



**The analysis of critical factors for mobile payment  
competition in China-evidence from Alipay**

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### Abstract

The financial industry has witnessed the so-called “fintech revolution” in recent years. Due to the emergence of information technologies such as cloud computing, big data, blockchain and artificial intelligence, the landscape of the traditional financial industry has been largely transformed.

With the popularity of smartphones and networks, mobile payment becomes more and more important. China has a population of 1.3 billion and is the largest mobile payment market in the world. Backed by the e-commerce giant Alibaba, Alipay has become the world’s largest mobile payment system. Together with Wechat Pay, they dominate China’s \$5.7trn mobile payment sector. Alipay has a presence in over 70 countries including the UK, US, Japan, South Korea and Australia.

Alipay is China's most successful mobile payment. Why Alipay can achieve such great success in just a few years? Why other companies can not shake Alipay's position? This article uses qualitative research and research design and data collection and induction method strategies to analysis of critical factors for mobile payment competition in China-evidence from Alipay.

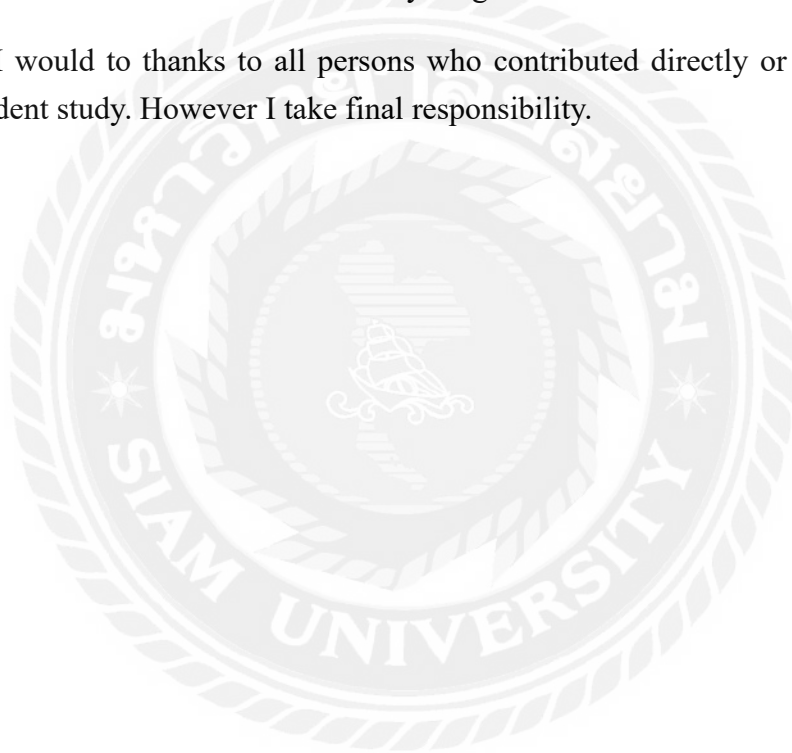
**Keywords:** mobile payment, Alipay, critical factors, competition

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## **Chapter 1: Introduction**

### **1.1 Background of the Study**

Mobile payment is a service that allows users to pay for the goods or services they consume using their mobile terminal (usually a cell phone). Units or individuals through the mobile device, the Internet or proximity sensing directly or indirectly to the bank financial institutions to send payment instructions to generate monetary payments and fund transfer behavior, so as to achieve mobile payment capabilities. Mobile payment integrates terminal equipment, Internet, application providers and financial institutions to provide users with financial services such as currency payment .

Mobile payment is mainly divided into two types of near-field payment and remote payment, the so-called near-field payment, that is, by means of mobile phone credit card car, shopping, etc., is very convenient. Remote payment means payment by sending payment instructions (such as online banking, telephone banking, mobile payment, etc.) or by means of payment tools (such as by mail, remittance), such as palm merchants, palm recharge, and so on are remote payments.

Alipay is a third-party payment platform under Ant Financial. In December 2004, it was founded by Alibaba Group in Hangzhou and originally owned by Alibaba Group. Alipay is now an affiliated company of Alibaba Group and is affiliated with Zhejiang Ant Financial. Alipay online payment can be carried out, the official application of credit card to support free repayments, charges Q currency recharge, utilities gas fee payment. You can also pay for air travel, education payment, booking payment and large-scale activities to buy tickets.



## **1.2 Objectives of the Study**

With the continuous popularization of smart phone, mobile payment is gradually replacing cash payment as the main means of payment. IDC data research firm's report shows that in 2017 the global mobile payment amount will exceed 1 trillion US dollars. Strong data means that the global mobile payment business in the next few years will show a continuing trend of strength. Mobile payment is becoming more and more important in people's daily life.

Nowadays, Alipay has become the major payment system in Mainland China and most Chinese people have already replaced Alipay with cash or credit card transactions. This has become one of the most mainstream ways of making money in China.

Through research to discover why Alipay in the field of mobile payments achieved great success in a few years.

## **1.3 Significance of the Study**

It is an era when information technology rapidly develops, mobile payments will be replaced in cash payments but many traditional and old things will also be replaced by new technologies. However, if traditional enterprises are to continue to develop in this era, they must transform and develop to keep up with science and technology and information. Alipay is a model for the success of this era. Research Alipay competitive critical factors enable people to know why Alipay can be so successful and find the factors that make other companies worth learning from.

## **Chapter 2: Literature review**

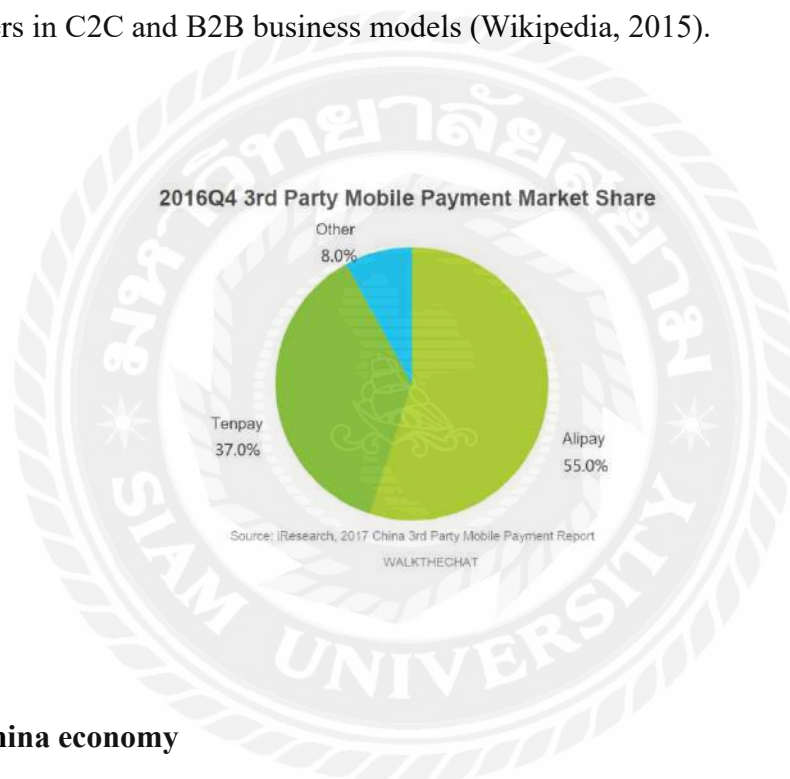
### **2.1 Industry overview**

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).



### **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.

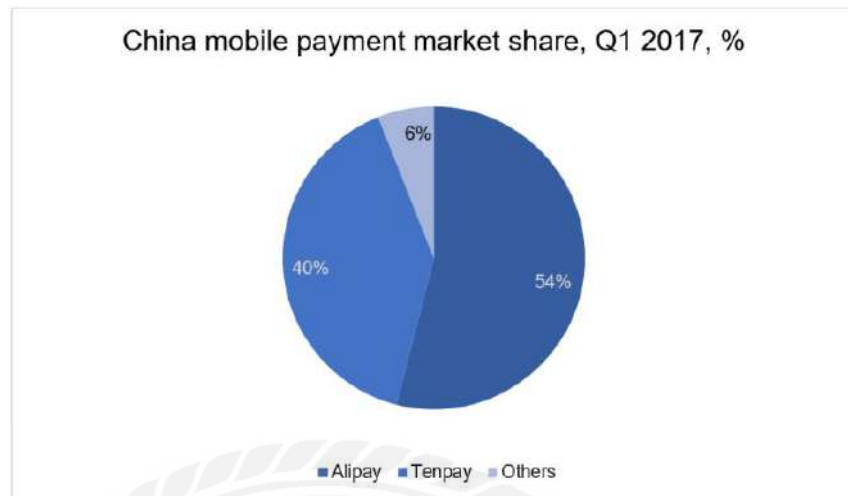
In the eye of digital wallet, it contains two different types of e-wallets (e.g. preloaded and pass-through e-wallet). Besides, it is always supported by technologically advanced techniques and software, so that it not only improves payment experience and also simplifies online/mobile checkout. In contrast 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

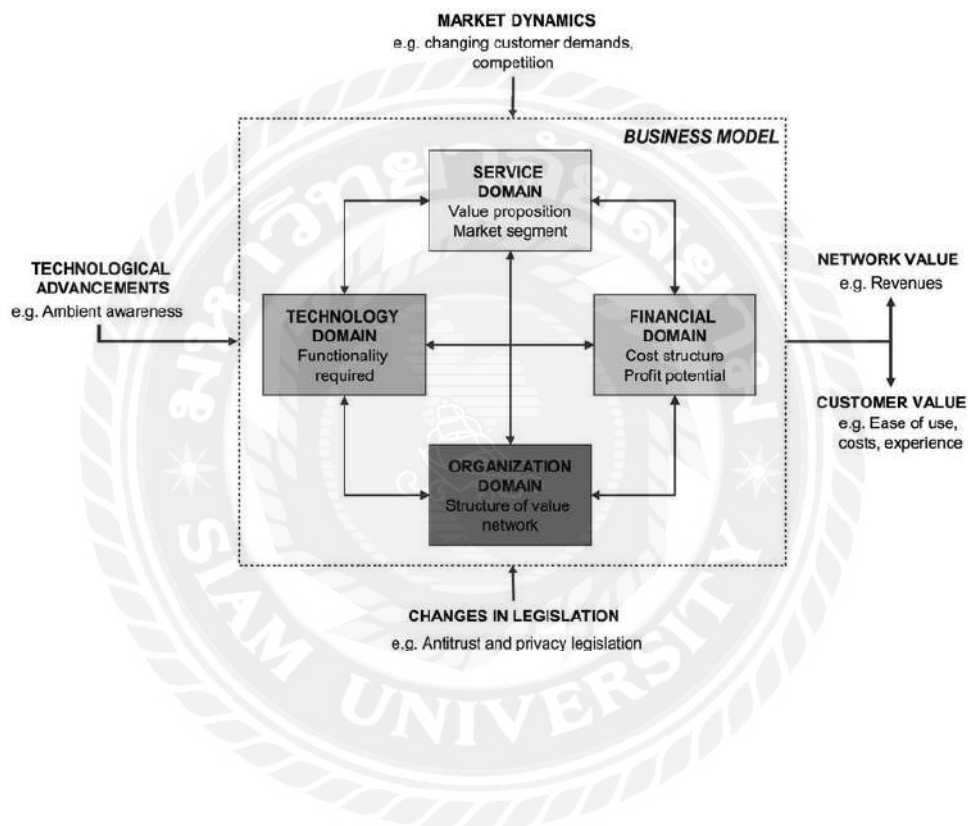
STOF model can be explained as to help business model and to collaborate with partners. A business model describes how you create, deliver, and capture value. In STOF business model it is to describe the business model from the four connected perspectives such as follows

- 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

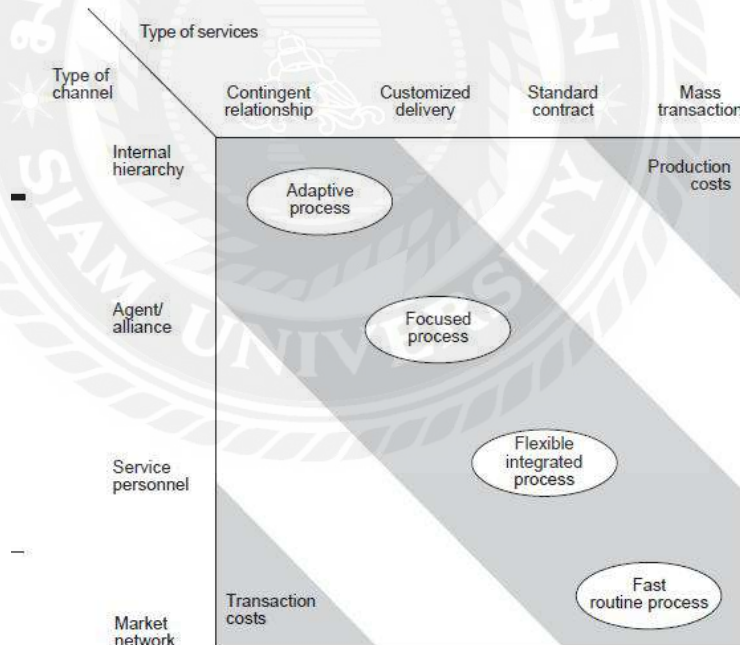
collaboration. Lastly, Finance domain explains about the cost and revenues. The researcher can use STOF business model by sketching the key variables in each domain in order to find out critical factors and issues and analyze them. In every domain there will be some questions which can be treated as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

## **Chapter 3: Methodology**

This chapter particularly explains about the method used in this research paper followed by the purpose of choosing the particular method along with the source of gathering information or the nature of collection of data and finally, the analysis methods to discover and check the credibility of the selection of method for this research work.

### **3.1 Type of Research Methodology**

There are many ways to do research methodology but in this research paper it is entirely based upon qualitative research in which the collection of data will be exploratory in nature. The purpose of this research work is to probe China's leading online payment company Alipay's critical factors, challenges and opportunities so after evaluating China economy situation and mobile payment scenarios in chapter 2. The researcher decided to present this study in qualitative method because it will explain and investigate the specific information about mobile payment users (Mack, Woodsong, 2005).

### **3.2 Research Design**

Yin (2009) explained that research design is a logical plan from getting one point to another point as one point can be explained as the set of questions needs to be answered and another point can be explained as the conclusion achieved from the set of questions. Research design is very important for any research work to be in proper framework (Harwell, 2011).

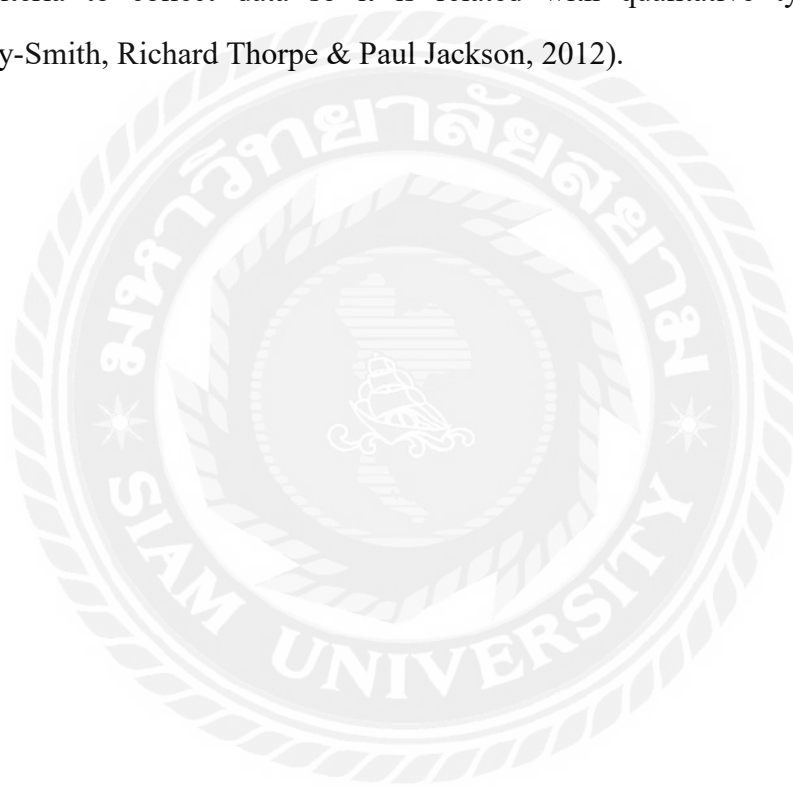
Data collection	Qualitative method
Data collection instruments	Reports, articles, numeric figures
Data analysis	Literature review, case studies, STOF model analysis, SPA matrix analysis numeric figure analysis, competitor analysis
Data period	Last past 5-10 years
Data source	Secondary

### 3.3 Data Collection

The data collection in this research paper is from secondary source which was gathered from internet, past reports of mobile payments, journals, ministry of finance China and detail study of some case studies. The combination of all different sources of secondary data has been used to support this research work. Firstly, this thesis study explains and provides large amount of information and concept of Chinese ecommerce industry and also industry overview from Internet sources. This part examines china economy, Alipay's customer positioning and market potential, image of Chinese economy worldwide and in Asia region. These all information were collected and gathered mostly from previous reports mentioned on the internet and this information are also well supported with figures. The numeric figures provide more concrete and solid information about the Mobile payment system in China. Secondly, the innovation diffusion theory is also support this research work by distinguishing the characteristic of Alipay's Company competitive advantage over others. Lastly, the analysis of case studies and related research will add more realistic examples to elaborate this research work.

### **3.4 Research approach**

In this research work, researcher used inductive approach strategy in which the conclusions can be drawn on the basis or via the process of empirical study or observation of past relevant data and findings, theories to improve the research work (Ghuri & Grønhaug, 2005). According to (Trochim & Donnelly, 2006), induction approach process the outcomes from the observation, theory and findings will be the main criteria to collect data so it is related with qualitative type of research. (Easterby-Smith, Richard Thorpe & Paul Jackson, 2012).





## **Chapter 4: Critical Analysis of Alipay's company mobile payment competition in China.**

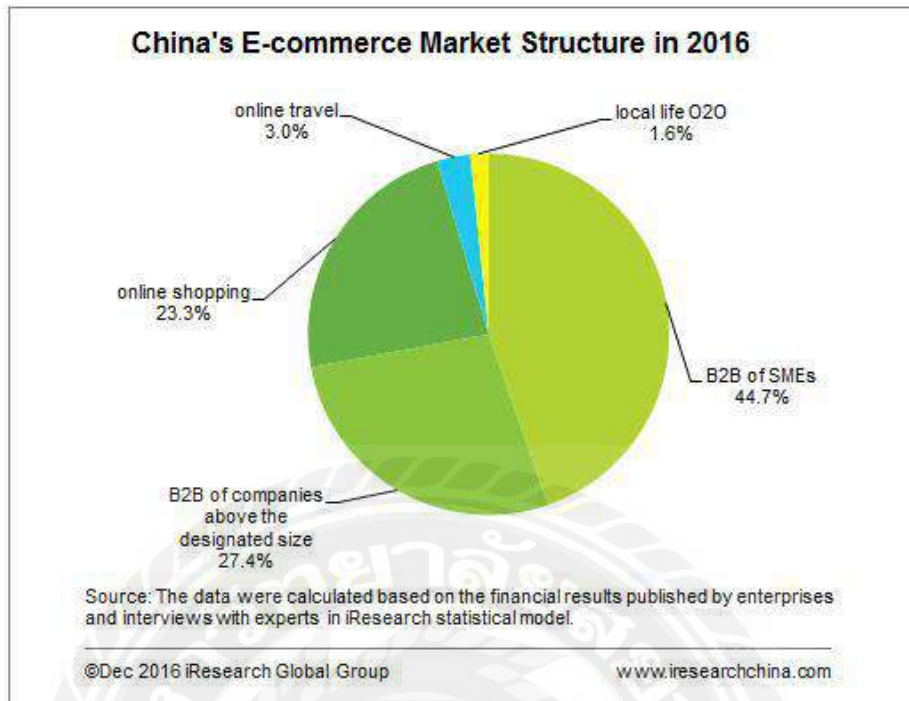
The mobile payment competition has become a very interesting topic in the past recent years as because in China with the passage of time, new possibilities and business model arises. In this chapter, it will firstly analyze the China e-commerce market because it leads customers to avail the mobile payment terminals. The e-commerce can be explained as buying and selling of goods and services, sharing of information with the help of computer networks which involves the use of internet. The e-commerce applies to different sections such as direct marketing, stocks and online related activities. E-commerce is also a part of marketing and advertisement as many companies attract and increase their customer's base through e-commerce as their promotional strategy. There are different methods of e-commerce industry in china are mentioned below

- B2C (Business to customer)
- C2C (Customer to customer)
- O2O (Online to offline)
- B2B (Business to business)

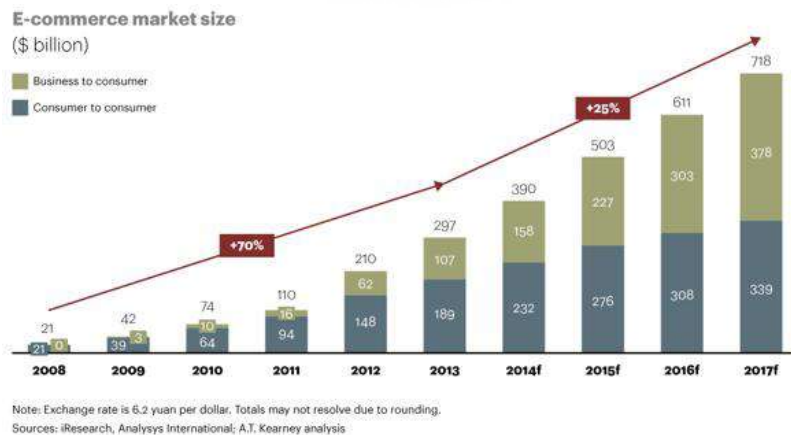
The mobile payment system is a very important tool in China when it comes to consumption for Chinese people. In this chapter to analyze the critical factors for mobile payments will access company case for risk and opportunities and industry analysis, the STOF and SPA matrix analysis including Alipay's Company competitors.

#### **4.1 Industry analysis**

In China, mobile payments market is rapidly growing as due to e-commerce under the different wireless internet platforms. In 2008 when the entire world was facing recession during that period China was progressing due to e-commerce market that market enabled the introduction of mobile payments platforms. In the figure below it has shown the market size of e-commerce industry from the time period of 2008 to the year 2017. The below graph line can be used to decide the impact of e-commerce market and the market size of company's performance in terms of mobile payments. The graph elucidates the growth of B2C and C2C and highest increase had been recorded in the year 2011 and the market size of e-commerce industry accounted for \$300 billion in the year 2013. This had happened due to online retail sales as it can be assessed with the help of the graph and it shows Taobao's early growth in C2C because as in 2008 the C2C business in China was 21 billion dollars and it has increased up to 339 billion dollars in 2017 and the market size of B2C was 107 billion dollars in 2013 and 378 billion dollars in 2017. The overall growth of e-commerce from the period 2008 to 2013 was 70% and from the period 2013 to 2017 was estimated as 25% growth. Hence this chart explains that in China during the introduction stage the e-commerce platforms were mostly occupied by Taobao and it was acted like eBay style and that includes direct transactions only. Later, Alibaba group introduced another platform was called as Tmall for B2C business structure. The early success of Alibaba group had enabled other partners to collaborate with Alibaba group and offer the same facility under one roof and resulting Alibaba group had covered highest market share on online retailing.



In addition to this, another study of (Goh & CheeWee, 2014) reported that the Alibaba group had generated more revenues from rural areas as because they had a poor retailing system. This explains that mobile payments platforms are growing in numbers and there is a huge competition to survive as because it is clear from the graph that e-commerce market is increasing which proves that use of internet users are increasing and ultimately mobile payments will also increase overall.

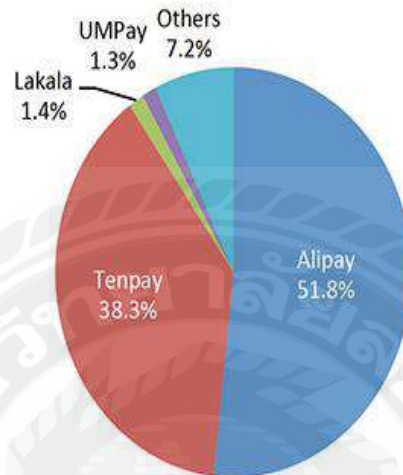


The above explanation indicates some critical factors for mobile payments competitions in China are mentioned below from the industry analysis.

- In China, the number of online users is increasing as because the e-commerce market is increasing.
- The competition level among mobile payments service providers are also increasing.
- The Alibaba group market size structure is bigger and many other small companies are working together with Alibaba group.
- The Alibaba group highest mobile payment contributor is Alipay as it targets mostly rural areas where retail sales are limited.
- It also explains the higher the industry growth of e-commerce will also increase the market share of Alibaba group and it will increase the users of Alipay as well.

## 4.2 Competitor's analysis

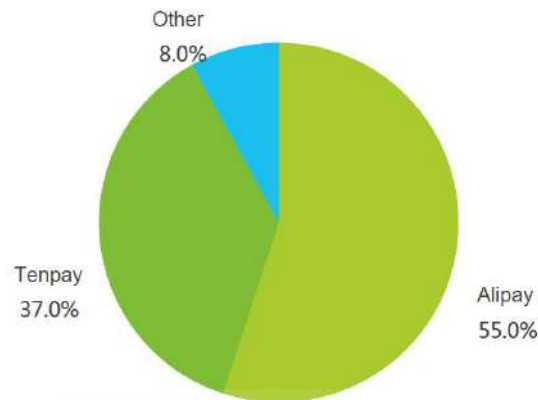
Figure 10. China: Market Share of Third-Party Mobile Payment Providers, 1Q16



Source: iResearch/Fung Global Retail & Technology

In quarter 1<sup>st</sup> 2016 suggest that the third party mobile that the Alipay is the leading mobile payment service providers in China with 51.8% market share followed by the Tenpay which had the market share of 38.3% and considered to be the second leading mobile payments service providers. Lakala and UMPay had 1.4% and 1.3% market share respectively. In others section, the companies include are Wechat pay, Baidu wallet, Apple pay contributed together 7.2% market share. The Alipay and Tenpay jointly had the market share of approximately 90%.

### 2016Q4 3rd Party Mobile Payment Market Share

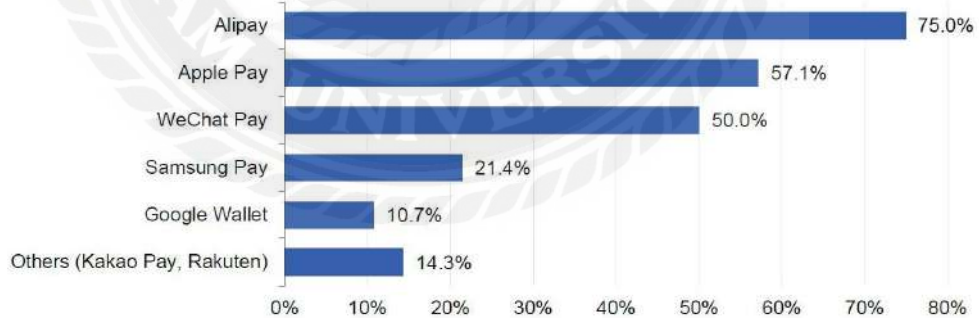


Source: iResearch, 2017 China 3rd Party Mobile Payment Report

WALKTHECHAT

In 2016 Q4, suggest that the mobile payments market capitalization indicates that Alipay was still the leading market share holder individually with 55% followed by Tenpay which had 37% market share individually and collectively they had market share of 92%. The others include Lakala, Umpay, Apple Pay, We chat Pay and Baidu wallet.

**Figure 11 - Merchants: What type of mobile payments do you accept at point of sale? (Select all that apply)**



Source: MPS Merchant Survey

In a survey conducted by MPS merchant, China it indicates that Alipay was the most suitable ways of doing mobile payments among merchants with 75% approved that Alipay is the best mobile payment service providers over its competitors followed by Apple Pay with 57.1% and We Chat Pay with 50%. This shows that Alipay which is widely accepted as point of sale. The below comparisons include competition analysis

of top three giants in mobile payments category and it also includes the SWOT analysis.

Competitors	Apple pay	Alipay	We Chat
Factors			
Registered users in millions	Less than 38 million users	400 million users	300 million users
Technology offering	NFC ( Near field communication technology allows two devices for payments when two devices are near)	E-wallet with QR payment option	E- Wallet offering QR scan payment option method as similar to Alipay payment system.
Method of payment	Payment can be done when an Apple device is placed on the top of POS position	Customer or seller should scan QR code. It's also called sound wave payment.	Customer or seller should scan QR code. It's also called sound wave payment.
Password	Not required	Not required but requires for large amount of transactions.	Not required but requires for large amount of transactions.
Requirements	It requires Apple device, iOS 8 or above operating system	It links to credit card account or pre deposit money should be in the account.	It links to credit card account or pre deposit money should be in the account.

Areas	In china and in some selected countries	In whole China	In whole China
Organization	Apple	Alibaba	Tencent
Strength	<p>-It has strong brand image as it's a part of big company in smartphone category.</p> <p>- It covers huge market across worldwide.</p> <p>- Huge customer base with product diversification.</p>	<p>-It has also strong brand image in China with combination of different payment choices.</p> <p>- It has strong social network.</p> <p>-it is a part of Alibaba group which generates maximum revenue.</p>	<p>It has the second large customer base after Alipay in China.</p>
Weakness	<p>It has poor facilities in countries like two major countries such as India and China</p>	<p>Geographical coverage as in China certain areas are difficult to cover.</p>	<p>It has the copycat image of Alipay in China and their functions only available in China</p>
Opportunities	<p>It can cover the other countries market such as India and China because they have got huge e-commerce market.</p>	<p>The popularity of e-commerce market in China which has maximum share young generation people and they have strong belief in online consumption and their belief highly satisfied by Alipay</p>	<p>It can attract large number of users as there is a continuous increase in internet users.</p>



		which is difficult for any other countries to break.	
Threats	There is a direct competition Alipay and We Chat also the government regulations to enter into the different markets. It's also very late in entering mobile payment market	There is a direct competition from Apple Pay and We chat.	Its only famous in China as in other countries We Chat is not very popular and it requires huge investment in order to compete with its competitors.

#### 4.3 Case study analysis- Alipay

According to the channel advisor (2014) explained that Alibaba considered to be a leading online and mobile retailing platform for buying and selling goods and services especially retailing related and apart from that it also deals cloud computing and other services. Alibaba founder Jack Ma Company is a reputed e-commerce platform. Alibaba has slowly and gradually developed its business in China and in 2010; Alibaba launched Ali express in order to sort out the payments challenges for exporters in China from the rest of the world. It creates a platform for Chinese exporters to receive payment from the consumers around the world. In 2015 the Alibaba group has gathered revenue of 35 billion RMB and out of this 19 billion RMB came from mobile payment option according to the annual report of Alibaba 2016. According to the Statista (2016)& Carsten (2015) explained that there is an increase in the internet users and active buyers by 649 million and 334 million respectively. Carsten 2015 also pointed that there were new 57 million internet users joined in the

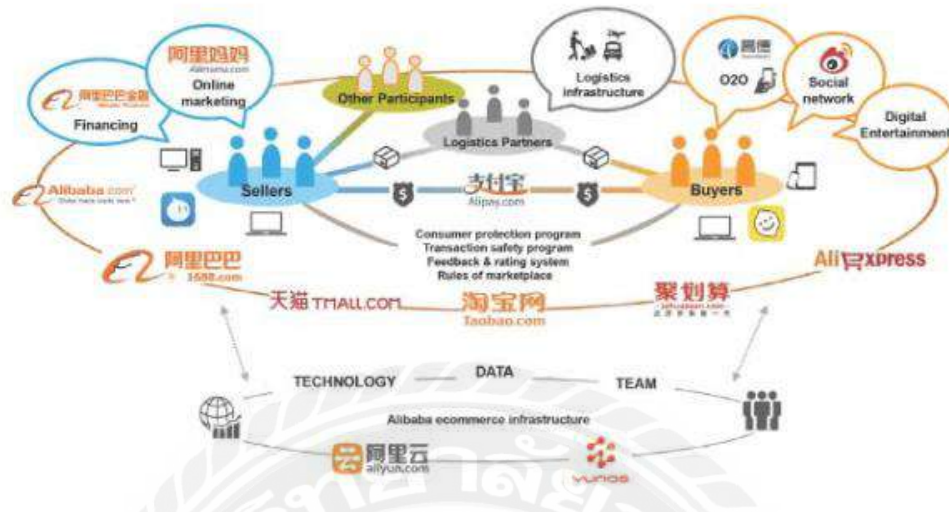
end of 2014. In September 2014, Alibaba was entitled to be listed in New York Stock Exchange with the share price of \$68 per share according to the IPO price. This share price explains that Alibaba has built strong market coverage.

Alibaba business and company structure can be understood on the basis of company overview of its ecosystem. Alibaba Empire as there are main four factors of the ecosystem is as follows

- Seller
- Buyer
- Logistics partners
- E-commerce infrastructure

Alibaba main focus is their online business platforms which gathers and collects buyers and sellers and nowadays, sellers are improving their performance with the help of Alimama in their marketing support activities and Alibaba Finance by getting financial advice support. As for buyers point of they can access through internet as well as from the smart phones so with the help of Autonavi it can provide the location status. The logistics department of Alibaba group is very effective in order to build strong relationship between buyers and suppliers.

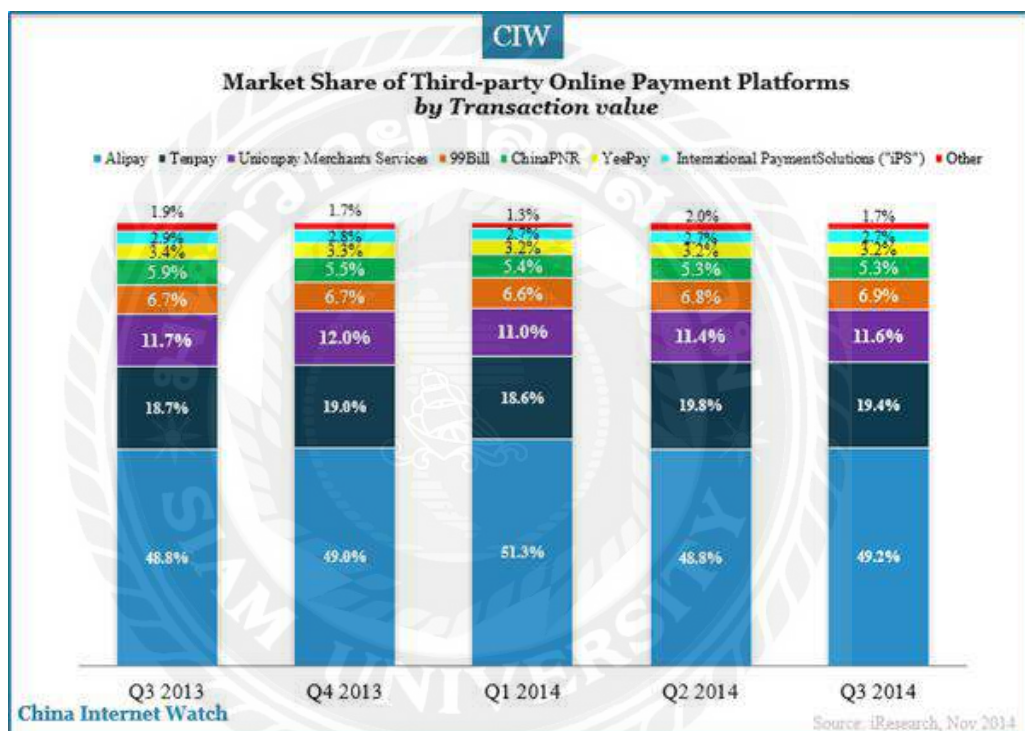
## Alibaba Eco-system



The above ecosystem of Alibaba explains that online to offline (O2O) has created huge business opportunities and it requires good payment application environment. Due to increase in online transactions the chances of third party online payments getting popularity and attentions as well and the Chinese e-commerce market enables online payment methods as a big part of online transactions as the Alibaba payment system categorized into three different segments such as online banking payments, credit card payments, online payments. Online banking system and credit card payment system include banking facilities involvement and on flip side the online payment is mostly done on PC and mobile side and in this case it's Alipay. Alipay it gives users chance to deposit the money into their Alipay account and it will give users the opportunity to earn interest while keeping their money in the accounts and with that amount they can place order by using scan QR code which has authorized account information after that it gives SMS notification during placing order for ID authorization. The only threat to online payment system is cash on delivery payment system for example the competitor Jingdong (JD) has the facility of cash on delivery of products which in a way can provide

competitive advantage over competitors because of better delivery service. The mobile payment has developed the B2C market and Alipay success model can actually give an opportunity for e-investment products and offerings.

The below figure can explained that Alipay is a clear winner in mobile payments or third party payment systems. In 2015 Cecilia has explained that market share of mobile payments by transaction value.



#### 4.4 STOF model analysis- Alipay

The STOF model explains to analyze the Alipay mobile payments performance as discussed and introduced in chapter 2. The STOF model contributes four main attributes and domains to evaluate Alipay mobile payments performance. The four main domains are: service domain, technology domain, organization domain and finance domain.

#### 4.4.1 Service domain

The service domain explains about the focus of getting customer value from the services of Alipay mobile payments system. There are four types of values according to the Bouwman (2008) expected value and perceived value from the customer point of view and delivered value and intended value from the provider point of view. The difference between what customer expects and what is being delivered is going to cause customer dissatisfaction and it will lead to reduction in profit and will also hamper the brand image of the company (CNNIC 2011). In this domain there are five critical issues which can cause the difference in the value and hampering brand image of Alipay and what should be done in order to retain the customer base of Alipay.

According to the table below it suggests that there are five critical issues that Alipay should take care of in order to achieve competitive advantage such as: targeting customer, creating value, branding, and trust and customer retention. The table summarizes the critical service domain issues to analyze and provide solutions.

Critical design issue	Description	Balancing requirement
Targeting	Sellers: from sellers point of Alipay has to increase more merchant sellers to join Alipay and to retain the existing ones as well for B2C and C2C as well. Buyers: from Buyers point of View Alipay should target the young age population as it's growing rapidly in China and it will have the highest buying power.	Generic & B2C
Creating value	To create value by creating grasp needs and wants	User needs and wants

Branding	To introduce new brands or adding features to the current brands	Content brand: Tmall, Taobao
Trust	To launch security measures and privacy policy to build trust	Security & privacy
Customer retention	Pricing strategy and branding	Customer lock- in

#### 4.4.2 Technology domain

In order to achieve competitive advantage over others Alipay should analyze certain technological issues of STOF model in order to sustain and create large customer base. In this domain Alipay should analyze issues which are explained in the table below.

Critical design issue	Description	Balancing requirement
Security	To protect the security issues Alipay has got full support from Alibaba security Response Center (ASRC). To improve ID authentication facility in order to protect and secure the personal details	Privacy protection
Quality of service	To improve the quality of service the system browsing and transaction placement should be improved	Quality
System integration	To integrate system more	Flexibility

	different synchronized features should be improved apart from mobile and PC only.	
Accessibility for customer	There should be different age buyers preferences should be meet; not only young age buying preference's	Open system
Management of user profiles	The user profile needs both automatic generation and user involvement as because user involvement provides better understanding of user needs and wishes and automatic generation would save time in re-ordering and online Q &A.	User involvement & automatic generation

#### 4.4.3 Organizational domain

The critical issues of organizational domain which Alipay should analyze in order to achieve higher competitive advantage regarding mobile payment solutions are explained in the table below:

Critical design issue	Description	Balancing requirement
Partner selection	There should be business	Quality of service and

	<p>cooperation with all other entities that are directly or indirectly related with Alipay such as Aliyun, Aliexpress, Koubei, Auto Navi etc. to help and promote as much as possible.</p> <ul style="list-style-type: none"> <li>- To merge and acquire different mobile payments platforms to create diversified value network in order to increase the Alipay users and market share</li> </ul>	strategic interest
Network openness	Alipay should open to spread their networks with the form of merger and acquisition, joint venture, strategic investment, partnership to increase its network and users. They should introduce different ways to reach customer in highly rural areas	Openness and customer reach
Network governance	There should be controlled powerful committee with not more that at least five members. The more members	Entry, compliance and exit conditions: individual and network interest



	in the committee will be added the more number of conflicts will arise so it would be better to strict with the control power of authority.	
Network complexity	Strategic selection of partners in order to create conducive business environment and produce a collaborative working culture	Need of access to critical resources and capabilities

#### 4.4.4 Finance domain

The finance domain has certain critical issues which Alipay should analyze in order to achieve competitive advantage over its competitors regarding mobile payments.

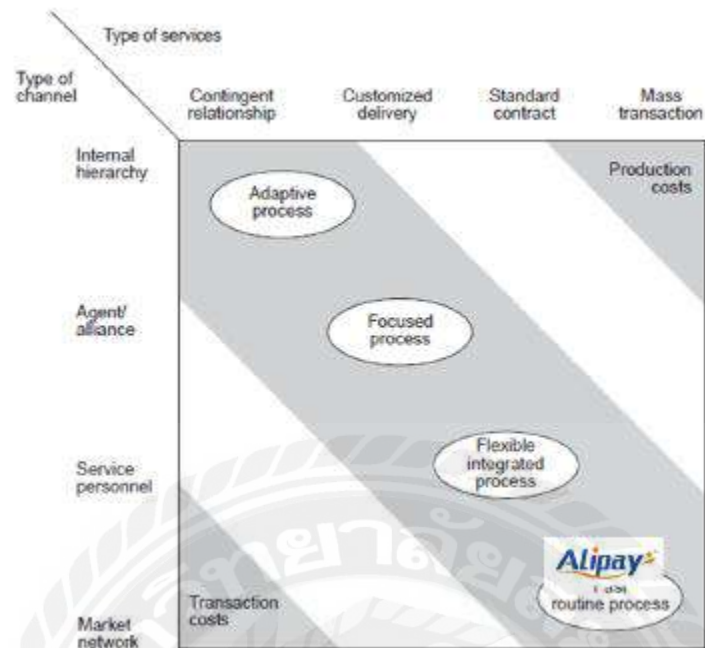
Critical design issue	Description	Balancing requirement
Pricing	The penetration pricing strategy & discount pricing strategy should be used in order to attract large amount of users with the help of transaction commission, advertisement, pop-up banners windows, narrow advertisement etc.	Realize market share
Division of investments	Ali pay generates more revenues from brand	Match individual profitability and risk

	advertising and banners and apart from this Ali pay should reduce operating costs, futile development costs and equity incentives.	
Valuation of contributions and benefits	To concentrate on tangible benefits	Operational financial interest(ROI)
Division of costs and revenues	The cost system should be in a way to support sellers as much as possible because Ali pay has large number of sellers because it will increase sales and market share.	Cost benefit valuation on level of network & equity incentives

#### 4.5 SPA matrix analysis-Alipay

The SPA matrix model analysis tries to find out the business efficiency of different service type offering and channel type offering and at the same time provide solutions if necessary within the group, company or industry. It helps also for the cross type industry. This model service types include following factors analysis such as : transaction frequency, uncertainty, customization degree, information complexity and resources type used. The channel process explains how to promote and push the products or service towards the end users. (Tinnilä & Vepsäläinen, 1995). In current scenario, Alibaba business group has been expanding their operations in B2C and C2C terminals into more diversified way and so with the likes of Ali pay, Aliyun and other strategic alliances have caused value addition to the service offering of Alibaba group.

In this analysis, Alipay is a third party mobile payment platform which enables the transaction by scanning QR code which leads the transfer of money from one account to another account. The basic and in a way most important attributes of Alipay is the convenience in terms of making payments as Chinese community can use their mobile phones and buy their preferences by using Alipay. There is also the facility to pay taxi fare by using Didichuxing feature. According to the report from Statista, 2013 there was 700 billion registered accounts with 2.78 billion transaction volume. This transaction volume explains the service type of Alipay is simple and easy to use. Alipay also works in offline mode with the cooperation from in time retail option allows shopping malls which accept Tmall accessibility (Chen Y., 2014). The transaction payment can be done by the QR code scanning and password protected payments. The main objective of using Alipay is to eliminate unwanted intermediaries and also save time. In order to understand the service offering of Alipay the amount of time spent on using mobile payment of Alipay can present a better picture and understanding of Alipay service offerings. As an online payment service, the service delivery depends upon the connection speed of internet and the infrastructure of platforms provided and there is no distribution channel involves as because the action of using Alipay depends on the information technology support system.



SPA matrix analysis suggests that Alipay business process is a fast routine process because of its simple and easy way of using which attracts large users and large users create large amount of transaction volume collectively. Alipay is not only a mobile payment platform but it also provides the opportunity for banking company to develop their platforms. Alipay allows users to movie tickets bookings, taxi services, monthly budget and spending report and links to Alibaba shopping services. Hence Alipay is not only a routine service it's more than that from any banking applications.

## **Chapter 5: Conclusions, Limitation and Recommendations**

### **5.1 Conclusions**

This research paper provides the detail analysis of different factors for mobile payments systems in China with the evidence of Alipay as because the e-commerce industry is increasing day by day in China which increase the transaction volume of different types of business such B2C, C2C and O2O. The O2O business is relatively a new phenomenon which is generating more users and targeting more groups. This paper elucidates the detail analysis of mobile payment industry in China with the help of Chinese e-commerce industry, cased study, and numeric study as the reason for choosing case study to provide more solid and realistic view of understanding Chinese e-commerce industry.

The literature review provides complete understanding of Chinese e-commerce market, online payment platforms, market share of different mobile payment option. This research study evaluates four different methods to analyze the Alipay and other competitor's performance by using numeric analysis, case study analysis, STOF model analysis and SPA matrix analysis. In this study competitor analysis also has been done to support the study.

The STOF model had four main domain in which Alipay has to analyze critical issues related with them and those issues well defined in chapter 4. In simple way in order to draw conclusion from this model is that Alipay should satisfy the value of users via the platform of Alipay for service domain. The technology domain should provide the technical support to Alipay so that it can function without any issues. It should provide positive and favorable environment on the platform. The organizational domain deals with the internal as well as the external affairs of the company in order to select the partner but critical resources and capabilities will have top priority during selection process. The finance domain will analyze the cost related issues so that Alipay can generate more market share.

The SPA matrix analysis create a framework for Alipay to evaluate analyze the service and channel type combination in order to attract mass amount of transaction volume without any intermediaries and it has more features apart from mobile payments.

This research study only illustrates four critical analysis factors to understand mobile payment platforms in China as it analyzes more critical factors for mobile payments. This research study only examines local mobile payments company comparison and limited global company comparisons so in further study can improvise to make comparisons between local and global mobile payment companies.

## **5.2 Limitation**

This research study has some limitations as well such as e-commerce industry and mobile payment or third party payment concept is broader concept. The STOF business model doesn't provide an overview for the single unit of business operation as it provides the overview for the whole business operation. The study is entirely qualitative as it doesn't reveal much broader understanding. There was not much literature review or detail analysis on this related topic. However, despite of various limitation this paper is still being useful for the future research prospects.

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