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## Research on The Issue of Payments in The Cross-Border E-Commerce

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#### **ABSTRACT**

Cross-border e-commerce is the combination of "Internet+" International Trade, which shorten the distance between products and market in time and space, and promote trade development. While cross-border payment services play an important role in cross-border e-commerce, once the payment services is not successful, it means we are unable to make a deal, so, it pushes the completion of cross-border e-commerce transactions. This paper researches the concept of cross-border e-commerce and cross-border payment, and develops a model to describe current situation of China's cross-border payment business, summarizes the domestic and foreign cross-border e-commerce platform to solve cross-border payments service solutions. Finally, we analyze the opportunities and challenges of Xi'an city facing e-commerce cross-border payment, and proposes solutions.

Keywords: Cross-border e-commerce, Cross-border payment, Third-party payment, Cross-border payment of Xi'an

## INTRODUCTION

With the rapid growth of China's import and export transactions, the growing number of rich people, large number of consumers intend to go shopping from abroad overseas, the demands of cross-border online shopping is growing faster and faster. According to the China Electronic Commerce Research Center data, it is reported that China's overseas purchasing transaction size doubled in recent years, the trade size of 2011 reached 18 billion, an increase of 132% over the previous year, and 2012 overseas purchasing transactions were 48.3 billion, and the number exceed75 billion in 2013. In 2014, there is total 3.75trillion, and increasing 39%. 2015, Chinese cross-border transactions is about 5.4 trillion, an increase of 26%, it suddenly occurs to us that tremendous demand of China market, we have reason to believe there is great potential to develop for cross-border e-commerce companies. It is expected by 2016 that the total will reach 6.5 trillion, therefore, China have a huge consumer market of cross-border e-commerce. There are also many hands to build the core national policy promoting development, such as the Belt and Road, Free Trade Area(FTA), the international of RMB, Chinese manufacturing 2015, Internet + and the coordinated development of regional economy, these both lead to the birth of cross-border e-commerce. Cross-border e-commerce generally refers to international business transactions between different countries or regions by technical tools, which could shorten the distance between product and market. It is a new pattern of cross-border trade which takes electronic as means, and it will be the main mean of upgrading trade development. China's e-commerce is in a period of great development. We should make full use of resources and provides the opportunities for enterprises to promote China's cross-border e-commerce development. Cross-border e-commerce involves many aspects, which are settlement, billing, logistics, financing, taxation, payments and so on, these factors play an vital role in reaching a cross-border e-commerce deal. With the rapid development of cross-border e-commerce business, the demands of expanding cross-border payment services gradually becomes intense, cross-border payment services is equivalent to the cross-border e-commerce "last kilometer", the last kilometer service becomes the focus of market share, only cross-border payments business do well, are customers more willing to buy. Therefore, the construction of cross-border payment services for cross-border e-commerce has become particularly important.

## CROSS-BORDER E-COMMERCE AND CROSS PAYMENT SERVICES

Cross-border e-commerce generally refers to international business transactions between different countries or regions who communicate via e-commerce platform to trade and defray, and bring goods or services from sellers to buyers by logistics systems. It is a new trade patterns which are more often faster or convenience than before. Cross-border e-commerce greatly shorten the distance between product and market in time and space, It will be the main mean of promoting trade a facilitation, upgrade trade development and promote the effective implementation of new tool.

Cross-border Payment services refers to the capital which was traded or invested transfer behavior among two or more than two countries and regions by certain settlement instruments and payment systems. Cross-border payment services mainly consists of three sections, which are cross-border network consumption, cross-border transfer remittance and consumption under the overseas offline. There are a lot of ways of cross-border network consumption including the third-party payment platform. Internet banking online payment, credit card online payment, telegraphic transfer, mobile phone payment and fixed telephone payment. Cross-border transfer remittance mainly involves third-party payment platform, commercial banks and specialized remittance companies. There are some forms of payment, such as credit card, deposit card, Cash in foreign currency and CNY cash, these all belong to consumption under the overseas offline. This paper deals with the problem of cross-border network consumption.

There is a close relationship between cross-border e-commerce and cross-border payment services. Huge space of cross-border e-commerce development and potential profit margins both continuously promote cross-border payment companies to provide high-quality service and upgrade capital management ability in cross-border payments. Cross-border payments services play an integral role in cross-border e-commerce, it is an important condition for occupying consumer market at home and abroad.

Security and timeliness on the cash flow of Cross-border payment companies will bring sense of credibility and dependence to domestic and foreign buyers and sellers, cross-border payment services will tremendous promote cross-border e-commerce to develop from the perspective of technology.

## PRESENT SITUATION OF CROSS-BORDER E-COMMERCE PAYMENT SERVICES

#### **Theoretical Model**

Michael Porter Diamond Model explains improving industrial competitiveness from the six aspects, there are factor conditions, demand conditions, related and supporting industries, firm strategy (structure and rivalry), government, chances. Factor conditions refer to human resource, physical resources, knowledge resources, capital resources and infrastructure. Demand conditions in the market can help companies create a competitive advantage, which pressure firms to innovate faster and to create more advanced products. Related and supporting industries can produce inputs that are important for innovation and internationalization. Firm strategy, structure and rivalry refer to the goals and management methods of company, which is important for company success. Government can influence each of the above four determinants of competitiveness. Government can influence the supply conditions of key production factors, demand conditions and chances in the home market. Chance events are occurrences that are outside of control of a firm, and it is important to create discontinuities in successful companies and the fail. The thesis is that these factors interact with each other to create competitive advantage for company. We summarize the factor conditions and related and supporting industries into resource because of them all providing the companies needed resource. Since the market, demands conditions, chance also represents the market requirements, we just the market and chance and demand conditions as a complement—Market. So we summarize the four elements to describe the competitiveness. Cross-border e-commerce can be regarded as a process of circulation, which including logistics, capital, business, and information flow the four components. In any transaction, buyers or sellers will involve product delivery, cash flow, information transmission.. Based we mention above, we propose an integrative model to explain the issues of payments in the cross-border e-commerce as shown Figure.1.

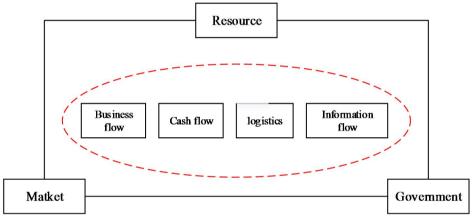


Figure 1: Theoretical Model

## Resource—Our Country Major Cross-Border E-Commerce Payment Institutions

Our country major cross-border e-commerce payment institutions has two forms, one of is the domestic third-party payment institutions, for example, Alipay, Unionpay, Tenpay and so on, these payment institutions both are approved and released by The State Administration of foreign exchange to transact cross-border payment business. Alipay gradually enter the fields of cross-border payments by good basis for domestic third-party payment. Currently, the cross-border payment service of Alipay has covered 34 countries and regions, and supported the dollar, pound, euro, swiss franc and so on to do foreign currency settlement. Besides, Unionpay can achieve cross-border payments business outside of China about the 125 countries and regions, In China, its distinct advantages of cross-border payments become increasingly apparent.

The second is providing global online payment services institutions outside China, such as PayPal. PayPal as the world's largest online payment company, occupies an important position in the third-party payment fields, and it supports 25 kinds of currency to trade business in 190 countries and regions, especially it is very popular in European and American counties.

## Market —the Scale of Business

By 2015, the company accounting for the largest share of China cross-border payment market is Alipay, the total size of cross-border payment is approximately 900 million, which only occupies 5% of total cross-border e-commerce transaction volume. Billions of dollars each year in cross-border third-party payment market is mainly dominated by the United States' company-PayPal and other foreign payment company 95% of cross-border payment market is controlled by PayPal.

## Government—the measures

The government has taken numerous measures to promote the development of cross-border e-commerce. Firstly, the government clearly regulates the import and export policy to promote the fair competition and strengthen of import and export tax administration. Secondly, financial supports are provided, the government encourages traditional manufacturing and trade enterprises to apply cross-border e-commerce platform to explore the international market, and gives the necessary financial

support to priority projects meeting the requirements. Thirdly, the government optimizes supervision measures out of customs. The operations processes of goods or services importing and exporting through customs are optimized, and the government has considered the possibility of simplifying the categorization of cross-border e-commerce exports and idealized the cross-border e-commerce statistical system.

## The Process of Financing of Cross-Border E-Commerce

Figure 2 shows the process of financing of Cross-border e-commerce. First, Domestic consumers log on foreign Web sites to select which goods or services they want and order (①Log overseas online shopping web sites to select goods). Second, Overseas sellers send the orders of consumer to the payment platform (② commodity information) third, payment platform certify domestic consumers' authentication information (③certify consumers' account).fourth, , The domestic consumers to fill in their personal information and choose the payment pattern(④ write authentication information; Choice of CNY payment; confirm the payment). fifth, Payment platform transmits the payment message to bank (⑤payment message), And the receive the message of foreign exchange purchasing available from bank (⑥purchase of foreign exchange payment information). Finally, After foreign sellers accept available remittance information from payment platform (⑦remittance information), and send products and related services (⑧ send goods) to domestic consumers. And all the steps involve the input and output of flow of business, cash, information and logistics.

## SOLUTIONS TO THE PROBLEM OF PAYMENTS ON THE CROSS-BORDER E-COMMERCE PLATFORM

From the experience of cross-border e-commerce platform we found that there are two ways to solve the problem of the payments. One is the companies to establish their own payment platforms to complete the payments, and the other is dependent on the third party platform to pay.

For example, EBay and Alibaba are dealing with the payment problems through their own payment system. On EBay, you

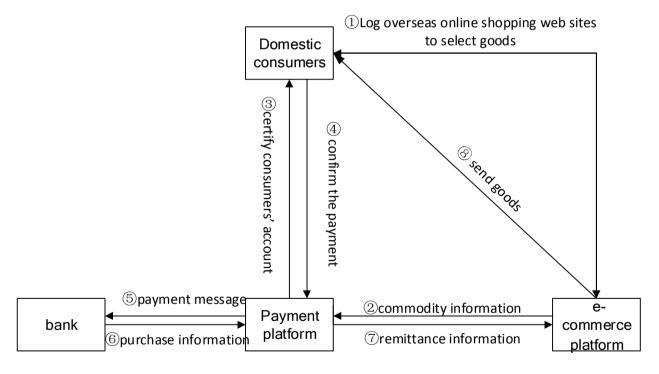


Figure 2: The process of financing of Cross-border e-commerce

complete the payments mainly via Paypal. Using Paypal is very simple. First you should register a Paypal account. Then bind a VISA or Master dual currency credit card issued by any of domestic banks, and then you can go shopping at the EBay. Compared to EBay, Alibaba platform has three cross-border online shopping services. They are Taobao global purchase, Tmall International and Etao. In order to solve the network transaction security problems, Alibaba launched Alipay. Alipay uses the "third party secured transaction mode", in which the buyer pay for purchases to Alipay firstly. Secondly Alipay remind the seller to delivery. And finally, when the buyer receive the goods and confirm the receipt, Alipay will remit the payment to the seller, a network transaction finished.

While most of the other cross-border e-commerce enterprises are paid through the third party payment platform. For example, to Amazon's overseas users, you could complete the payment without any difficulty as long as you have a VISA or Master dual currency credit card. Specifically, you need to create an account in Amazon, enter your bank card number. After shopping the website will send you an e-mail about your information and what you've bought. When you confirm the e-mail the bank will

automatically debit in 24h. Some domestic e-commerce companies such as Lightin The Box and Dunhuang are through Alipay or Paypal platform to complete the cross-border payments.

## ANALYSIS OF THE CROSS-BORDER E-COMMERCE PAYMENT SERVICES IN XI'AN

## Opportunities for Cross-Border E-Commerce Payment Services in Xi'an

## The official reply of the pilot cities

March 19, 2014, the General Administration of Customs approved Xi'an to carry out cross-border e-commerce trade services as a pilot. After more than half a year of preparation, Xi'an cross-border electronic business platform (export) formally launched on October 28, 2014. This platform is designed as a bridge to facilitate the Shaanxi enterprises to go abroad and expand overseas markets. At the end of January this year, the platform cumulatively export more than 18000 times, the total export volume is more than \$600,000. The main export destinations are the United States, Britain, Japan and Italy and the main export products are clothing, shoes, hats, local handcrafts and ornaments. Shaanxi's products are out of the country through the network. The cross-border e-commerce business will not only take the Xi'an manufacturing to the international market, also bring the cheap and good quality products in international market to china, which is conductive to the development of Xi'an economy. At the same time, as the core of cross-border trade, foreign currency payments' volume will also be greatly increased.

## The strategy of "The Belt and Road"

"The Belt and Road" strategy accelerating has brought cross-border payments industry significant opportunities for development. According to the Commerce Department data, in 2015, the import and export trade volume is totaled \$846 million which is an increase of 10% between Xi'an and the countries along "The Belt and Road". This strategy not only accelerated the development of cross-border e-commerce in Xi'an. Also led to the rapid development of traveling and studying abroad. Thus further enabled the cross-border payment scale in the transactions is also gradually rising.

## "Silk Road Online" strategic opportunities

Construction of "Silk Road Online", which is focused on promoting the trade exchanges based on the internet and the development of cross-border e-commerce has the highest priority, will bring a greater development of cross-border e-commerce platform payment services in Xi'an. Xi'an should seize the policy opportunities, vigorously improve the e-commerce environment within the city. With the internet-based reciprocal trade both to promote the exports of manufactured products from Xi'an to the countries along "The Belt and Road", but also to promote the countries with abundant resources of energy and agricultural products to input to inland market. Guided by this policy, the cross-border e-commence payment services in Xi'an will be a substantial rise.

# Challenges for Cross-Border E-Commerce Payment Services in Xi'an Deficiencies in existing development

Compared with Zhengzhou, Chongqing, Hangzhou and other pilot cities, the development of cross-border e-commerce in Xi'an is relatively backward. The main inferiorities are as following: First, the overall size of the e-commerce industry is small. In 2014, Guangzhou, Shenzhen, Hangzhou, any of their e-commerce transactions are more than 1 trillion CNY. And as Xi'an is located in the west of China, Chongqing and Chengdu's are more than 450 billion CNY and 500 billion CNY, respectively, while only 120 billion CNY in Xi'an. Second, the support of the policies is not enough. The policies in various departments have not been effectively integrated, especially the excessive dispersion of financial resources make the support limited. Third, infrastructure, financial system and other ancillary services are not perfect, such as logistics, payment, financing, and so on. Fourth, the development of e-commerce consciousness is not strong. Departments and districts have not realized the importance of developing the e-commerce. Thus it is lagging behind in terms of promotion, brand packaging, personnel training. It has not formed a good atmosphere for the development yet. The above four points cause the development of cross-border e-commerce is relatively slow, so that the cross-border payment services are very backward.

## Cross-border payment safety coefficient isn't stable

Cross border payment services are vulnerable to the security and stability of the payment instruments. In the process of cross-border payments, it's prone to appear sort of risks such as payment failure or payment account theft caused by the system failures, lack of information or other human factors. Which has brought the both sides of transaction some payment risks. In addition, the electronic payment also easily leads to the risk of cross-border money laundering crimes.

## Suggestions for Cross-Border E-Commerce Payment Services in Xi'an

## Actively seeking cooperation with third party payment platform

Xi'an is an important center city of the Silk Road Economic Belt and the beginning of the ancient Silk Road. As we all know, the Silk Road Economic Belt is a platform with the similar functions as the free trade zone, which can produce more close economic relations with Central Asian countries and even European countries. Given there are Xi'an Comprehensive Bonded Zone, Xi'an Hi-Tech Comprehensive Bonded Zone, New West Ham airport bonded logistics area and other logistics distribution center in Xi'an, cross-border trade of this city will become increasingly prosperous. Therefore, the enterprises should actively take advantage of the Xi'an cross-border e-commerce platform to attract third party payment companies those who have the qualification of settlement in cross-border e-commerce and strive for cooperation with them to expand the scale of Xi'an cross-border e-commerce transactions as well as promote the economic development of Xi'an.

## Government guidance

Xi'an Municipal Government has set up the following several measures to encourage the development of cross-border e-commerce payments: first, to encourage banks and Payment institutions to provide payment services for cross-border e-commerce enterprises. Second, to encourage banks to provide cross-border e-commerce companies the cross-border CNY settlement services. Third, to push the banks and Payment institutions to accelerate product innovation, improve cross-border payment service experience and payment efficiency, strengthen the construction of credit system. These measures are implemented and led by the Provincial Finance Office and the People's Bank of China Xi'an Branch.

## Pay attention to the access management of Payment institutions

People's Bank of China approved the third party payment institutions to carry out t payment services. The State Administration of Foreign Exchange approved the enterprises the launching of cross-border payment service network access qualification. Strictness and cohesion of these two departments policy play a decisive role in the payment institutions qualification examination. Therefore, the government should choose the payment enterprise which with legitimate business qualifications and mature technical conditions to participate in cross-border payment services.

## THEORETICAL AND PRACTICAL IMPLICATIONS

By addressing the research questions at the beginning of this paper, this study makes several important theoretical contributions. First, this study makes significant contribution to the literature on Michael Porter diamond Model, The phenomena that are analyzed and classified into six broad factors incorporated into the Porter diamond, including factor conditions, demand conditions, related and supporting industries, firm strategy, government, chances, the six factors play a vital role in improving industrial competitiveness. Diamond model also explain the phenomenon of cross-border e-commerce, and this paper mainly describes how governments to help promote the development of cross-border e-commerce of Xi'an.

Second, this study also proposes a specific combination of Michael Porter diamond Model and circulating theory contribute to the payments in the cross-border e-commerce. This paper emphasizes making full use of diamond model at the same time dealing with the transaction in logistics, cash, business, information flow.

In terms of implications for practice, this study is significant in that it provides some comprehensive advice for governments, the government must make full use of opportunities to support payments business of cross-border.

#### CONCLUSION

With the development of cross-border e-commerce in China, the two-way demand for domestic consumers shopping overseas and overseas consumers purchase domestics is increasing. China's cross-border e-commerce transactions are rapidly growing in size every year, it will increase to 1.3 trillion in 2017. So the scale of cross-border payments business is also gradually expanded. Cross-border payment is mainly based on the third party payment. Third party cross-border payments are adopted by a large number of cross-border e-commerce platform because of its convenient and safe transaction, saving cost and other advantages. It has greatly promoted the development of cross-border e-commerce in china. Each of cross-border e-commerce platforms should actively take the advantages of policy to develop their own business, and promote the development of China's economy at the same time. Also, the government should vigorously provide convenience for China's third party payment platform to be out of the country.

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