

Chapter 2: Literature review

2.1 Industry overview

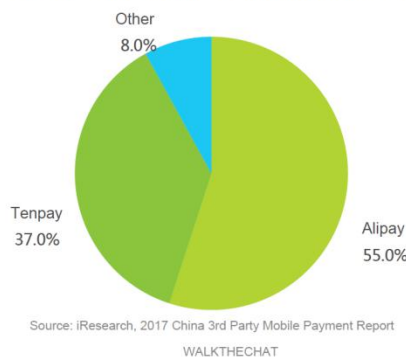
As we know that due to change or recent development in the economy and network technology, there have been a numerous changes in mobile payment industries. In current scenarios more and more new technologies are popping out to make our life very easy particularly in the payment techniques which were not the case primitively. This paper elucidates about Alipay's critical factors in order to probe and explain the biggest payment portal as a third party online payment platform in China. This research paper will discuss about the China biggest mobile payment operation, mechanism, transaction security, effectiveness and efficiency and lastly about its impact before going further let's have a basic understanding about Alipay Company.

2.1.1 Alipay background information

Alipay was incepted back in 2004 by Jack Ma who is Alibaba group founder head also has started this mobile payment system in order to make trading and business with hassle free and considered to be easy for both parties in terms of payment and receive of funds very easily. He focusses on e-commerce and e-payment which allow traders to do business from anywhere in the world. Alipay is very helpful in online payment, online retail and wholesale shopping, virtual gaming, providing financial services, telecom- services and payment of utilities fees. In December 2010, it has more than 550 million registered users worldwide. The total turnover on daily basis of Alipay mobile transaction was around 8.5 million. It has more than 65 financial institutions to provide payment option for online shopping platform. Alipay also provides payment services to companies like TaoBao.com, Tmall.com and different 460,000 Chinese businesses. It acts as an intermediary between them as because it's the safest and secured, easy to use payment mobile transaction portal (Wikipedia 2015). Moreover according to Alipay there are 14 supported currencies are going to be used in order to promote Alipay transaction on international level.

Alipay is the most reputed and commonly used mobile payment due to its innovative technology, easy and friendly services and has got different variety of payment features. The highlight of Alipay is that all the online transaction on Alipay payment platform are without any transaction fees. It's also most secured payment platform which allows buyer to verify the goods that they bought are truly satisfying their needs before transferring the money to the seller. It increases the faith and trust in customer as well as decreases the transaction risk. It increases the confidence level among customers in C2C and B2B business models (Wikipedia, 2015).

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2.1.2 China economy

China economic reform was formed in 1978, when it has gone for remarkable economic revolution from planned economy to market oriented economy. China considered being the third in the world that provided influential support towards world progress. The economy policy of China was previously a closed door economy but has changed to open door policy. This policy was proposed and formulated by PRC's second president Xiaoping Deng. According to the World Bank, 2015 has overtaken Japan which was second best in the world, China still contributing best management and allocation of resources as per the World Bank data of 2015. The economic model

of China always in the race of establishing economic integration between countries by adapting to current trend and demands. The main advantage of economic policy of China is the availability of resources and economies of scale which was applied by US and USSR but they performed terribly in order to maintain it. Lin & Gertner (2015) indicated that China main strategy is to improve the economic and business relationship in Asia pacific domain through international law, international trade and international division of labor. On the contrary it has got the ability to also foster and improve the other countries economic development, for example, The establishment of new Silk Road and one belt and one road which is the connection point and economic integration between China and the rest of the world.

2.1.3 The importance of China in ASIA

As we know that China is the world biggest country within Asian countries geographically and it has also the bigger economy in Asia and in the World as well. It's evident that China contributes maximum support in Asia pacific regions in the field of communications, culture, natural resources and economic cooperation. The economic conditions of China can create positive or negative impact on other countries economic condition. There are certain challenges and opportunities for other countries with in Asian countries but China offers some extraordinary competitive advantages such as low labor rate, economies of scale, huge population base so it can be an ideal place for other countries to utilize its abundant resources. According to Haltmaier(2007) has explained that China importance for Asian countries in two forms: macro and micro.

- China acts as a guiding factor for growth of other countries to use the Chinese economy and grow their own country economy.
- The other countries can take advantage of China economic growth.

- China is becoming a platform for exporting finished goods and creating demands for products from other countries as well.

Although the relationship between China and other countries in Asia is not so sweet but China is paying more attention in order to develop good relationship between other Asian countries with the thought of “Rise of China” (Jisi, 2014). China should aim to rebuild the relationship between countries in form economic cooperation and also extend their efforts to reshape its international image (Jisi, 2014).

2.1.4 The importance of China worldwide

In 2000, after the introduction of open-door and Revolution policy, China had taken a series of global strategies of multinational enterprises (MNEs). China has got the highest market share of MNC firms located for their marketplace. The large number of firms is entering in China in the form of merger and acquisitions, joint ventures and in the form of export-import trade. The most common practice is the merger and acquisition as because it provides the instant market entry followed by acquiring existing world class brands and empire building (Peng, 2012). The trade figures of China in the recent times indicated that in export has accounted for 2.26 trillion in 2017, 3 trillion in foreign reserves in 2017 and 3.87 trillion in global trade in 2017. Moreover, China attracts more foreign direct investments that can boost China domestic economies and China invests abroad to boost foreign economies. It also balances world politics.

2.1.5 The development of payment system in China

In China, the standard of living is bit simpler and convenient compared to other countries as there have been many changes undergone in past decade most importantly in payment method. The payment process in between buyer and seller has always been a tedious task as it has become very difficult for parties to negotiate and facilitate transactions so Chinese government has introduced from 1955 to 1993 various

payment methods from time to time such as tickets for food and for clothes as food tickets and clothes tickets respectively. In 1990, ticket payment system has taken into a new form and paper cash RMB had introduced and became widely used as a payment system in China. The maximum value allocated for RMB was 10 Yuan and then increased to 100 Yuan and it's still the highest value. In 1985 the first Bank card was issued and then it has got increased users over the years. In 2013 there were 4.2 billion cards users which had accumulated 12,971 billion transaction volumes and 31.83 trillion business values. During these periods the bank card was the main medium of payment transactions between buyer and seller.

In the age of network technology and mobile devices the online payment systems have been introduced in the market and eliminated the cliché payment systems with added extraordinary features such as easy and safe in use. The online payment systems categorized in three forms: card payment, Alternative payment and digital wallet also named as E-wallet. In other words, card payment is a conventional and preliminary online payment method. The alternative online payment which does not pay for goods or services with bank card, but through alternatives like online bank transfer, checks, direct debits, invoices and so more to make or receive a payment during transactions (About-Payments, 2015). However, this kind of payment is always associated with low and fixed transaction fees, but safe and secure.

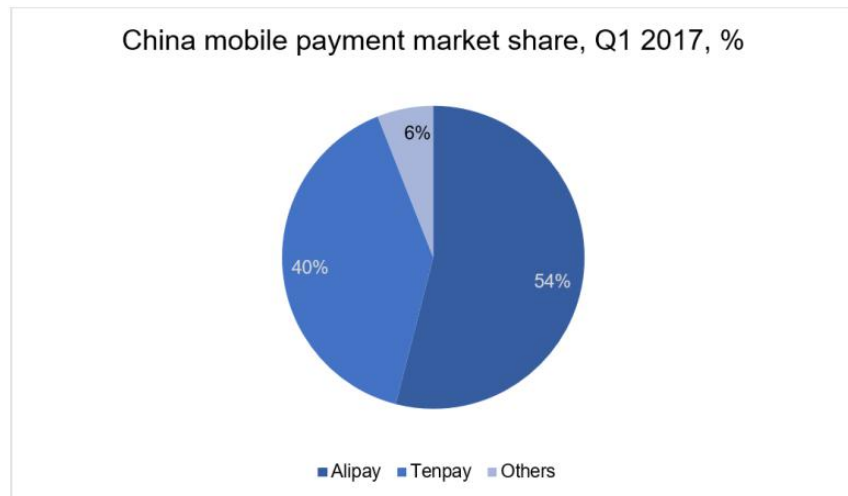
In the eye of digital wallet, it contains two different types of e-wallets (e.g. preloaded and pass-through e-wallet). Besides, it is always supported by technologically advanced techniques and software, so that it not only improves payment experience and also simplifies online/mobile checkout. In contrast to the previous two online payment methods (card payment and alternative payment), e-wallet enables users to pay using stored value in e-wallet account or to instantly pay with their associated bank cards or alternative methods (About-Payments, 2015). This contributes to consumers are to make/receive a payment in an easy, safe, and secure way. At present,

the most Chinese internet users would like to shop online, in the meanwhile, they also prefer to choose the digital wallet instead of others, which makes the payment timely and safely.

2.1.6 Alipay customer positioning

Alipay acts as service provider for e-payment and has been contributing a major portion in the growth of e-commerce field in China. Alipay has more than 400 million registered users with more than 100 million transactions on a daily basis. During its inception, it focuses only on major first class cities for instances: Shanghai, Beijing, Guangdong, Zhejiang and Jiangsu provinces. According to the Alipay 2017 spending report all above provinces have contributed and accounted for 55% of total transactions in 2017. Interestingly, with the advancement of technology more people now have shifted their preference from using personal computers to mobile phones or smartphones and especially in rural areas in China have witnessed that more than 54% of mobile transactions accounted in the year 2017 according to the research report of iResearch consulting group, 2017. Grace wang the head of O2O from Alipay has quoted that the number of mobile transaction users will be increased in upcoming years of 2 to 3 with more than 100 million more but also has said it depends how the internet network performs as well. According to China internet Network information center nearly end of 2017 the total number of nation internet users will be 32.6% in rural areas.

Alipay customer segmentation also has been increasing to low class cities such as Lhoka, Shigaste, Bortala and its also trying its best foot in overseas market like U.S and Europe just because of main reason which settling of cross border transactions services.



2.1.7 Alipay payment mechanism

Alipay is being known as the PayPal of East in China. It's very much similar to PayPal in various ways as both of them are considered to be an e-wallet. It requires linking the user Bank cards to this system or wallet. In this case users can transfer the loaded money to this wallet but it's differ from the PayPal because PayPal doesn't provide escrow services in order to safeguard the interest of users by providing protection from online transaction fraud (Chinese SEO Shifu, 2014). In Alipay payment made to seller only when buyer receives the goods and is happily satisfied with the goods and the Alipay release money from its official account to seller. On the contrary if the transactions happened among good friends or family then Alipay transfer the money immediately. The escrow and protection services have to specify by the users as they want to avail it or not. Alipay is also accepted by other online shopping websites such as Taobao.com and Tmall.com and users need to verify their identification and address proof by submitting their details in Alipay accounts.



2.2 Theory

2.2.1 STOF model

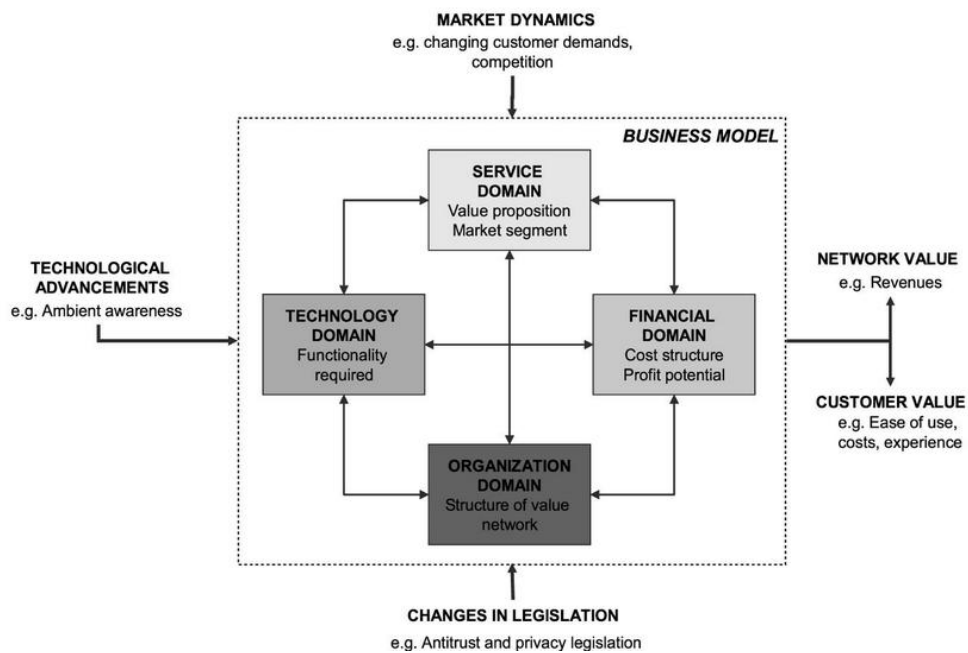
STOF model can be explained as to help business model and to collaborate with partners. A business model describes how you create, deliver, and capture value. In STOF business model it is to describe the business model from the four connected perspectives such as follows

- Service domain: The service domain explains about customers and end-users and answers certain questions such as
 - 1) Who is the customer?
 - 2) Who will pay for the service?
 - 3) Who is the end-user?
 - 4) Who will be using the service
 - 5) In what specific situation(s) would people want to buy or use the service?
 - 6) What does the service do for the customer or end-user?
 - 7) What are the unique and distinguishing benefits of the service?
 - 8) What is the actual offering provided to the customer or end-user?
 - 9) What are the distinguishable elements of the service?

- Technology domain: it answers some following questions
 - 1) What business functions does the service require?
 - 2) What is the global architecture of the service offering?
 - 3) What user applications should be running on the technological system (e.g. for communication, interaction, content distribution, transactions)?
 - 4) How are customer profiles and privacy managed?
 - 5) How is secure access to, and use of, services arranged?
- Organization domain: It answers following questions
 - 1) Which business roles are required to create and deliver the service?
 - 2) Which actors can and want to cooperate and take up the business roles?
 - 3) What are the actors' resources & capabilities? Actors in this case talks about partners
 - 4) What are capabilities and resources that these actors can or should provide
 - 5) Which resources and capabilities are critical? Hence which actors are preferable?
- Finance domain: It answers following questions
 - 1) What is the cost structure of the service? Investment costs, fixed costs and variable costs?
 - 2) What is the revenue model behind the service or product?
 - 3) What are direct payments? For example: one-off sale, subscriptions, licenses, pay-by-tweet.
 - 4) What are indirect payments? For example: advertising, sponsoring, subsidies, commissions.
 - 5) How are investments, costs and revenues divided over the actors?

These domains create a collaborative understanding the business model and shows how the company fits within the network of partners. This model was explained by (Bouwman, Zhengjia, Duin, & Limonard, 2008). STOF Business Models are based on four interrelated perspectives or domains, i.e. Service domain which indicates value proposition and customers. Technology domain explains about the architecture and systems of the company. The Organization domain explains about the partners and

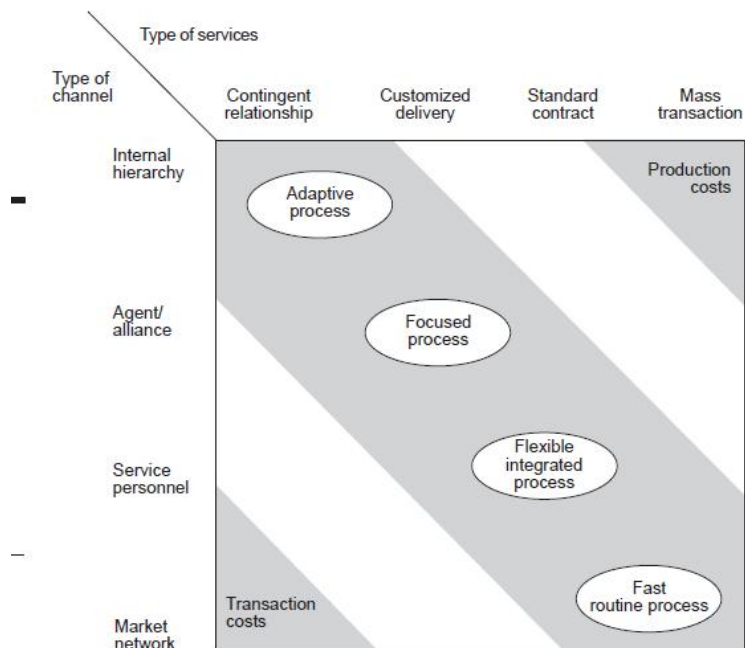
collaboration. Lastly, Finance domain explains about the cost and revenues. The researcher can use STOF business model by sketching the key variables in each domain in order to find out critical factors and issues and analyze them. In every domain there will be some questions which can be treated as critical issues and those issues will help to find out the performance of Ali pay in mobile payments.



2.2.2 SPA matrix analysis

This model will be used as well in order to know Alipay performance in mobile payments by analyzing intermediaries, service and channel. This model exhibits the service positioning and in this research paper it will explain about Ali pay. This model was described and explained first by Tinnilä & Vepsäläinen(1995). This model is designed to answers two attributes such how to enhance and increase the service quality and organization as whole and how to match the service and channels.

- 1) Service types: The below Figure explains about service process analysis matrix that evaluates and investigates the different alternatives associated with service types. The horizontal axis represents and evaluates the service transactions. There are four types of service and it includes such as mass transactions, standard contracts, customized delivery and contingent relationship as because service is a relative complex concept, which involves high degree of uncertainty, customization, complexity etc.
- 2) Channel types: There are four types of organizational channel: market network, service personnel, agent/alliance and internal hierarchy. These four types are categorized based on presenting length of the channel and cost per service transaction. The length goes longer for the channel while upward of the vertical axis.



2.3 Related research

In this section the research which had done by other researchers regarding third party online pay inside China or globally will be discussed and presented. The online payment system mainly depends upon safety certifications, market supervision, integrity and perceived risk. So Visa, master card and American express are three major secured payment terminals. Noteberg and Wallag have indicated that impact of third party certification of building trust. They have also explained the third party online transaction can affect the purchase intense if there is not safety certification.

Vulkan (2009) explained about the integrity involved between the intermediaries in online transactions. Franklin and Anthony (2001) indicated benefits of economic method to discover the factors which can impact the intermediary service.

Yee Ling, Norazah and Amlus (2004) explained about the factors that affect user intentions in online payment systems. Tan and Teo (2000), verified the factors that influence the user adoption of online payment systems in Singapore. Polatoglu and Ekin (2001), explained the user adoption of online banking in Turkey. Wang, Lin and Tang (2003) explained that perceived usefulness and credibility will decide the user's adoption of online payment systems. Kim and Prabhakar (2000) explained about the trust factor in e-commerce and perceived risk are the main determinants for online payment adoptions. In china, researcher's main aims were safety, integrity, legality and profitability of third party online payment. Peng, Tong and Li (2009) explained that there were various problems associated in third party online payment. Hu (2008) indicated that third party online payment service providers should focus more how to provide more safety issues in terms of online payments.