



The competition on Third-party Online Payment in China : A case study of ALIPAY

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ABSTRACT

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In the information age, the development of the Internet has also promoted the development of the e-commerce industry, and various e-commerce platforms are constantly appearing. The convenience of online shopping has been recognized by the public and the rapid development of the e-commerce industry open the channels for settlement through the Internet. Traditional bank payments can no longer meet the development requirements of e-commerce, therefore, many third-party online payment platforms have emerged as the times require. Among many third-party payments, the most popular in China is Alipay, and they will continue to be a hot topic for a long time in the future development of the Internet. As a secure, fast and convenient online payment platform, third-party platforms have established credit guarantees and technical support functions between banks, buyers and sellers. It can not only meet the credit needs of users in online transactions, but also eliminate concerns about financial security during the transaction process.

The purpose of this article was to analyze the current status of third-party online payments at home and abroad by using ALIPAY as an example. This research summarized the advantages and disadvantages of ALIPAY, studied the opportunities and challenges of ALIPAY, understand the problems that China's third-party online payment development will face, and find the appropriate online payment market survival and development strategy in China.

Keywords: Third-party payment, Alipay, Online payment competition

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Name :

Date :

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1.Introduction

1.1 Research Background

Alipay is a third-party payment platform in mainland China. It went live on October 15, 2003 and officially operated independently on December 8, 2004. With the widespread popularity of the Internet, China's e-commerce has developed rapidly, and the rise of e-commerce has been increasing. Third-party online payment has played an important role in promoting the development of e-commerce. (ALIPAY, 2020). At present, Alipay has developed from a single payment tool to an open platform that provides multiple solutions, such as payment, living services, government services, social networking, wealth management, insurance and public welfare, and gradually covers the entire industry (Li, 2017). As of March 31, 2018, Alipay had 870 million users, becoming the world's largest mobile payment service provider and the world's second largest mobile payment service provider. (SFWQ, 2018) However, issues such as funding, security, and competition also challenge the development of third-party online payments. In December 2016, Alipay upgraded the transfer system according to the requirements of the People's Bank of China, providing users with multiple transfer methods, including real-time, ordinary and next-day transfers. (Zhou, 2017) On January 10, 2017, a netizen discovered a loophole in Alipay. The details of this vulnerability are that if other users are familiar with their personal Alipay personal information, they can log in and tamper with Alipay's password through the "Recover Password" feature. In response, Alipay responded that this method would only happen in some cases. The current system increases the security level of the risk control system (Ma ,2017). The system was upgraded again in August 2018. If the user performs the transfer, the user is selected as a fraudulent user after receiving the account within 24 hours, and the police will return in the same manner after the first report of the alert. (Qianjiang Evening News, 2018) Therefore, how to understand the status and prospects of third-party online payment business from an appropriate perspective, effectively solve the problem of third-party online payment, and expand the unique advantages of third-party online payment are topics worthy of serious study.

1.2 Research Problems

At present, due to the continuous development of network information technology, China's Internet coverage is also becoming wider and wider. The emerging e-commerce industry has ushered in a period of rapid development, and e-commerce is becoming a major differentiator for an innovative economy. (Chen&Jiang, 2015) Since the establishment of the first domestic third-party payment platform, Shouyixin, in 1998, the development of third-party payment companies has been controversial, but there is no doubt that it has accelerated and promoted our social credit system Third-party payment is also a double-edged sword. It continuously challenges and impacts China's existing financial system and is blocked by various forces. It is also trapped by various issues such as payment security and industry competition. Although Alipay's transaction scale in the third-party payment field has always ranked first, with the continuous development of the payment

industry, Alipay is also threatened by other payment methods, such as Tenpay, WeChat Pay and Tianyi Payment. According to Analysys International, in the third quarter of 2015, Alipay's market share was 71.51%, while Tenpay was only 15.99%. Two years later in the third quarter of 2017, Alipay's market share dropped to 53.71%. Financial growth to 39.35%. (China News Network, 2018) Alipay, which has the largest market share, not only faces fierce competition from Tenpay, the second largest player in the market, but also competition from numerous small and medium-sized enterprises, because innovation and business models in the Internet economy are Most importantly, regardless of the size of the company, it may be eliminated in the fierce market competition.(Zhang,Gao&Lv, 2018) The emergence and development of third-party payment is the inevitable of economic informatization and financial electronicization. It has become an indispensable part of our financial payment system. The continuous, healthy and stable development of third-party payments is of great significance to the sound operation of China's economy. As a representative of the third-party payment industry in China, Alipay's own development process can reflect the development trajectory of third-party payment in China. While Alipay has unique advantages, it also bears the pain faced by the entire industry. The emergence of third-party payment has effectively solved the problems of integrity and payment encountered in the development of e-commerce and has played an important role in socio-economic development and the construction of the credit system. Broke out of the world, but regulatory agencies such as the People 's Bank of China have become more and more specific in the supervision of the third-party payment industry, and the rapid development of Internet payments has created a series of electronic payment security issues and increasing conflicts with traditional commercial banks, leading to The development path of third-party payment institutions was shocking. Therefore, although the third-party payment market is showing vigorous development, it is also facing many difficulties at the same time as its rapid development. The future is full of unknowns. How to effectively solve the difficulties faced by third-party payments and maintain the healthy and sustainable development of the industry It is worth our reflection.

1.3 Objective of the study

The development of China's e-commerce has become a background for improving social productivity, and third-party payment service agencies have formed an industry that cannot be ignored. The business model of Alipay service institutions shows that the development and growth of third-party payment service institutions meet the needs of market development. At present, Alipay has established strategic cooperative relationships with nearly 180 domestic and foreign banks and international organizations such as VISA and MasterCard. (You, 2018) This article analyzes Alipay's competitive advantages, points out the crisis and development opportunities that Alipay faces, and puts forward constructive opinions on the development of third-party payment platforms in China:

- (1) Why did Alipay achieve such an achievement.

(2) What is the outstanding competitive advantage of Alipay compared with other payment platforms?

1.4 Scope of the study

The third-party payment industry is in a period of rapid development, and the format has gradually stabilized. At present, China's third-party payment market is highly concentrated, with UnionPay Commerce, Alipay and Tenpay taking most of the market share. Some payment institutions have begun to shift from simply providing payment services to providing industry solutions and developing value-added services, and have formed strong competitive advantages in certain areas. Among them, in the field of Internet payment, Alipay and Tenpay adopted preemptive strategies, taking full advantage of the unique advantages of individual users, and using C2C platforms and other services as the basis for development, enabling account payment methods to bind individual users and train the habits of individual users And stickiness has a clear lead.

1.5 Research Significance

The development of third-party payment companies has been controversial, but there is no doubt that it has promoted and promoted the construction of China's social credit system. It is also a double-edged sword. It continues to challenge and impact China's existing financial system, is hindered by various forces, and is trapped by various issues such as payment security and industry competition.

As the representative of China's third-party payment industry, Alipay's own development process can reflect the development trajectory of China's third-party payment. Although China's third-party payment market has become the world's largest third-party payment market after rapid development in recent years, based on China's huge population, the world's second largest economy, the huge potential of the e-commerce shopping market and mobile Internet, China The rapid development of the third-party payment market and other factors still have a broad space for development. (Zhuo, 2019) Despite Alipay's unique advantages, it has also suffered the pain faced by the entire industry. This article analyzes the macro environment of the Alipay market, and finds the difficulties and predictable market prospects that Alipay faces for the sustainable development of China's third-party payment company's market strategy. This has certain theoretical significance for China's three-party online payment industry, and can also promote the development of payment platforms such as Alipay.

2.Literatures Review

2.1 Alipay

Alipay was originally set up to address the security of Taobao transactions. At the beginning of Taobao's launch, most transactions were conducted in the same city, that is, "one hand pays, one hand delivers", and some transactions use interbank transfers. In order to reduce the risk of being deceived by users, Taobao encourages the use of "online ordering and offline transactions" methods, but this transaction method has great limitations. Therefore, Taobao needs to establish a trust relationship between buyers and sellers before it can develop further. To address this, Taobao CEO Sun Tongyu collected information about online secure payments on the Internet and asked the team to collect information to understand PayPal's payment methods. Later, Sun Tongyu planned to imitate Tencent's Q coin model and developed "Taobao Coin", but neither worked. Buyers and sellers in the Taobao community are also discussing this issue. Sun Tongyu believes that as long as the security of funds between users is guaranteed, Taobao can be used safely, so Sun Tongyu eventually developed a payment tool based on secured transactions to solve this problem. ("Alipay", 2020)

According to Alibaba founder Ma Yun, the newly launched Alipay will be Taobao's "greatest product" and will enable "untrusted buyers and sellers to complete transactions through third-party guarantees." (Wang, 2018) At the same time, Alipay as a new type of mobile payment service still has some risks, such as credit card withdrawals, online fraud, and some operational risks. (Chen, & Lu, 2016) At present, these risks are mainly concentrated on policy risks, financial and legal risks, reputation risks, and technology risks. (Drennan, McConnell, & Stark, 2015) Mobile payment technology risks include data transmission security and user information security. This is the most important issue for mobile payment users. (Chen & Li, 2017)

2.2 Third party payment

The so-called third-party payment refers to a transaction support platform provided by some thirdparty independent institutions. In the third-party payment model, after the buyer purchases the product, he uses the account provided by the third-party platform (to the third party) to pay (pay to the third party), and the third party notifies the seller that the payment has been received and requires delivery; the buyer receives After the goods are inspected, the third party is notified for payment after confirmation; the third party then transfers the money to the seller's account. (China Economic Information Network 2019) In recent years, with the rapid development and popularization of smart mobile terminals and the mobilization of various e-commerce consumer platforms, there have been more and more use cases of third-party mobile payments, leading to the rapid development of the industry. The development has continued to increase the overall transaction scale of China's third-party payment industry. (Ke, 2019)

Third-party online payments have penetrated every aspect of daily life and business activities. With the development and change of technology, there are more and more interactive processing methods in the digital age, and more and more people and enterprises participate in third-party transactions through online payment platforms. (Twin, 2019) The survival and development of third-party online payments has been the

focus of attention because the payment model is relatively simple and the barriers to entry for the industry are low. Third-party payment processors are fast, flexible, and cheap at least initially, which makes them very popular among online sellers and startups. ("What is a third-party payment processor?", 2018) Compared to merchant accounts where compliance may charge a monthly fee, the cost of using third-party payments and their services is significantly reduced. The advantages make them one of the alternatives. (Lewis, 2016) Thirdparty online payment provides a good solution for the payment process in e-commerce, but third-party online payment still cannot solve all the problems in the online payment process, and it also brings many new problems. For example, in sustainable development, it is necessary to address the attribution and distribution of interest caused by funds stranded on third-party platforms.

Domestic third-party online payment is still in its infancy. Online payment has low cost and high efficiency. For buyers and sellers, electronic operators, banks and other financial institutions, and third-party institutions, this is a win-win model. However, due to the imperfection of China's online credit system and the lack of selfregulation in related regulatory areas, online payment also brings new risks. However, as a new force in the financial field, third-party online payment has promoted social economic development.

2.3 Online payment competition

Alipay, Tenpay and UnionPay are also the top three in China's mobile Internet payment market, with a market share of 80%. In terms of total transaction value, Alipay has more than 300 million users and remains the market leader in China's third-party payment market. ("What third-party payment methods are there in China?", 2015) The rapid development of mobile Internet has attracted many small payment companies. Whether payment platforms can establish close cooperative relationships with major commercial banks and whether they can talk about the lowest price in negotiations with banks have become the main means for payment companies to compete. Therefore, for a third-party payment company, its commercial significance lies not only in settlement, but also in the stickiness of "customers" and the ability to master "precipitated funds" and "other financial needs of customers". Payment is only the entry point, and the comprehensive financial services provided around payment are at the core of competition. (Tan, 2017) But the relationship between payment companies and banks is more than cooperation. If the bank establishes direct contact with the merchant through no third-party payment company, the third-party payment company will face fierce competition from the bank. In 2015, mobile Alipay users accounted for 65% of the total number of Alipay users. At the same time, Alipay users' loyalty to PCs is declining, while Alipay's online payment GMV growth is slowing. This change also provides opportunities for small-scale participation in markets where well-known giants such as Alipay and Tencent continue to occupy a large share. ("China's third-party payment industry sees booming cross-border transactions", 2018) In addition to banks, China's third-party payment market currently faces four types of competition: potential competitors, alternative product manufacturers, customers, and

industry competition They are the five basic forces for promoting industrial competition. ("Third Party Payment Research", 2019) Competition between the five basic forces in the third party payment market will determine the industry's average profitability, and different combinations of these five forces will also have an impact on development. As the payment services provided by China's third-party payment institutions are currently less differentiated and have a simpler business model, if in the future the existing payment services cannot be used as a basis to provide diversified value-added services and compete for online and offline scene entrance, It is difficult to share enough market share to form a scale effect and realize profitability. The development of the industry in the future will gradually reflect the value-added value of payment channels, which poses requirements and challenges for third-party payment companies. (Michael, 2018) If third-party payment is limited to payment products that simply provide funds transfer and settlement, not only will the profit be low, but it will be easily copied and replaced, and homogeneous competition will be severe. For third-party payment companies, simply developing such products cannot establish a sustainable competitive advantage.

2.4 Past research

Mobile payments security was never a significant problem to begin with. In 2017, it was reported that \$13 million was lost or stolen through mobile payments in Guangdong province (Rambus,2018). While this figure is not insignificant, even after extrapolating the figure to all provinces in China, in comparison to the \$12.77 trillion in mobile payments transactions in China from the first ten months of 2017, the amount of money lost and stolen is small (Du 2018).Meanwhile, PayPal, a prominent U.S. third - party payment platform, has a fraud rate of 0.32 percent, which is already significantly lower than the 1.32 percent that U.S. merchants see on average (Morisy 2018). Given these figures, it is hard to imagine that China's mobile payment fraud rate would be any higher than other prominent payment platforms. In addition, Chinese mobile payments solutions like Alipay and WeChat Pay offer users buyer protection, but without the high transaction fees of PayPal. Venmo, another prominent U.S. third - party payment platform, charges users low transaction fees, but lacks any form of buyer protection, instead relying on users to transfer their money carefully ("Venmo Security" 2018). With a low estimated fraud rate and standard buyer protection services, China's mobile payment security seems at least as secure as mobile payment security in Western countries like the United States. The biggest winners of the new mobile payment regulation are the CCP and PBOC. By gaining access to the billions of proprietary consumer data points collected by mobile payment providers, the CCP and PBOC gain incredible insight into the behavior of the hundreds of millions of Chinese citizens that use mobile payment platforms (Abkowitz 2018). The government has a myriad of uses for this data. First, officials can now more easily track down and find incriminating evidence for political opponents by tracking their monetary transfers through mobile payment platforms. In addition, with the full - fledged implementation of the social credit system on the horizon, the government will be able to monitor its citizens on a more granular level and have more data on

which to base its social credit scores (Ma 2018). Finally, the government also gains yet another way to extract potential rents, by exchanging the collected data for bribes and through fines for policy violations — for example, in August 2018, the PBOC fined four companies 100 million yuan for breaching service regulations (Ren, 2018).

3. Findings and Conclusions

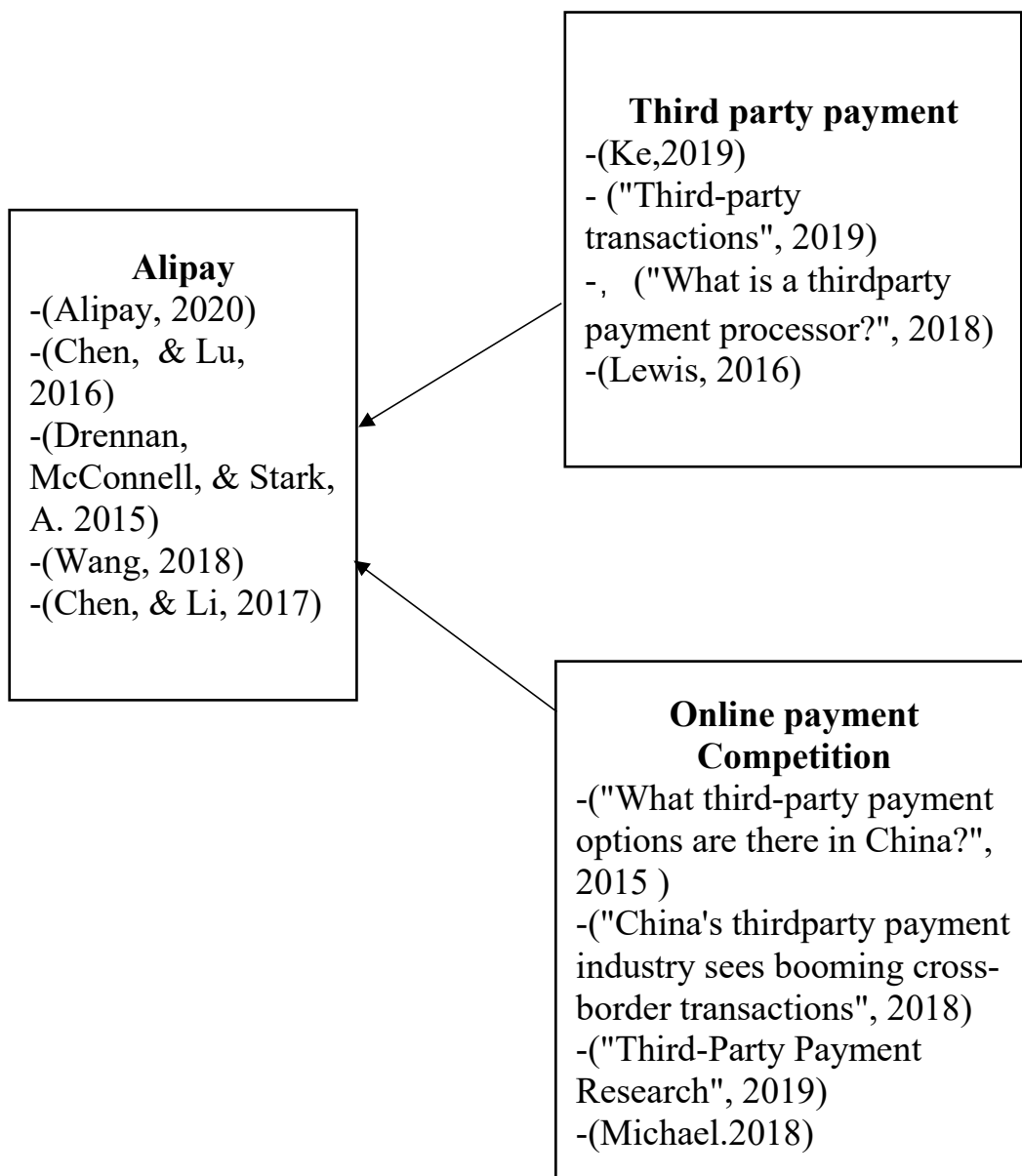


Figure: 1 Established Framework

This article mainly adopts literature research methods to study the development status and future development strategies of Alipay in third-party payment during the development of e-commerce, and to provide better experience and lessons for the development of third-party online payment industry. The combination of the Internet and traditional finance has produced online finance. With the development of Internet infrastructure and e-commerce, the rapid development of online finance in China in recent years has greatly promoted the development of e-commerce (Qin, 2016). However, traditional payment methods are not suitable for e-commerce. Therefore, TPP has become the main payment method for e-commerce. On the whole, competition in China's electronic payment sector is becoming increasingly fierce. However, the duopoly pattern formed by the two major institutions in the mobile payment field is difficult to shake in the short term. According to the statistics of Analysys, in the first quarter of 2019, from the perspective of mobile payment transactions, Alipay ranked first in the market and won 53.21% of the market share in the first quarter. The transaction scale is maintained at a high level, and through WeChat traffic advantages, it continues to penetrate the life scene, and the market rate is as high as 39.44%; One Wallet has a share of about 1.27%, and the market share of other platforms is less than 1%. (Li, 2019).

At the current stage of electronic third-party payment, whether it is the giant Alipay or the entire third-party payment platform, are facing huge challenges. After learning about Alipay's operating model, payment security, unique advantages and other competing payment methods, and bank cooperation, we know that third-party payment platforms have a broader market prospect in the continuous development of science and technology, and face a crisis in overall development. Under the circumstances, learning from and summing up the solution experience of giant Alipay, it brings a better consumer experience to the development of the entire third-party payment platform. When encountering payment security and customer merchant credit problems in the platform, it can efficiently solve and improve. Bring more aggregate power to the industry and the financial sector, allow the platform to have better development strategies, and promote social and economic progress.

4.Recommendation

4.1 Establish a sound payment system.

Third-party payment systems should be continuously optimized and improved to establish a sound payment system. There should be strict system guarantees in terms of goods quality, transaction integrity, return and refund, etc., not only for sellers, including buyers, should be restricted, supervised and managed. For example, if you scan the code to buy items in a place where the signal is not strong and the traffic is unavailable, the customer still fails to pay after the customer has traveled far away and reconnected to the network. Such cases often occur, which is also a considerable loss for the store seller. Under such circumstances, the optimization and improvement of the system becomes particularly important. (Feng, 2019).

4.2 Strengthen the internal construction of enterprises to ensure the safety of capital operations.

To ensure the safety of the deposited funds and do not affect the normal payment and settlement, the third-party payment institution is allowed to use the deposited funds, but it must be approved by the People's Bank of China and strict restrictions must be placed on the use quota and investment areas. (Xie&Luan, 2017) On the one hand, third-party payment institutions ensure the safety of funds by establishing a customer reserve system, a customer reserve insurance protection fund, and an insurance system. It also allows third-party payment institutions to set the withdrawal ratio of withdrawal funds for deposit funds based on the size, management and operation of the institution; on the other hand, it allows institutions to enable deposit funds and use caps without affecting normal payments and settlements. Approval by the relevant management institutions strictly limits the authority, and the use of funds must be limited to the establishment and improvement of low-risk investment projects and a comprehensive customer reserve management system.

4.3 Strengthen the construction of credit system.

First, third-party payment companies should establish a fair and reasonable credit evaluation system so that both parties can participate in evaluation activities so that both parties can score based on each other's performance. Third-party payment companies should strictly prohibit buyers and sellers from changing the evaluation results, and finally release the evaluation results in the form of a summary. The entire process should be open, transparent and strict. Second, we must improve the statistical information disclosure system. Thirdparty payment companies need to take necessary measures to retain customers' personal information and transaction data for a certain period of time. Companies set up to process payments on behalf of many companies must conduct due diligence to ensure that processors do not repatriate illegal gains to the company's payment portfolio. (Volkov, 2015) This not only makes the results of credit assessments more real and objective, but also helps combat online gambling, money laundering and credit card cashing. Finally, it requires highly qualified personnel to operate. Whether it is to improve the system according to the actual situation, or to make up for the loopholes in online credit evaluation procedures, improve the credibility of payment companies, and promote the healthy development of payment companies, high-quality talents will not be exposed.

Reference

- Abkowitz, A. (2018). The cashless society has arrived - only it's in China. *Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/chinas-mobile-payment-boom-changes-how-people-shop-borrow-even-panhandle-1515000570>
- Alipay. (2019). Retrieved from <https://zh.wikipedia.org/wiki/LIPAY>
- Alipay. (2020). Retrieved from <https://zh.wikipedia.org/wiki/Alipay>
- Chen, H., & Li, W. (2017). Mobile device users' privacy security assurance behavior. *Information & Computer Security*. doi 10.1108/ICS-04-2016-0027
- Chen, S. Y., & Lu, C. C. (2016). A model of green acceptance and intentions to use bike-sharing: YouBike users in Taiwan. *Networks and Spatial Economics*, 16(4), 1103-1124.
- Chen, T. T., & Jiang, H. B. (2015). *Analysis of competition and cooperation between third-party payment enterprises and commercial banks-Taking alipay as an example, the fifth issue of electronic commerce*. n.p.
- China Economic Information Network. (2019). *The development status of China's third-party payment industry in 2018, the industry pattern will not change much in the short term*. Retrieved from <https://www.shangyexinzhi.com/article/details/id-136524/>
- China News Network. (2018). *Focusing on the mobile payment battle: Competition is fierce, brewing new changes?* Retrieved from http://www.xinhuanet.com/2018-01/07/c_1122220868.htm
- China's Third Party Payments Sector Sees Boom in Cross-border Transactions*. (2018). Retrieved from <http://www.chinabankingnews.com/2018/08/31/chinas-third-party-payments-sector-sees-boom-cross-border-transactions/>
- China's Third-Party Online Payment Market Confronts Increasing Fierce Competition*. (2016). Retrieved from http://www.iresearchchina.com/content/details7_20682.html
- Drennan, L. T., McConnell, A., & Stark, A. (2015). *Risk and crisis management in the public sector*. London: Routledge.
- Du, J. (2018, February 19). China's Mobile Payment Volume Tops 81 Trln Yuan. *China Daily*. Retrieved from <https://www.chinadaily.com.cn/a/201802/19/WS5a8a8e42a3106e7dcc13d08f.html>
- Feng, Y. B. (2019). *Problems and improvement opinions of third-party payment platforms*. Retrieved from <http://www.scicat.cn/p/20190707/2514269.html>
- Ke, S. F. (2019). *Foresee 2019: "A panorama of China's third-party payment industry in 2019."* Retrieved from <https://www.qianzhan.com/analyst/detail/220/190226-f2a62e95.html>

- Lewis, J. (2016). *Third party payment processors: Advantages and disadvantages*. Retrieved from <https://paylinedata.com/blog/third-party-payment-processors-pros-cons/>
- Li, M. M. (2017). *Alipay is in front of WeChat, why is Wang Xing still insisting on a payment system?* n.p.
- Li, Y. S. (2019). *Giant wrestling battle in the payment market is fierce*, *Economic Reference*.
- Ma, A. (2018) “China has started ranking citizens with a creepy ‘social credit’ system: Here’s what you can do wrong, and the embarrassing, demeaning ways they can punish you.” *business insider*. Retrieved from <http://www.businessinsider.com/china-social-credit-system-punishments-and-rewards-explained-2018-4>
- Ma, X. N., (2017). *Alipay exposes major security breach, responds that it has raised risk control security level*. Retrieved from http://tech.ifeng.com/a/20170110/44528830_0.shtml?_zbs_baidu_bk
- Morisy, M. (2018). *China third-party payment platform industry analysis report-market in-depth investigation and development prospects study*. Retrieved from <http://www.technologyreview.com/s/545631/how-paypal-boosts-security-with-artificial-intelligence>
- Morisy, M. (2018). “PayPal practices defense with deep Learning.” *MIT technology review*. Retrieved from www.technologyreview.com/s/545631/how-paypal-boosts-security-with-artificial-intelligence.
- Qianjiang evening news*. (2018). Retrieved from http://www.xinhuanet.com/fortune/2018-08/22/c_1123307380.htm
- Qianyun, Z. (2017). *Payment platform "delayed arrival" is accused of being unable to actively cancel the platform: To prevent reverse fraud*. Retrieved from http://china.cnr.cn/xwwgf/20170913/t20170913_523947999.shtml
- Qin, Y. (2016). China's transport infrastructure investment: Past, present, and future. *Asian Economic Policy Review*, 11(2), 199-217.
- Rambus Press. (2018) “Let’s Talk about Mobile Payment Regulations in China.” *Rambus*. Retrieved from <http://www.rambus.com/blogs/understanding-mobile-payment-regulations-in-china>
- Ren, D. (2018). *China’s central bank fines four companies 100 million Yuan for violating payment service rules*. Retrieved from <https://www.scmp.com/business/companies/article/2158610/alipay-and-three-others-fined-pboc-combined-100-million-yuan>
- S. F.W.Q. (2018). *870 million! alipay announces number of users for the first time: Number one in the world*. Retrieved from <https://news.mydrivers.com/1/575/575709.htm>
- Tan, Y. (2017). What is the core competitiveness of third-party payment. *People's Forum Issue 20*. Retrieved from <http://m.fx361.com/news/2017/0809/2146618.html>

- Third-party payment research*. (2019). Retrieved from https://www.360kuai.com/pc/9a5a0e7d2b6aea703?cota=4&kuai_so=1&tj_url=so_rec&sign=360_7bc3b157
- Twin, A. (2019). *Third-party transaction*. Retrieved from <https://www.investopedia.com/terms/t/third-party-transaction.asp>
- Venmo Security. (2018) *Venmo*. Retrieved from <http://www.venmo.com/about/security>
- Volkov, M. (2015, October 14). *Managing third-party payment risk*. Retrieved from <https://www.trulioo.com/blog/managing-third-party-payment-risk/>
- Wang, H. (2018). *Alipay: Breaking the cocoon for five years*. Retrieved from <https://web.archive.org/web/20090917104633/http://tech.qq.com/a/20090905/000043.htm>
- What is a third-party payment processor?* (2018). Retrieved from <https://www.cardswitcher.co.uk/2018/03/third-party-payment-processor/>
- What third party payment options are there in China?* (2015). Retrieved from <https://www.nanjingmarketinggroup.com/blog/alipay/third-party-payment-options-china>
- Xie, Y. H., & Luan, F. M. (2017). China's third-party payment status, risks and control measures. *Accounting Monthly*, 13, 41.
- You, G. Y. (2018). *China's mobile payment third-party platform*. Retrieved from <http://www.cim.chinesecio.com/hbcms/f/article/info?id=1bd8247b3e474469a7aa5cb02d28ff3f&lang=3>
- Zhang, Y. Q., Gao, C., & Tingjie, L. (2018). *An empirical study on the monopolistic competitive monopoly market structure of China's e-commerce third-party payment market*. Retrieved from <http://m.fx361.com/news/2018/0120/2748420.html>
- Zhuo, S. J. (2019). PayPal's entry into China's third-party payment market has multiple positive implications. *Financial Times*. Retrieved from <http://news.iresearch.cn/content/201910/304328.shtml>