focus on technology. Secondly, before offering the platform to other companies, you need to test it well. Third, by opening the door to third-party clients, Ant transforms itself from a financial institution into a platform - and is freed from external financial regulation. Finally, it gives Ant a first-mover advantage in customer relationships.

3) Classic aggregator

Ant Group's products reflect aggregators in all areas, from lending to insurance. These can be direct customer relationships, zero customer service costs and modularity, and vendor availability due to a large user base.

Ant Group quite often used 1 billion users from the Alipay platform to attract banks, mutual funds and insurers. Their significant impact on demand also means they can reduce supplier margins, leading to affordable products with low entry thresholds.

4 PERFORMANCE OF DIGITAL PLATFORM ALIPAY

The company's performance inspires investors: it is a very fast growing profitable business.

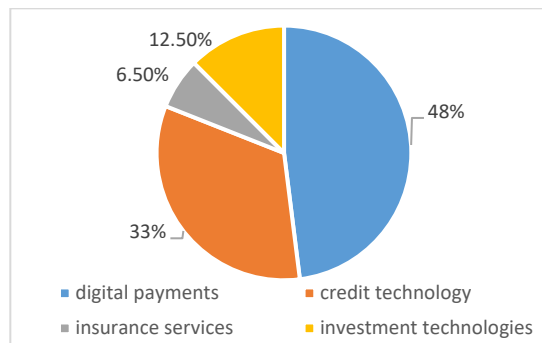


Figure 3. Ant Group Revenues in 2020

The company's revenues are made up of flows: from digital payments, from credit technologies, insurance services, investment technologies (Figure 3).

In 2019, Ant's revenue was \$ 18 billion - 40.6% more than in 2018. The company continued its growth in 2020, with revenues in the first six months of \$ 10.8 billion, which is \$ 7.9 billion more than in the same period a year earlier, and at the end of 2020, revenues were already \$ 19.6 billion (Figure 4).

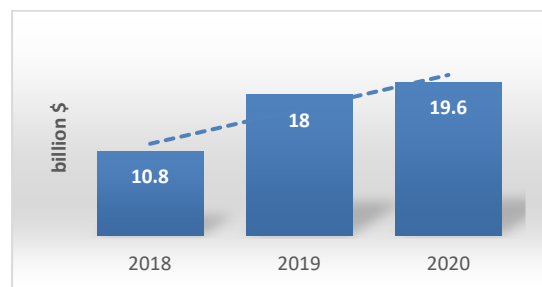


Figure 4. Dynamics of Ant Group's income from the operation of the Alipay payment system^[7]

During the global economic crisis caused by the pandemic, the company not only did not lose, but also managed to earn money on the payment system with a great result, which suggests that the company's services are profitable (Figure 5).

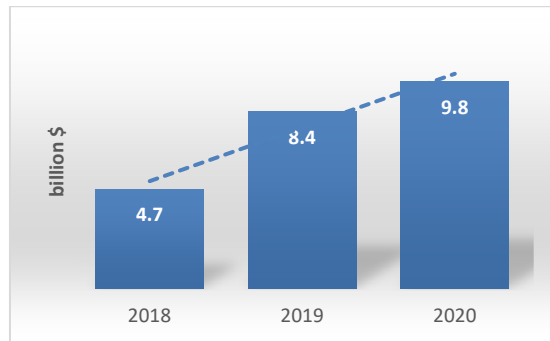


Figure 5. Dynamics of Ant Group's profit from the operation of the Alipay payment system^[7]

The company's net profit: in 2018, the figure was \$ 4.7 billion, in 2019 - \$ 8.4 million, and at the end of 2020 - \$ 9.8 billion.

5 ALIPAY CUSTOMER LOYALTY SURVEY

With the growth in revenue, the number of users also increased. Monthly active users grew from 499 million at the end of 2017 to 712 million by the end of 2020 (Figure 6).

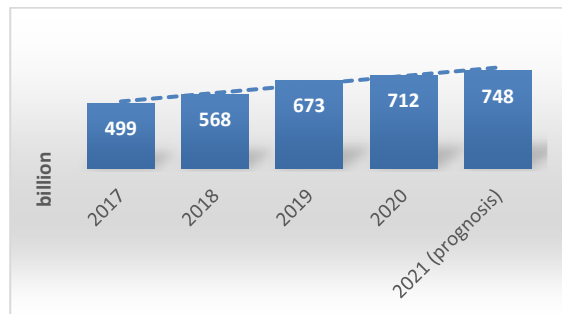


Figure 6. Growth in the number of users of the payment system (million users)^[6]

According to the survey, customer loyalty to the Alipay payment system remains high. 81% of service users prefer to make online purchases through Alipay, and 77% use the service whenever possible.

Alipay is highly rated by most users, but not everyone can trust it. Only 55% of respondents said they trust the payment service, while 80% said the same about banks. More than half (56%) of those surveyed do not want to send cash deposits to their Alipay accounts, however 69% of users believe that Alipay protects their data better (Figure 7).

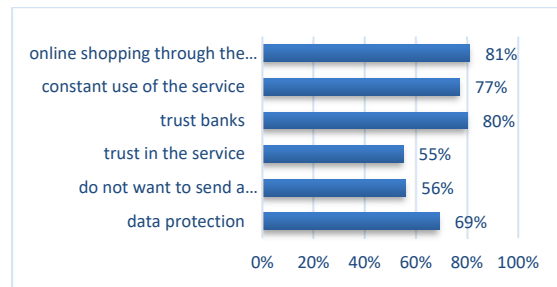


Figure 7. Attitude of users to the Alipay payment system^[7]

Thus, we can note that the growth potential of the use of the payment system is confirmed by the fact that today the digital platform with financial services is one of the most demanded by users not only in China, but also in other countries.

The financial service Alipay has a high degree of individualization and simplicity at the same time, which explains its high demand and an important role in increasing financial inclusion. At the same time, being a product of the fintech industry, the payment service often does not fall into the regulatory framework of the Chinese financial market, and, accordingly, can create regulatory and supervisory challenges. In this regard, the success of the development of mobile financial services depends on the interest of financial regulators in stimulating financial innovation and understanding the needs of users.

This challenge leads to a significant expansion of the role of financial regulators from the traditional function of exercising regulation and supervision towards promoting the development of innovative services and the development of competition between banks, telecommunications companies and payment service providers.

In Ant Group's prospectus, "regulatory risk" accounts for 40% of those listed. The requirements of Chinese regulators are constantly changing, affecting one or the other of the group's financial products. The company also notes China's growing geopolitical tensions with the United States and user privacy issues as significant risk factors.

In the future, as the group expands into international markets, these issues will become more pressing and demanding a strong response. But Ant Group has already overcome all obstacles to financial leadership in China.

Ant Group showcases the characteristics and power of China's IT industry. Thus, Western financial innovation becomes negligible compared to Alipay. While the United States and Europe are focused on a new type of bank - trendy, beautiful and affordable, China has spawned a conglomerate that today surpasses traditional financial systems.

6 CONCLUSION

Let's summarize. Currently, the Alipay payment system operates at a cross-border level (USA, Canada, UK, France, Germany, Italy, Russia, Australia, New Zealand, South Africa), and a wide range of services (payments, financial management, insurance, lending, credit scoring) allows us to consider this payment system as a full-fledged ecosystem of financial services.

Today, the digital platform Alipay allows partner companies to look differently at their business and find new directions for development.

A key element of the successful development of innovations on digital platforms is the presence of such a system that creates conditions for the interaction of all market participants, helps to scale and successfully implement new technological solutions.

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REFERENCES

- [1] The Age of Personalization [Electronic resource] / Mastercard Expert Insights. – Mode of access: <https://www.mastercardservices.com>. –
- [2] Innovation in financial inclusion. Revenue growth through innovative inclusion [Electronic resource] / EY. – Mode of access: <https://www.ey.com>.
- [3] Yoshino, N. Overview of Financial Inclusion, Regulation, and Education [Electronic resource] / N. Yoshino, Y. Naoyuki, P. Morgan // ADBI Working Paper Series. – Mode of access: <https://www.adb.org>
- [4] ADBI Working Paper Series. – Mode of access: <https://www.adb.org>.
- [5] "Current financial realities are a set of rules for old people": how fintech giant Jack Ma Ant Group makes money // <https://vc.ru/finance/>
- [6] Jack Ma's fintech is preparing for the largest IPO in the world: what does Ant Group do and how does it make money // <https://vc.ru/finance/171304-finteh>
- [7] Ant Group launched a blockchain trading platform ahead of the largest IPO in history // <https://forklog.com/Ant-Group-5-facts-ahead-of-record-debut-on-the-exchange/> // <https://bcs-express.ru/>
- [8] Understanding Ant Group // <https://eastmeetswest.substack.com/p/understanding-ant-group>