

A Survey of Chinese Teenager Behaviors on the Local Social Networking Sites

Information Systems Science

Master's thesis

Xiaoyu Hou

2013

A Survey of Chinese Teenager Behaviors on the Local Social Networking Sites

Purpose of the Study

The purpose of this research is to study how Chinese teenagers behave on the local SNSs and the factors influencing Chinese teenagers on choosing SNSs. The research also describes the current situation of Chinese Internet economy and SNSs development as well as the characters of Chinese teenagers affected by the local policies, culture and educational system.

Methodology

A research model is developed based on six degree separation theory, Technology Acceptance Model, online advertising avoidance model and SNSs revenue models. The research model is to examine how people, technology, advertisements and wiliness of payment factors influencing Chinese teenagers on choosing SNSs. A survey research is used as the research method in this study and the primary information of Chinese teenagers using the local SNSs is collected by the use of a questionnaire. The questionnaire is answered by 600 randomly chosen students from a randomly chosen junior and high school in Beijing. Quantitative methods are used to carry out the statistical results from primary data collected from the questionnaire and qualitative method is used to identify the natures of Chinese teenager SNSs users.

Findings

Chinese Internet industry started late but is developing and catching up fast. However, the development is unbalanced between eastern and coastal cities and western cities, and between urban and rural areas of China. Sina Weibo, Qzone, Renren.com and Kainxin001 are the four most popular and competitive Chinese local SNSs. Being affected by the "One Child" policy, family and school education, Chinese teenagers are over protected, lack of imaginations, creativities and social abilities. Most of the Chinese teenagers spend their after school time at home on contacting their friends by using SNSs. Their biggest reason and activity of using social networking sites are contacting friends. Technology and people are the most important factors influencing Chinese teenagers on choosing SNSs. Although most of the Chinese teenagers are only using the free basic functions of SNSs, there are still many of them willing to spend money on SNSs. Opportunities can be found in Chinese mobile Internet and smart phone market, as well as in the social media industry toward teenager target group.

Key Words: Social networking sites, teenagers, Weibo, QQ, Renren.com, Kaixin001

Table of Contents

List of Figures	4
List of Tables	5
1. Introduction.....	6
1.1 Motivation.....	6
1.2 Research Objectives and Research Question	7
1.3 Research Methodologies	9
1.4 Structure of the Research	9
2. Defining Social Networking Sites	11
2.1 Defining Social Networking Sites	11
2.2 Clarifying Social Networking Sites from the Confusions	12
2.3 A History of Social Networking Sites	14
2.4 Pros and Cons of Social Networking Sites.....	15
3. Internet Economy of China.....	16
3.1 The Population and Educational Level	16
3.2 Economy and Household Consumption.....	17
3.3 Development of Internet	20
4. Chinese Social Networking Sites	29
4.1 Social Networking Services in China	29
4.2 Sina Weibo.....	33
4.3 Qzone.....	35
4.4 Renren.com	37
4.5 Kaixin001.....	39
5. Characteristics of Chinese Teenagers.....	41
5.1 “One Family One Child” Policy.....	41
5.2 Educational System of China	42
5.3 Comparison between Chinese and Western Education.....	42
5.4 After School Time of Chinese Teenagers	43
6. Earlier Research and Theoretical Models.....	44
6.1 Six Degree Separation	44
6.2 Technology Acceptance Model.....	45
6.3 Online Advertising Avoidance.....	46

6.4 Social Networking Sites Revenue Models	47
7. Research Methodology	49
7.1 Research Model and Research Questions	49
7.2 Questionnaire	50
7.3 Qualitative Research virus Quantitative Research.....	52
8. Empirical Research.....	54
8.1 General Information.....	54
8.2 Research Process	57
8.3 Findings	65
9. Conclusion	69
9.1 Summary of the Study	69
9.2 Recommendations to Investors.....	70
9.3 Limitation of the Study	71
Appendix: Questionnaire of Teenagers' Behaviors in SNSs	73
References	74

List of Figures

Figure 1: Income and Consumption in Urban and Rural Areas 1978-2008 (FOST, 2010).....	19
Figure 2: Number of Internet Users and Internet Penetration Rate 2005-2012 (CNNIC, 2013) ...	22
Figure 3: Number of Mobile Phone Users and Percentage in Total Internet Users 2007-2012 (CNNIC, 2013)	23
Figure 4: Internet Users in Urban Area & Rural Area 2011 & 2012(CNNIC, 2013)	23
Figure 5: Age Structure of Internet Users 2011 & 2012 (CNNIC, 2013).....	25
Figure 6: Educational Levels of Internet Users 2011 & 2012 (Source: CNNIC, 2013).....	25
Figure 7: Purchasing Experiences Spread & Effects on SNSs (CNNIC, 2012).....	30
Figure 8: Screen Cut of Sina Weibo Personal Homepage	34
Figure 9: QQ Show, QQ Gardener & QQ IM Desktop	36
Figure 10: Screen Cut of Renren.com Personal Page.....	38
Figure 11: Happy Games	39
Figure 12: Technology Acceptance Model (Davis, 1985).....	45
Figure 13: Model of Advertising Avoidance in the Online Social Networking Environment (Kelly, Kerr, and Drennan, 2010)	46
Figure 14: Revenue Models and Revenue Drivers for SNSs (Enders et al., 2008).....	47
Figure 15: Model of Factors Influencing Users on Choosing SNSs	49
Figure 16: Respondent Age and Gender Distribution	52
Figure 17: Activities Online in Gender	56
Figure 18: Reasons of Using SNSs (Using Only One vs. Using Many)	61
Figure 19: Activities on SNSs (Use Only One vs. Use Many)	63

List of Tables

Table 1: Classification of Social Media (Kaplan & Haelein, 2009).....	13
Table 2: Weight of Consumption in GDP in Different Countries (CICC, 2006).....	17
Table 3: Household Consumption Rates 1978-2008 (Lv, 2009)	19
Table 4: Memorabilia of Chinese Internet Industry Development.....	20
Table 5: Internet Penetration Rates in Provinces 2012 (CNNIC, 2013).....	24
Table 6: Main Backbone Networks International Egress Bandwidth (CNNIC, 2013)	24
Table 7: PC and Mobile Phone Online Activities 2011-2012 (CNNIC, 2013).....	26
Table 8: Examples of International and Chinese Local Social Medias	31
Table 9: Four Most Competitive Chinese Social Networking Sites.....	32
Table 10: Tencent Subscription Packages (Credit Suisse, 2011).....	37
Table 11: Qualitative vs. quantitative research (Johnson et al., 2008 & Lichtman, 2006)	53
Table 12: Number of Computers & Internet Access Methods.....	54
Table 13: Use of Mobile Phone & Mobile Phone Internet Access	54
Table 14: Average Time Online per Week.....	55
Table 15: Activities Online in Frequency and Percentage.....	55
Table 16: ANOVA Analysis of Demographic Factors Affecting Activities Online	57
Table 17: Number of Respondents Having SNSs Accounts & Number of Accounts	58
Table 18: Average Time of Use of SNSs per Week.....	58
Table 19: Devices for Using SNSs.....	59
Table 20: Brand Distribution of Use of SNSs.....	59
Table 21: Brand Distribution of Use Only One SNS	60
Table 22: Reasons of Using SNSs in (Gender & Age).....	60
Table 23: Reasons of Using SNSs (Using Only One vs. Using Many).....	61
Table 24: Activities on SNSs (Age & Gender).....	62
Table 25: Activities on SNSs (Use Only One vs. Use Many)	63
Table 26: Weights of Factors Affecting Samples Choosing SNSs	64
Table 27: Weights of Factors Affecting Choice of Samples Using Only One SNS and Others	65
Table 28: Willingness of SNSs Payment per Week	65

1. Introduction

1.1 Motivation

Social networking sites (SNSs) are rapidly growing communication media based on human needs and new information technologies such as Internet, 3D technologies and web 2.0. It is increasingly attracting the attentions of the academic, industrial and social researchers. People spend their spare time on social networking sites interacting with other people, self expressing and online gaming. According to ComScore's research in 2011¹, every five minutes people spent online, there was one minute spent on social networking sites; 82% of world's Internet-using population (about 1.2 billion people) is using social networking sites. This number was 85% bigger compare with the last year. The phenomenon is not only the interests of the academic world but also new opportunities to the business world. Because of the non-geographical, highly interactive, and easy information collecting features, social networking sites are nowadays widely applied in business promotions and customer communications, education, medical and health services, and government agencies.

Meanwhile, China is considered as one of the most rapid developing countries within the last half century and also one of the most potentially developing countries in the future. By the end of 2011, 513 million Internet users made China World's largest Internet community and it is estimated that the amount of Chinese Internet users will grow to 711.6 million by 2016². So far more than half of Chinese Internet users are attracted by the local social networking sites such as Sina Weibo, Kaixin001, Qzone, and Renren.com, and the rate is expected to grow to nearly two third by 2014³. The rapid developing information technologies, more and more opened policies, and the sharply increasing social networking site users make China one of the most potential social networking site markets in the world.

¹ Time Spent Online on Key Internet Categories. <http://techcrunch.com/>

² Digital Media in China. <https://wiki.smu.edu.sg/>

³ China Social Media Uses. <http://www.resonancechina.com>

According to the survey of global population pyramid by 2010, 35.7% of the people are from zero to nineteen years old all over the world⁴. Tapscott (1998) considers this generation – the echo of baby boom – different from all the other generations as Net-generation. The Net-generation are the first to grow up surrounded by digital media. A new youth culture as interaction is emerging via digital media. The Net-generation are fierce independent, immediate, emotional and intellectual open, eager to mature and sensitive to corporate interest; they emphasize free expression and innovation, have strong views, and value trusts; they are not anymore audiences, but participants. What the Net-generation are experiencing and what culture they have made now will subsequently affect their later behaviors and culture as the leaders of the future in their workplaces and the society.

It is always necessary and worth to pay more attentions to the focuses – social networking sites as the focus of the Internet economy, China as the focus of the world's economy development, and teenagers as the focus of the future of the society. This research has been narrowed down to the focus of the focuses – teenagers in China using social networking sites – in purpose to draw a very detailed picture of the Chinese Internet economy and Chinese social networking sites development, to find out how Chinese teenagers behave on the local social networking sites, and thus to bring some inspirations for the investors and companies who are interested about this market segment.

1.2 Research Objectives and Research Question

Academic research institutions and individuals have paid a lot of attentions to social networking sites, China, and teenagers. Investigations of social networking sites have been gone through issues of identity, privacy, child safety, youth culture, education, and so on. A variety of literatures have been found during the preparation for this research. As rapid development is one of the biggest characteristics of the industry, research from different angles can be found in different time with very different contents and results. Don Tapscott wrote his first book – *Growing up Digital, the Rise of the Net Generation* in 1998 – describing the new young Net-generation in North America and their cultures,

⁴ World Population Pyramid <http://www.worldlifeexpectancy.com/world-population-pyramid>

lifestyles, and behaviors as consumers, at work and in their families. A research named *Social Impacts of Digital Media* made by Justin Healey in 2008 mapped the Internet industry of Australia and how their children are using and being affected by social media. In 2010, PewResearchCenter published research *Social Media & Mobile Internet Use among Teens and Young Adults* telling the changes of American youths using Internet, social media, and mobile phones. Supported by Becta, digizen.org is making Childnet International research report yearly about *Young People and Social Networking Services* searching for the opportunities and risks social networking sites had brought to children. China Internet Network Information Center (CNNIC) has been reporting about the development of Chinese Internet every year since 1997, including *Survey of online behaviors of Chinese youths*. Much more research about “the leaders of the future” and “the technology of the future” can be found all over the world.

Differing from children in other places of the world, the characters of Chinese teenagers are formed under the impact of the local policies, culture and educational system, which consequently affect their behaviors and values as well. Therefore, this research is to make a survey of the characteristics of Chinese teenagers’ behaviors on the local social networking sites and the factors influencing them on using and choosing social networking sites.

Consequently, the objective of this research is to (1) map the current Chinese Internet economy environment and social networking sites market; (2) describe the characteristics of Chinese teenagers affected by the local policies, culture and educational system; (3) study the Chinese teenagers’ behaviors on the local social networking sites; (4) and analyze the factors influencing Chinese teenagers on using and choosing social networking sites. By carrying out the objectives of this research, such a research question as followed should be answered:

How Chinese teenagers behave on the local social networking sites and what are the factors influencing them on choosing social networking sites?

1.3 Research Methodologies

One of the most common tools for business research is survey research, as a method of gathering primary data and providing quick and efficient means of assessing information about the population (Zikmund, 2003). It will also be used in this research as a research method for gathering information of Chinese Internet economy and social networking sites, as well as for collecting primary data from Chinese teenagers by the use of a questionnaire. A research model of factors influencing Chinese teenagers on choosing social networking sites is developed based on six degree separation theory, Technology Acceptance Model (TAM), social networking sites revenue models and online advertising avoidance theory. The research model supposes that Chinese teenagers are influenced by four factors – people, technology, advertisement and willingness of payment – while choosing social networking sites. Results from the questionnaire data analysis will examine the model and tell how the four factors are influencing Chinese teenagers on choosing social networking sites.

To carry out the research process, a questionnaire with 22 multiple-choice questions was delivered to 600 students from a randomly chosen Chinese junior and high school in Beijing⁵. The questions concern to the general situation of the students using computers and Internet in after-school time, their behaviors on social networking sites, their willingness to pay for social networking sites, and the factors influencing them on choosing social networking sites. Descriptive statistical methods will be used for general information description; scoring and weighting method will be used to measure the weight of each factor influencing teenagers on choosing social networking sites; and analysis of variance method will be used to examine the significant associations between factors.

1.4 Structure of the Research

From the next chapter, the research will start with defining social networking sites; introducing the history of social networking sites development, and the pros and cons of

⁵ In China, junior high schools and high schools are usually binding to each other. In this research, junior and high school means a school with students from grade 7 to grade 12.

using social networking sites. Chapter 3 and Chapter 4 will describe the macro environment of Chinese Internet economy and the development of Chinese social networking sites. Chapter 4 will also give an introduction of the four most popular and competitive Chinese social networking sites which will be involved in the questionnaire questions later. Chapter 5 will tell the characteristics of Chinese teenagers formed under the impact of the local policies, culture and educational system, and how they are different from children in western countries.

The empirical part of the research will start from Chapter 6 by introducing the earlier research and theoretical models, based on which the research model is build. The research model and research questions will be brought forward in Chapter 7 and Chapter 8 will then explain the details of the research process and the findings of this research. Finally, a conclusion of the research will be got in Chapter 9 including managerial recommendations and the limitations of this research.

2. Defining Social Networking Sites

2.1 Defining Social Networking Sites

From the very beginning of this research, a closest-to-accurate definition of social networking sites (also called as social networking services) and a clarification of social networking sites from other similar confusing concepts will be given so that it will be easier to accurately identify what social networking sites in this research refer to. Some definitions of social networking sites from earlier research are listed as follows:

- *A social networking service is an online service which provides a platform for building social network or social relations among people.* – Deepa, Neha & Ranjith, 2012
- *Social networking services refer to online services where ‘members’ can chat with each other via instant messaging, email, video or voice chat, share photos and videos and post comments in online forums or blogs.* – Healey, 2008
- *Social network sites are a prominent type of the various forms of user-generated social media that sometimes are grouped under the term ‘Web 2.0’.* – Gustafsson, 2009
- *Social network sites are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.* – Boyd & Ellison, 2008
- *Social networking sites are based around profiles, a form of individual home page, which offers a description of each member. In addition to text, images, and video created by the member, the social network site profile also contains comments from other members, and a public list of the people that one identifies as friends within the network.* – Boyd, 2007

All the definitions emphasize people’s activities, the features and functions of the services, or the demands of technologies. Accordingly, three key elements of social

networking sites are abstracted as Web 2.0, interaction, and profile. By describing social networking sites as web-based online service, the web technology especially refers to Web 2.0. Kaplan & Haenlein (2009) claimed that Web 2.0 is the platform and technological foundation of social media allowing the creation and exchange of User Generated Content (UGC). Functioned by a set of functionalities such as Adobe Flash, RSS, and AJAX, Web 2.0 makes it technologically possible for people to interact and collaborate with each other. Web 2.0 is the creator of user generated content in a social media dialogue, instead of Web 1.0 limiting people to only passively publishing or reading contents through personal web pages (Kaplan & Haenlein, 2009).

Being provided the technological environment by Web 2.0, interaction becomes one of the most significant features of social networking sites. They allow people to create networks of friends, reach out to the friends of friends, connect to people who they would not normally have connected, and make new friends across geographical areas, culture and religions (Winder, 2008). People chat and comment to each other, share their interests and experiences, keep each other up-to-date, and participate in online activities.

Boyd (2007) identified another feature of social networking sites as profile, which contains users' demographic details such as age and sex, photographs, tastes and interests, work and educational background and so on. User profiles make it possible to connect a group of people from networks with similar backgrounds or common interests.

As a conclusion, this research will give a definition of social networking sites as Web 2.0-based online services allowing their users to interact and collaborate with each other, by creating user generated content in different mediums such as text, pictures and videos.

2.2 Clarifying Social Networking Sites from the Confusions

After the definition of social networking sites was determined, it is also necessary to clarify it from other confusing concepts such as social network and social media. Social network is a macro description of relationship and interaction between people, groups of people, or even the entire society, while social networking sites are the online platforms for people to build their networks.

Comparing with social network, definition of social media is much closer to social networking sites – a group of internet-based applications that build on the ideological and technological foundations of Web 2.0; and that allow the creation and exchange of user generated content (Kaplan & Haelein 2009). Kaplan & Haelein (2009) introduced two key elements of social media – media research (social presence and media richness) and social processes (self-presentation and self-disclosure) – and accordingly classified social media into six different types shown in Table 1.

		Social Presence / Media Richness		
		Low	Medium	High
Self- presentation / Self-disclosure	High	Blogs	Social Networking Sites (e.g., Facebook)	Virtual Social Worlds (e.g., Second Life)
	Low	Collaborative Projects (e.g., Wikipedia)	Content Communities (e.g., YouTube)	Virtual Game Worlds (e.g., World of Warcraft)

Table 1: Classification of Social Media (Kaplan & Haelein, 2009)

Collaborative projects such as Wikipedia allow end-users to join and create content, which are trending to become the main source of information for many people. Content communities are where users can share media content such as text, photos and videos. Virtual game worlds with another famous name MMORPGs are where people can use avatars to play games and interact with each other in a three-dimensional environment. The social presence and media richness degrees of collaborative projects, content communities and virtual game worlds are from low to high. However, all these three types of social media are in low degrees of users' self presenting.

Correspondingly, blogs are used by users as personal web pages to describe their life which others can read and give comments to interact with the person. Comparing with blogs, social networking sites are more social and networked. People no longer only present themselves, but also connect each other by inviting friends to access their personal profiles including photos, video, audio files and blogs, and sending emails and instant messages. Comparing with virtual game worlds, people in social virtual worlds such as second life also use avatars but can behave more freely. In MMORPG people are playing games to accomplish tasks or reach certain levels, but in social virtual worlds people present themselves and interact with each other more.

2.3 A History of Social Networking Sites

Boyd & Ellison (2008) drew a timeline of the history of social networking sites according to the definition of social networking sites. The first recognizable social network site – SixDegrees.com – launched in 1997. It allowed users to create profiles, list their friends and surf the friends lists. Although each of these features existed in some forms on some other websites before, SixDegrees.com was the first to combine all these features. During the early years of social networking sites (1997-2001), users can create personal profiles, identify friends, follow the journals and diary pages of their friends, manage their privacy settings, and furthermore leverage their business networks, e.g. Ryze.com.

After Friendster was launched in 2002, social networking sites became the mainstream of Internet. Two of the world's most popular social networking sites LinkedIn (a social networking site for people in professional occupations) and MySpace (a social networking with a strong music emphasis) were launched a year after.

As social networking sites were rapidly developing and became a global hotspot, many popular communication and community services such as MSN and Chinese QQ instant messengers began to add profiles, blogs and other functions to appear social networking sites features in year 2005. Meanwhile, world's biggest social networking site – Facebook.com– was launched in 2004, open to everyone with a valid email.

Chinese social networking sites appeared to rise a few years later than the world trend. Sina Weibo, Qzone, Kaixin001, Renren.com – four of the biggest Chinese social networking sites were all launched between years 2005 and 2009. Differing from Facebook as a worldwide social networking site, Chinese social networking sites have a very special feature – local. However, because of the huge population base, the user amounts of each of these four social networking sites had broken 100 million within a few years. Therefore, the market potential and opportunities in Chinese social networking sites and in using Chinese social networking sites for business activities cannot be ignored.

2.4 Pros and Cons of Social Networking Sites

There are several obvious pros of social networking sites according to Deepa, Neha & Ranjith (2012): it has a very low cost of usage; it allows people to keep contact both online and offline, in spite of barriers in geographical locations and time; it allows people highly interact to each other by sending and receiving messages, uploading and sharing photos and videos; it allows people to meet and know an array of people with similar interests according to their profiles; and it is a faster and easier way for people to collect information. Because of these pros and its huge regular user population, social networking sites are used as a tool for business promotions and other activities, and are also applied in government agencies, online dating services, education, finance, and medical and health services.

The most disputed cons of social networking sites are privacy (Deepa, Neha & Ranjith, 2012), cyber bullying and risk of child safety (Healey, 2008). Since social networking sites allow anyone with an Internet connection to public their own profiles and share information, users should keep in mind that it means not only their friends, but also some other people can access their profiles. While uploading contents to their own profiles, users should consider protecting not only their own privacies but also their friends' and families' privacies from information misuses. On the other hand, social networking sites users should also be alert of people creating fake profiles for cheating or criminal purposes. Risk of child safety is particularly concerning to sexual issues. Justin Healey (2008) claimed that it is normal for teenagers to be uncertain about sexual issues, and they may not be aware of the risks associated with sharing information and photos especially if they don't think of the information or images as sexual. Therefore adolescents need to be appropriately guided not only in using social networking sites but also in other areas of their lives.

3. Internet Economy of China

3.1 The Population and Educational Level

On 1st November 2010, People's Republic of China started its 6th National Population Census, involving population growth, families, gender structure, age structure, ethnic structure, education level and so on. The result was reported by the National Bureau of Statistics of China on 28th April, 2011⁶. The total population within 31 provinces is 1.34billion, of which 51.27% are males and 48.73% are females. 16.6% of the population is under 14 years old, and 13.26% is over 60 years old while 8.87% is over 65 years old. 49.68% of Chinese people are living in urban area by 2010, but only 36.22% in 2000. The average family size is 3.10 persons. The fertility level of China is currently low and floating population is growing, thus the sizes of family are getting smaller and smaller. China has been developing the urbanization of the country and meanwhile more and more people are moving from countryside to cities searching for new opportunities. 8.87% of the population as over 65-year-old people shows that China has become aging society and is facing the challenges of social welfare problems.

The education levels were separated into illiteracy⁷, primary school, junior high school, high school, and college and above. On average, 8.93% of the population has higher than college education level, while 14.03% has high school level, 38.79% has junior high school level, and 26.78% has primary school level. In general, the education levels of people from cities such as Beijing, Shanghai, Tianjin and Eastern China are higher than the average and other medium and small cities. In the capital city of China – Beijing – 31.5% of its population has higher than college education level, while the percentage in Shanghai is 21.95% and Tianjin is 17.48%. The average rate of illiteracy is 4.89%, however, particularly high in Western China such as Qinghai Province (12.94%), Guizhou Province (10.23%) and Gansu Province (10%).

⁶ The Sixth National Population Census www.stats.gov.cn/zgrkpc/dlc/index.htm

⁷ Over 15 years old people who are unable to read and write because of lack of education.

3.2 Economy and Household Consumption

A list of countries by gross domestic product (GDP) and GDP per capita published by United Nations⁸ shows that in year 2011, China made a GDP of 7,203,784 million US dollars as the second most of the whole world right after United States. However, the GDP per capita of China was only 5,439 US dollars – the 93rd of 195 ranked countries. In National Economic and Social Development Statistics Bulletin 2012⁹, China made 8,226,885 million US dollars GDP with a growth rate of 7.8%, while GDP per capita was 6,091 US dollars with a growth rate of 7.2%. Registered unemployment rate is 4.1% which is about the same as the last year. The main exporting products are consumer goods and main importing products are materials. Disposable income per capita in urban area is 24,565 RMB, while the net income per capita in rural area is 7,917 RMB in year 2012.

Even though the total social consumption is growing every year, the weights of total consumption and household consumption are much lower in the GDP of China than many other countries, and have been going down for years (CICC, 2006). Table 2 shows that the household consumption rate of China is 44.6% in 2003 which is much lower than world's average, other developed countries, and India. By 2008, the household consumption rate of China had lowered to 35.3%, and the average propensity to consume¹⁰ dropped to 0.72 from the 0.85 of 1990 (Lv, 2009).

Percentage in GDP	Total Final Consumption (2003)	Household Final Consumption (2003)	Average of Household Final Consumption (1980-2003)
United States	86.0	70.8	66.7
Japan	74.4	56.9	56.1
United Kingdom	86.5	65.5	65.2
China	57.2	44.6	48.8
Korea	66.9	53.6	54.0
Malaysia	57.7	43.7	48.5
Singapore	55.1	43.3	44.5
Thailand	67.3	56.7	55.3
India	75.3	64.0	70.2
World	79.1	62.0	60.3

Table 2: Weight of Consumption in GDP in Different Countries (CICC, 2006)

⁸ United Nations Statistics Division. <http://unstats.un.org/unsd/default.htm>

⁹ National Economic and Social Development Statistics Bulletin 2012. www.stats.gov.cn/tjgb/ndtjgb/qgndtjgb

¹⁰ Average propensity to consume: percentage of disposable income spent.

There are several reasons causing the high economy growth virus low consumption rate situation. First of all, low consumption rate means high saving rate (CICC, 2006). In 2008, the total social consumption of China was only half of the household savings (Lv, 2009). As a developing country, China has been rapidly developing its economy, however, has not yet made the social welfare system well completed. The future income and expenses are still unclear to Chinese people, especially to those who are living in rural areas (Li, Xu, & Ai, 2008). The average rate of Chinese family saving is 25% of the whole disposable income, which is 6 times more than United States, 3 times more than Japan and also higher than Asian's average rate (Chang, 2012). In 2005, McKinsey made a survey among 6000 Chinese consumers about their reasons of saving (Chang, 2012) – 50% of the consumers saved money for medical expenses, 43% did for after retirement expenses, and 36% for buying apartments. Culture was also found as one of the main reasons why Chinese people were saving money: 30% of the people saved money because thrift is a virtue and 27% saved money for the future of their children.

Another reason of the low consumption rate is the huge gap between the rich and poor, the eastern and western China, and the urban and rural areas (Chang, 2012). The purchasing power of China is obviously centered in the eastern and coastal cities such as Beijing, Shanghai, and Shenzhen. 4% of the whole country's population from 10 biggest Chinese cities has 22.6% of the country's purchasing power. Figure 1 (FOST, 2010) shows the rapidly growing income and consumption in urban and rural areas of China within twenty years, as well as the bigger and bigger gap of income and consumptions between the urban areas and rural areas. The changes of how urban household consumption and rural household consumption weight in the total household consumption of China are shown in Table 3.

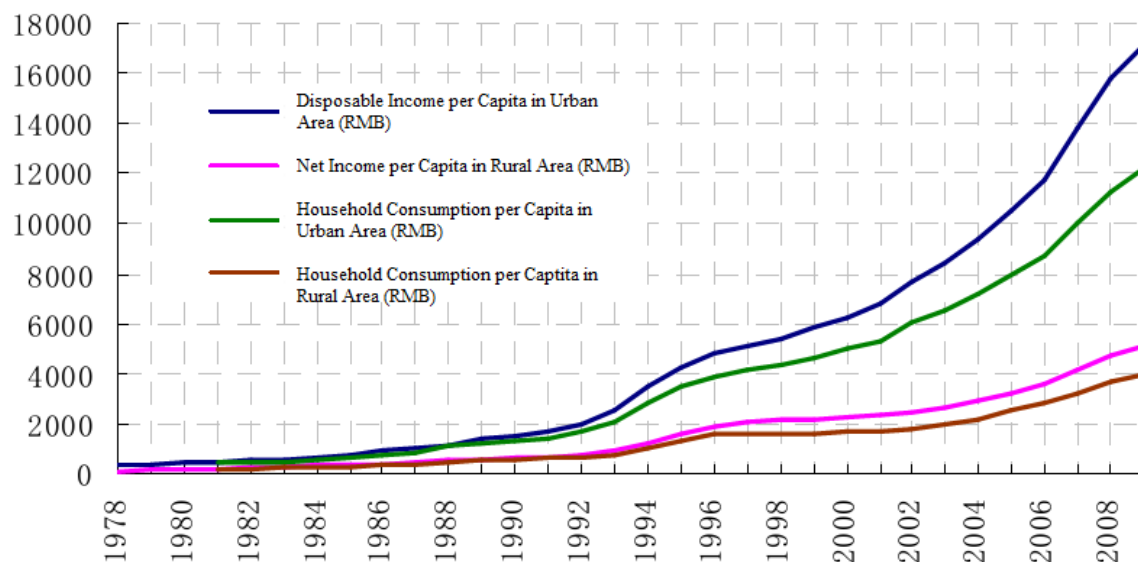


Figure 1: Income and Consumption in Urban and Rural Areas 1978-2008 (FOST, 2010)¹¹

	Total Household Consumption Rate (%)	Household Consumption Rate (Rural Area) (%)	Household Consumption Rate (Urban Area) (%)
1978	48.8	30.3	18.5
1979	49.1	30.6	18.5
1980	50.8	30.7	20.0
1985	51.6	31.0	20.7
1990	48.8	24.2	24.6
1995	44.9	17.8	27.0
2000	46.4	15.3	31.1
2005	37.7	10.2	27.6
2006	36.3	9.5	26.8
2007	35.6	9.1	26.5
2008	35.3	8.9	26.4

Table 3: Household Consumption Rates 1978-2008 (Lv, 2009)

Furthermore, the growth of real estate prices, the decrease of population of under fourteen-years-old people and the new consumption loan system are also the causes of low consumption rate in China. Therefore, improving social welfare system and narrow down the income differences between rich and poor have become the keys to improve the situation. Nevertheless, the quality of Chinese people's life has been much more

¹¹ Source "Current Consumption Situation and Characteristics of Household Consumption Structure Changes", by Beijing Fost Economic Consulting Co., Ltd. 1st December, 2010, FOST Project Report.

improved nowadays and the structure of the household consumption has changed a lot (FOST, 2009). The Engel Curve in Chinese urban areas had dropped from 39.4% to 37.9% from 2000 to 2008; and in rural areas dropped from 49.1% to 43.7%. Chinese people are spending less money on food, but more on living conditions, medication and healthcare, education and entertainment, and especially in transportation and communications.

3.3 Development of Internet

Since social networking sites are based on Internet technologies, it is necessary to first get to know about the development of Chinese Internet technologies, policy and regulations, and social applications. Table 4 is an abstracted memorabilia of Chinese Internet industry development from 1988 to 2012¹². The left side of the table lists the development of related regulations and the right side of the table is the development of technologies and social applications of Internet in China.

Regulation and Legal Issues	Year	Technologies and Applications
	1988	First X.25 packet switching network CNPAC built
	1990	First “.cn” domain name registered
	1994	- China was accepted to connect to Internet by NSF - NCFC connected to Internet - First WEB server built - First BBS opened
	1995	- First Chinese e-magazine launched - CERNET connected to Internet
China Public Computer International Networking Management Approach published	1996	- CHINANET connected to Internet - China International E-commerce Center Founded - CHINAGBN connected to Internet
International Networking of Computer Information Network and Security Management Approach published	1997	- Private ISP/ICP started - CHINANET, CERNET and CHINAGBN connected to each other
Public Information Network Security Supervision Bureau organized	1998	
- China Press Network Media Convention published - CNISTEC founded - CERNET Computer Emergency Response Team organized	1999	- CERNET and CSTNET opened satellite backbone Internet replacing IP/X.25 - zhonghua.com listed in NASDAQ - Higher level education recruited students first time via Internet - First e-bank by China Merchants Bank

Table 4: Memorabilia of Chinese Internet Industry Development

¹² Source from China Internet Network Information Center. www.cnnic.net.cn

Regulation and Legal Issues	Year	Technologies and Applications
<ul style="list-style-type: none"> - International Networking of Computer Information Systems Confidentiality Regulations published - The Online Securities Commission Management Approach published - China Telecom Ordinance and Internet Information Services Management Approach published - Websites Engaged in the Business of News Publication Provisions published - Internet Electronic Bulletin Service Provisions published - Notice on Internet Chinese Domain Management published 	2000	<ul style="list-style-type: none"> - CMNET in use and promoted WAP service - UNINET in use - MONTERNET (Mobile + Internet) project started by China Mobile - CERNET started IPv6 service
<ul style="list-style-type: none"> - Internet Drug Information Services Regulations published - China Information Technology Security Evaluation and Certification Center started - Information Network Transmission Right was written in Copyright Law - Youth Network Civilization Convention published 	2001	<ul style="list-style-type: none"> - China Telecom started Internet international roaming - CDMA network built by China Unicom - 10 backbone Internet connected
Internet Domain Management Regulations published	2002	GPRS service promoted by China Mobile
First civil dispute about virtual properties	2003	Broadband service CHINA169 started
Electronic Signature Law published	2004	Tencent Holding listed
Internet Press Information Service Regulation published	2005	<ul style="list-style-type: none"> - Baidu listed - Web 2.0 conception in China
Email Service Management Regulation published	2006	E-government started
<ul style="list-style-type: none"> - Blog Service Self-discipline Convention published - 7 national standards of information security published 	2007	First mobile newspaper operated
<ul style="list-style-type: none"> - Internet Audio-visual Program Service Management Requirements published - State Administration of Taxation announced to levy online virtual income tax 	2008	Kaixin001 launched
<ul style="list-style-type: none"> - Online Gaming Virtual Currency Exchange Regulation published - More than 500 illegal BitTorrent websites closed 	2009	<ul style="list-style-type: none"> - China Mobile, China Unicom and China Tele got 3G license - Sina Weibo launched
<ul style="list-style-type: none"> - Online Trading and Service Regulation published - Online Gaming Management Regulation published 	2010	- Online group shopping rose
<ul style="list-style-type: none"> - Weibo and Blog Development Regulation published - Copyright dispute between Baidu and books and music publishing industry - Investigation against monopolies of China Tele and China Unicom 	2011	

Table 4 Cont.: Memorabilia of Chinese Internet Industry Development

According to the first Statistics of Chinese Internet development published by CNNIC in 1997, China had 299,000 computers with Internet connection, 620,000 Internet users, 1500 www websites and international egress bandwidth 25 Mbps. 20 years later, Internet penetration rate in China reached to 22.6%. By the end of 2008, there were 298 million Chinese Internet users, of which 90.6% were using broadband services; the number of domains reached to 16.8 million and websites reached to 2.9 million; and the international egress bandwidth was about 640,000 Mbps.

In January 2013 CNNIC published its latest report of Statistics of Chinese Internet development. By the end of 2012, China had 564 million Internet users and the Internet penetration rate reached to 42.1% (Figure 2, CNNIC, 2013). 420 million Internet users used mobile phones to access Internet (Figure 3, CNNIC, 2013). The number of Chinese Internet users was doubled compared with 5 years ago in 2008, while the number of mobile Internet users was tripled. However, there is still huge gap of Internet penetration rates between urban and rural areas – 3/4 urban residents are Internet users yet only 1/4 rural residents are using Internet (Figure 4, CNNIC, 2013).

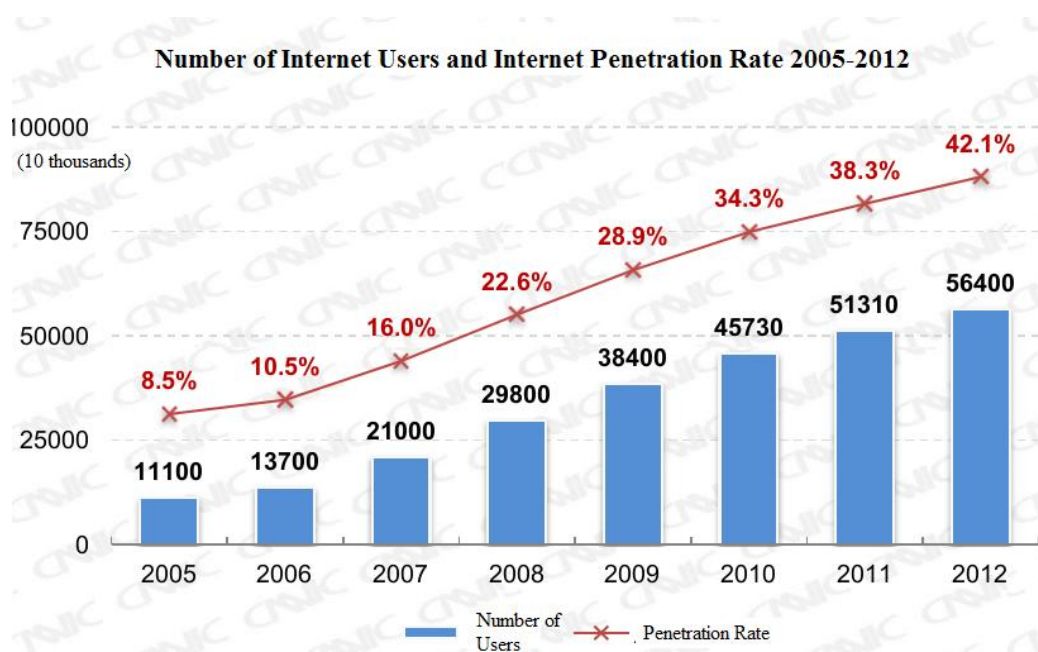


Figure 2: Number of Internet Users and Internet Penetration Rate 2005-2012 (CNNIC, 2013)¹³

¹³ Source: CNNIC, Statistics of Chinese Internet development, January 2013

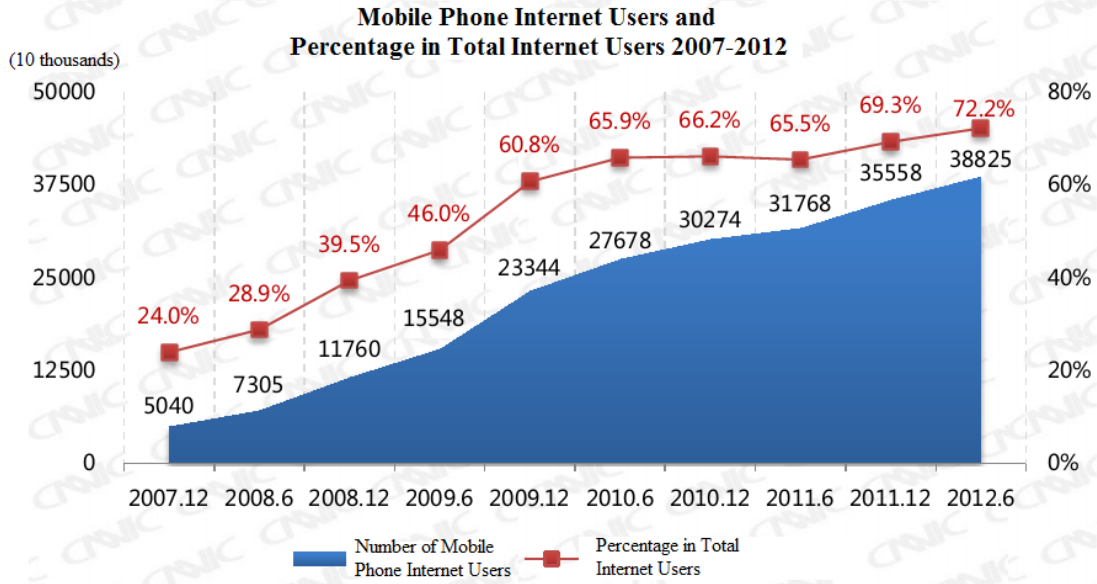


Figure 3: Number of Mobile Phone Users and Percentage in Total Internet Users 2007-2012 (CNNIC, 2013)¹⁴

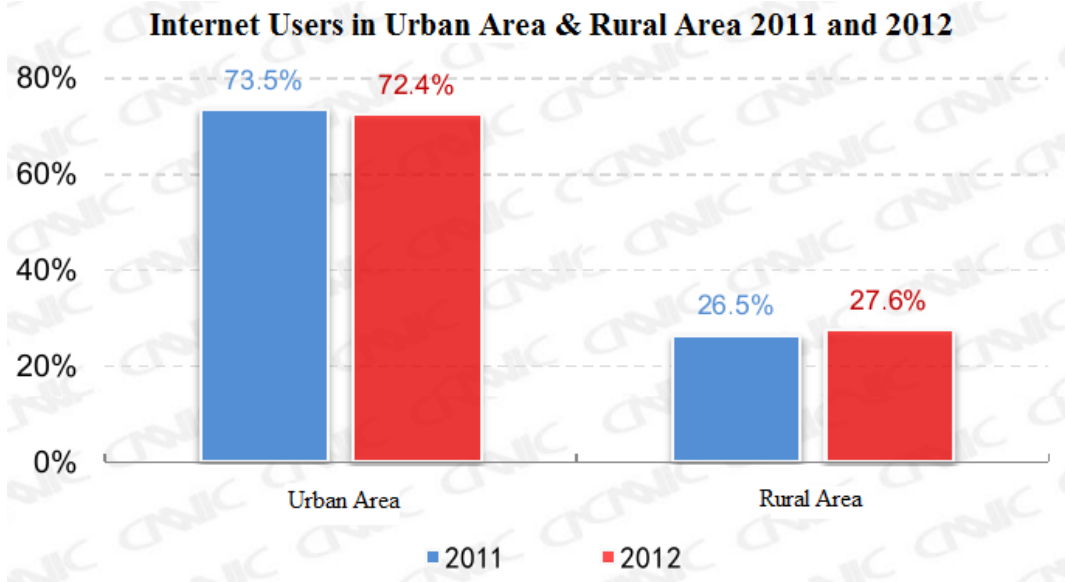


Figure 4: Internet Users in Urban Area & Rural Area 2011 & 2012(CNNIC, 2013)¹⁵

Another problem is the unevenly distributed Internet among cities and provinces. In coastal cities and provinces such as Beijing, Shanghai and Guangdong province, the Internet penetration rates are over 60% or even 70%, which are much higher than the

¹⁴ Source: CNNIC, Statistics of Chinese Internet development, January 2013

¹⁵ Source: CNNIC, Statistics of Chinese Internet development, January 2013

average of the whole country; while in western provinces such as Guizhou, Yunnan and Jiangxi Province the Internet penetration rates are lower than 30% (shown in Table 5).

Province / City	Penetration Rate (%)	Province / City	Penetration Rate (%)	Province / City	Penetration Rate (%)
Beijing	72.2	Qinghai	41.9	Hunan	33.3
Shanghai	68.4	Hebei	41.5	Xizang	33.3
Guangdong	63.1	Shaanxi	41.5	Sichuan	31.8
Fujian	61.3	Chongqing	40.9	Anhui	31.3
Zhejiang	59.0	Ningxia	40.3	Gansu	31.0
Tianjin	58.5	Shandong	40.1	Henan	30.4
Liaoning	50.2	Hubei	40.1	Guizhou	28.6
Jiangsu	50.0	Inner Mongolia	38.9	Yunnan	28.5
Shanxi	44.2	Jilin	38.6	Jiangxi	28.5
Hainan	43.7	Heilongjiang	34.7		
Xinjiang	43.6	Guangxi	34.2	Average	42.1

Table 5: Internet Penetration Rates in Provinces 2012 (CNNIC, 2013)

By the end of 2012, the Internet egress bandwidth of China reached 1.9 million. The 6 main backbone networks are China Telecom, China Unicom, China Mobile, CERNET (The China Education and Research Network), CSTNET (China Science & Technology Network), and CIETNET (China International Economy and Trade Network). Egress bandwidth shares of the 6 networks are as follows in Table 6 (CNNIC, 2013).

Networks	Egress Bandwidth (Mbps)	Percentage
China Telecom	1,048,848	55.2%
China Unicom	586,279	30.8%
China Mobile	206,563	10.9%
CERNET	35,500	1.9%
CSTNET	22,600	1.2%
CIENET	2	0
Total	1,899,792	100%

Table 6: Main Backbone Networks International Egress Bandwidth (CNNIC, 2013)

CNNIC report (2013) shows that 80% of Chinese Internet users are under 40 years old and one fourth of the users are under 20 years old (Figure 5, CNNIC, 2013). Consequently, one fourth of Chinese Internet users are students and the educational levels of most of the users are under high school level (Figure 6, CNNIC, 2013).

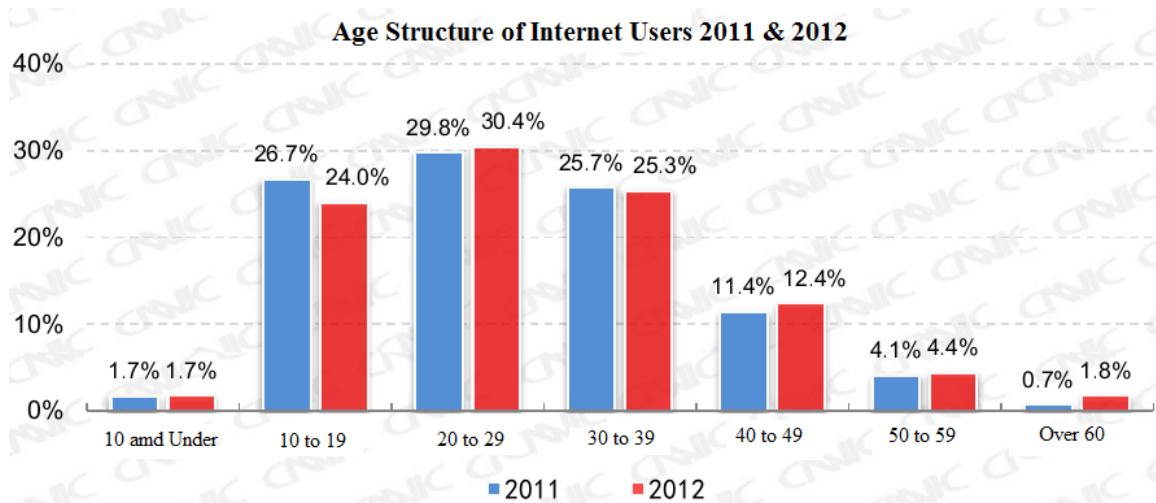


Figure 5: Age Structure of Internet Users 2011 & 2012 (CNNIC, 2013)¹⁶

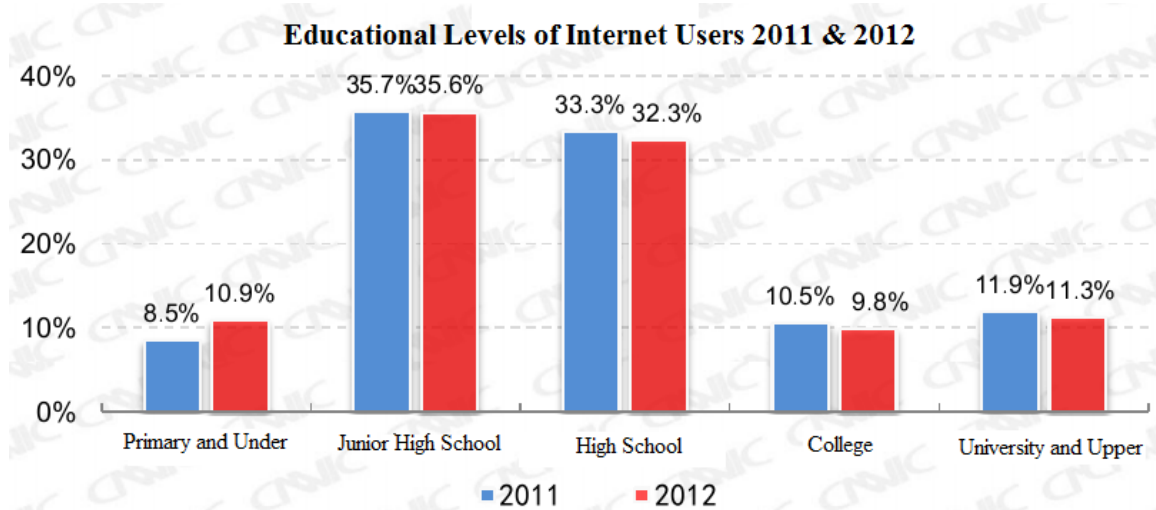


Figure 6: Educational Levels of Internet Users 2011 & 2012 (Source: CNNIC, 2013)¹⁷

Half of Chinese Internet users use laptops and 75% use mobile phones for Internet. The average Internet usage time per week is 20.5 hours. The main online activities of Chinese Internet users are listed in Table 7 (CNNIC, 2013) and mobile phone users' online activities are basically the same as PC users. It is worth to pay attentions to the rapid growths of activities in using Weibo, online shopping, e-bank and e-payment, and online traveling booking among PC Internet users. In general, mobile phone users' online

¹⁶ Source: CNNIC, Statistics of Chinese Internet development, January 2013

¹⁷ Source: CNNIC, Statistics of Chinese Internet development, January 2013

activities are growing faster than PC users especially in online video, Weibo, online shopping, e-bank and e-payments.

Activities	Percentage of Use by PC Users (2012)	Percentage of Use by PC Users (2011)	Percentage of Use by Mobile Phone Users (2012)	Percentage of Use by Mobile Phone Users (2011)
Immediate Communication	82.9%	80.9%	83.9%	83.1%
Search Engine	80.0%	79.4%	69.4%	62.1%
Online Music	77.3%	75.2%	50.9%	45.7%
Blog	66.1%	62.1%	--	--
Online Video	65.9%	63.4%	32.0%	22.5%
Online Gaming	59.5%	63.2%	33.2%	30.0%
Weibo	54.7%	48.7%	48.2%	38.5%
SNSs	48.8%	47.6%	42.0%	42.3%
Email	44.5%	47.9%	29.1%	24.1%
Online Shopping	42.9%	37.8%	13.2%	6.6%
Online Literature	41.4%	39.5%	43.3%	44.2%
E-bank	39.3%	32.4%	12.9%	8.2%
E-payment	39.1%	32.5%	13.2%	8.6%
BBS/Forums	26.5%	28.2%	--	--
Online Booking (Traveling)	19.8%	8.2%	5.9%	4.0%
Group Shopping	14.8%	12.6%	4.6%	2.9%
Online Stocks	6.1%	7.8%	--	--

Table 7: PC and Mobile Phone Online Activities 2011-2012 (CNNIC, 2013)

As the mobile phone Internet users in China are sharply increasing, it is considered that mobile Internet services and smart phones will be the trend of Chinese Internet development. 35.6% of Chinese mobile phone users claimed that they are using computers to access Internet much less than before. CNNIC also made Research of Online Behaviors of Chinese Mobile Phone Users and Survey of Chinese Mobile Internet development (CNICC, 2012). By the end of 2011, there are 356 million Chinese mobile Internet users, of which 58% are male users and 42% are female users. One third of the mobile Internet users are under 20 years old and 80% are under 40 years old.

As mentioned above, 83.9% of the mobile Internet users are using mobile phone to access Internet for immediate communications with friends. Instant messenger applications are widely used for immediate communications; 99.5% users are using Mobile QQ launched by Tencent Holdings Limited, and very little others are using other applications. The most used mobile social networking sites applications are Renren.com (58.6%) and Tencent Friends (44.4%) owned by the same owner of Mobile QQ IM – Tencent

Holdings Limited. 48% of mobile Internet users are using mobile Weibo and 24.8% are using Mobile Kaixin001. Tencent QQ, Renren.com, and Weibo are the most used social communication tools among Chinese mobile Internet users (CNNIC, 2012).

Although mobile Internet technologies and services are quite well developed in China, in 2011 the average monthly mobile Internet traffic per person of Chinese mobile phone users was only 75.53MB. This number was much less than it was in United States during the same period – 453MB (CNNIC, 2012). On one hand, most of the Chinese mobile Internet users are only using IM or visiting social networking sites with mobile phones but not many are listening online music or watching online videos which require much more bandwidth and traffic. On the other hand, Chinese mobile Internet users are very sensitive about the cost of Internet traffic. More than half of Chinese mobile Internet users choose 20M to 50M monthly service packages which in some provinces only cost 5 RMB per month. As well as, Wi-Fi service has not yet been widely used in China. Only 7.6% of Chinese mobile users use Wi-Fi to access Internet often in 2011.

CNNIC's research (2012) also shows that more than 60% of Chinese mobile phone users use mobile phones to access Internet more than once a day. 20% of the users spend more than 4 hours in using mobile Internet, and more than half spend at least one hour every day. Even though Chinese mobile Internet users are using mobile phones to access Internet and are using mobile applications a lot, they are not really willing to pay for mobile applications and Internet products. 80% of the users have never paid for any mobile phone applications and online products. More than half of those who have spent money on mobile phone applications spend their money on coloring rings.

While talking about the main hard devices for Chinese mobile Internet users accessing Internet – the mobile phones – Nokia still has the biggest market share with a percentage of 22.2%, and Samsung and iPhone have the second and third biggest market shares with percentages of 13.3% and 9.9% (CNNIC, 2012). Among those who are using smart phones, more than 60% are using Symbian operating system, 20.8% are using Android phones, 13.5% are using iOS phones, and only 1.8% are using Windows phones. However, it is predicted that Nokia's market share in Chinese mobile phone market will decrease in the future. More than half of the Chinese mobile Internet users are

considering switching their mobile phones. Among 53% of the Nokia mobile phone users who are considering switching their mobile phones, 43.3% are considering switching to Android phones, 28.6% are considering switching to iOS phones and the rest are considering switching to other mobile phones.

There are two different kinds of mobile Internet users who are considering switching their mobile phones – dumb phone users and smart phone users. Dumb phone users who are considering switching to smart phones are willing to pay around 1,000RMB for the new phones; and smart phone users who are considering switching to other smart phones are willing to pay over 2,000RMB because they are hoping to experience more advanced functions and operating systems (CNNIC, 2012). Dumb phone users are mostly planning to switch to smart phones within 6 months; and smart phone users are going to wait for longer time from 6 months to 2 years, so that there will be plenty of time for high-end smart phone R&D. While being asked about reasons why considering switching to other phones, most users answered that they were looking forward to more advanced functions and fashion outlooks.

As a conclusion, Chinese Internet technology has been rapidly developing and the amount of Chinese Internet and mobile Internet users are growing every day. Internet is well penetrated in urban areas of China especially in eastern and coastal provinces and cities. The main Chinese Internet users are young people and with middle educational levels. Mobile Internet services and smart phone will be the trend of Chinese Internet development. The technology development is still required to higher the speed of the Internet, and the Internet users should be more stimulated to use more Internet traffic and purchase more mobile applications so that the whole industry will profit more.

4. Chinese Social Networking Sites

4.1 Social Networking Services in China

Before going deeper into details of the four biggest Chinese social networking sites, a description of the general situation of Chinese social networking sites will be given at the first place. As mentioned earlier in this research, more than half of Chinese Internet users (including both PC and mobile users) are using social networking sites. The gender, age, educational and geographical structures of Chinese social networking site users are about the same as the ones of Chinese Internet users. Frequencies of users visiting social networking sites are high, however, not many of them are writing original contents or dairies, but just posting pictures, commenting to friends and sharing others' contents with friends. Keeping contact with friends, updating personal status and following hotspots are Chinese social networking site users' most done activities online.

Internet is undoubtedly making disruptive changes of the society and people's lifestyle. One of the biggest shocks and challenges it has brought to China is the freedom of public opinions against traditional social media. Internet has provided a platform for people to participate, supervise, discuss and affect politics, governments and organizations, events and hotspots (Min, 2004). Although the Internet penetration rate of China is at an average level comparing with other countries, the strength of Chinese Internet public opinion field is unparalleled (Zhu, Shan & Hu, 2011). Social networking sites have become the best public opinion platform because of its double characteristics of mass communication and private communication. On one hand, social networking sites connect all the social classes and can keep information up to date; on the other hand, social networking sites differing from BBS or other websites are more difficult to be supervised and shielded because of its private messaging function. There have been very many events or problems in China which were first mentioned in a social networking site, then spread and in the end were quickly solved because of the huge pressure brought from the public.

Social networking sites are also chosen by companies as online marketing platforms. CNNIC (2012) made a research about the impacts of online marketing on Chinese social networking site users. 44.8% of Chinese social networking site users are following brands'

and companies' activities via social networking sites, 42.8% share interesting advertising pictures and videos in their own pages, and 27.4% purchase because of the advertisements and promotions on social networking sites. More female users directly follow brands and companies, and purchase on social networking sites; and male users share and forward advertisements more. It is also found that people will desire to purchase while seeing friends' recommendations of products on social networking sites; they reference friends' comments to make purchase decisions, share good products and brands; and more important, they share bad purchasing experiences and complain on social networking sites (See Figure 7).

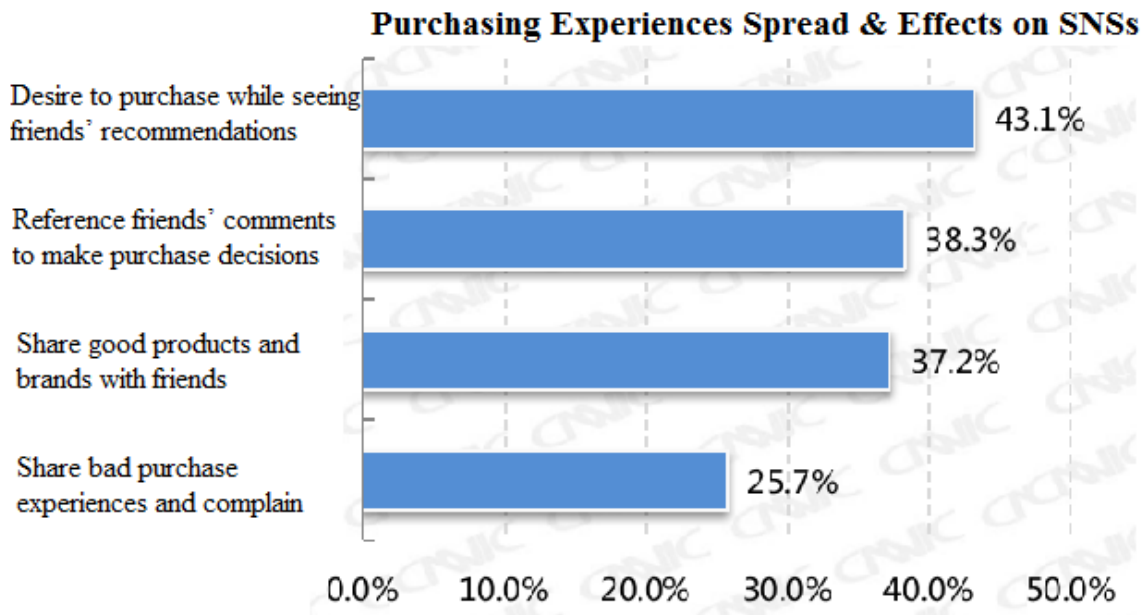


Figure 7: Purchasing Experiences Spread & Effects on SNSs (CNNIC, 2012)¹⁸

There is another very interesting phenomenon that almost every popular Chinese social media can be found a prototype from international social media platforms. As some examples given in Table 8, China has its own social networking sites, instant messengers, video-sharing websites, search engines, online trade websites and so on. Chinese social media copied the styles of those most popular international social media of their outlooks and functions, and added with some “Chinese characteristics” functions and applications. Therefore, social media such as Facebook and Youtube are blocked in China, because on

¹⁸ Source: CNNIC, Research of behaviors of Chinese social networking sites users 2012, December 2012

one hand public opinions are still conditionally free in China, and on the other hand the local information industry must be protected from the competitions.

Type of Social Media	International Social Media	Chinese Social Media
Social networking sites	Facebook	Renren
Instant messenger	MSN	QQ
Video sharing websites	Youtube	Youku
Search engine	Google	Baidu
Online trade	Ebay	Taobao
Wikis	Wikipedia	Baidu Baike

Table 8: Examples of International and Chinese Local Social Medias

Chinese social networking sites started to be popular between 2008 and 2009. The most famous Chinese social networking sites such as Kaixin001, Renren.com, Sina Weibo, and Qzone were either launched or revised during this period. Four most popular and competitive Chinese social networking sites as mentioned above – Kaixin001, Renren.com, Sina Weibo and Qzone – will be introduced in details about their histories, developments, products and services, as well as their business and revenue models. Similar with other Chinese social media, Renren.com is considered as a copy of Facebook; Sina Weibo is considered as a copy of Twitter; and Qzone is a derivative of instant messenger QQ which was originally copied from MSN messenger.

The demarcation of Chinese social networking sites is even messier. Although Weibo is compared to “Chinese Twitter”, it is always separately mentioned from social networking sites in China. However, since Weibo is a platform based on technology of Web 2.0, where users can make their own profiles, update status, share comments and contact with their friends instantly, it will be considered as a social networking site in this research. While talking about Qzone, people always first think about the instant messenger QQ launched much earlier than all the other social networking sites in year 1999. However, Tencent has been developing QQ along the time changing. A series of derivatives such as Qzone, QQshow, QQfriends have been launched during years since 2005, and of which Qzone is considered as with all the social networking site features. Therefore, while talking about QQ, it is more referred to the social networking site Qzone nowadays. Table 9 gives a general description of these four social networking sites and the details will be gone through one by one from the next chapter.

	Sina Weibo	QQzone	Renren.com	Kaixin001
Launch Time	August, 2009	June, 2005	December, 2005 ¹⁹	March, 2008
Owner	SINA Corp	Tencent Holdings Limited	China InterActive Corp	Beijing Kai Xin Ren Information & Technology Co., Ltd.
Listed	NASDAQ, 2000	Hong Kong Stock Exchange, 2004 Hang Seng Index Constituent Stock, 2008	NYSE, 2011	N/A
Number of Users²⁰	424 Million	576 Million	200 Million	130 Million
Target Group	All	All	High school and University Students	White collars
Registration	Email address	QQ number	Email address	Email address
Other Sign in	MSN, surfing, mobile phone number, China Unicom	2-dimensional bar code	MSN, mobile phone number, surfing	QQ number, Weibo account, mobile phone number, surfing, MSN
Member Levels	Experience levels, Weibo member	QQ member, Diamond levels	VIP member	Experience levels
Key Functions	Profile, Diary, Music, Album, Video, Private message, Online Chatting	Profile, Diary, Music, Album, Space decoration,	Profile, Diary, Album, Online Chatting, Private message	Profile, Diary, Album, Social games, online chatting
Applications	Hot spots, Weibo Desktop, Wei Bar, Talents, Wei Games, Search engine, radio	City Talent, QQ Show, Space Club, Flash Module,	Renren Games, Renren Desktop, University Communities, University information and recruiting, radio	Weather forecast, Online ticket, Stock simulation, Group shopping, Advertisement buffet
Celebrity Authentication	Yes	Yes	Yes	Yes
Fees	VIP member, Wei coins	membership fee, Q coins	VIP membership fee	Happy coins
Virtual Currency	Wei coins	Q coins	Renren Beans	Happy coins
Games	Wei games	QQ Gardener, Space Games more than 10 thousand	Renren games	Happy City, Happy Farm, Happy Restaurant
Mobile Applications	Windows phone, iPhone/iPad, Android, Symbian, Kjava, BlackBerry, Windows 8, MTK	Android, iOS, iPhone, Windows phone	Android, iphone/ipad, Symbian, Windows phone	Iphone, Android, Symbian, Kjava and Blackberry

Table 9: Four Most Competitive Chinese Social Networking Sites

These four social networking sites have very different histories and backgrounds and each one has its own characteristic products and services. As an example, both Sina

¹⁹ The time Renren was acquired by China InterActive Corp, and became real social networking site.

²⁰ All the numbers are statistical numbers of year 2012, however, might slightly differ from months.

Weibo and Qzone are the sub-products of Chinese web portals – Sina and Tencent, thus on one hand they already have certain loyal users accumulated from earlier time and on the other hand the companies' income and profits are not completely relying on them; Renren.com was originally an internal network made by university students for university communities, and was acquired by China InterActive Corp in 2005, and then started to face to the whole society. Only Kaixin001 is not a copy of any other international social networking sites but an original with “Chinese characteristics” social networking site. It also has a different business and revenue model than the other ones.

4.2 Sina Weibo

Sina Weibo is paid the most attentions by the society not only because of its rapidly increasing users, but more because of the huge social repercussions it has made. Sina Weibo has become the biggest platform for public opinions of China. A lot of enterprises and celebrities have joined Sina Weibo and can be directly reached by simply sending a “@” message to them. People are following and discussing hotspots of the society and activities of the government and politics. The influences and pressures Sina Weibo has made to the society are not comparable by the other Chinese social networking sites.

The key functions of Sina Weibo have nothing special than the other social networking sites. Users use their own email address to sign up to Sina Weibo, and then complete their own profiles. By using Sina Weibo, people can update their own status and post any forms of messages – by pictures, videos, locations, or the simplest way – text within 140 Chinese characters. People can add each others as friends, comment and forward others' posts, send private messages to friends, and chat with friends online. Users can collect experience points to increase their user levels, or pay to become Weibo members. The membership fee is about 100 RMB per year, and Weibo members can have for example bigger album spaces, unwanted information shields, and special rights in Weibo games. Users can also buy Wei Coins (1 Wei coin = 1 RMB) for purchasing virtual goods in Weibo games or other added-value services. Both membership fees and Wei coins can be paid by e-payment, credit cards, phone calls, and text messages or directly deducted from phone bills.



Figure 8: Screen Cut of Sina Weibo Personal Homepage²¹

If everything is as normal as any other social networking sites, why is Sina Weibo so popular? One reason is that Sina Weibo has the most authenticated famous celebrities, enterprises, media and other organizations. People or organization user names with a golden letter “V” behind means their identities are authenticated. Very many users use Sina Weibo because they can get closer to and follow the status of their favorite stars and brands, or so that they can keep an eye on the activities of some organizations.

The other reason must be traced to its owner – SINA Corp. SINA Corp. is one of the earliest founded Chinese Internet companies (founded in 1998), listed in NASDAQ in 2000. Sina along with Tencent, 163.com, and Sohu are considered as the four portal websites of China. Sina has its own news center and channels, online shopping center, forum, communities, email services, enterprise services and mobile services. Within the 10 years before Sina Weibo was launched, Sina had collected huge loyal user base, good reputations and financial strengths for its Weibo. In actual of fact, although Weibo has collected popularities for Sina, it doesn’t bring much profit to Sina. Most of the Weibo users are only using the basic functions and free services (Luo & Gao, 2011).

²¹ Source: <http://www.weibo.com/>

As a portal website, the main income of Sina is still coming from advertisements, plus added-value service incomes from virtual currency of online gaming, enterprise email fees, e-business, mobile phone rings downloading, and online digital TV. In 2011, Sina users spent more than half of monthly online time on Weibo, however, three fourth of the company's income is from advertisements (Luo & Gao, 2011).

4.3 Qzone

Comparing with Sina Weibo, Qzone has a similar background but is very different in operating ideas. Owned by another Chinese portal website – Tencent, Qzone is a derivative of instant messenger QQ. Early in 1999, Tencent launched the first Chinese local instant messenger QQ which became the most advanced and popular instant messaging tool at the time. On 5th March 2010, the number of synchronous QQ online users broke 100 million, and by the end of 2012 registered QQ users are more than 1 billion of which 700 millions are active users. Again, the portal website and the earlier success had prepared the user base for Qzone. The market share of social networking sites accessing time of Tencent social networking sites by 2010 was 25% (Credit Suisse, 2011). Both the user amount of Qzone and its total accessing time are leading the Chinese social networking services market.

Following the global social networking sites trend, Tencent in the first place launched Qzone for QQ users to express themselves, share comments and interact with each other in 2005. Rather than a social networking sites, Tencent paid more attentions on the individuation and differentiation of the users. In the right of Figure 9 shows the desktop application of QQ Instant Messenger. Anyone can apply for a QQ number (earliest with 6 digits and now with 9 or even 10 digits) for free and sign in to the desktop application with QQ number and password. On the top of the instant messenger, there are links directing users to their Qzone personal pages, emails, and other products and services. Except for normal social networking site page looking, Tencent has developed a service called as QQshow where users can design their own virtual images by changing clothes, hair styles, make-up, backgrounds and special effects. The upper left two pictures in Figure 9 are examples of QQshow images. QQ users can also plant their own flowers as an example shown in lower left of Figure 9 and place them in their own Qzone pages.

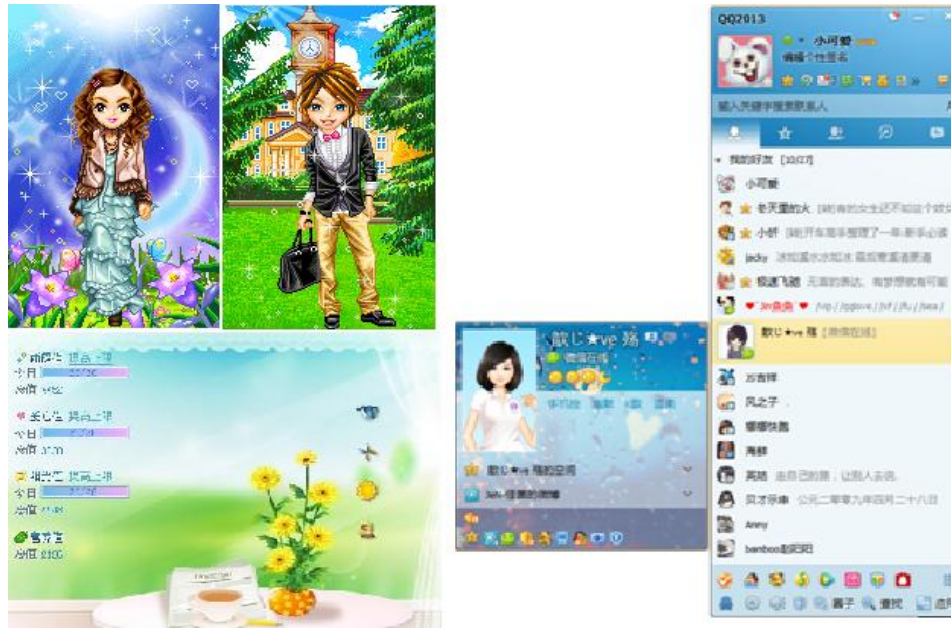


Figure 9: QQ Show, QQ Gardener & QQ IM Desktop²²

Differing from other normal membership levels, QQ users have their own membership levels called as colorful diamond memberships. In each service area, the advanced membership level is represented by one color of diamond. Table 10 (Credit Suisse, 2011) shows the details of different membership levels, costs and the benefits. Users can also use virtual currency Q coins to pay for virtual goods or online gaming points. 1 Q coin costs 1 RMB.

Advertisement is also one of the key incomes of Tencent. Comparing with SINA Corp.'s advertisement customers from world's top 500 global enterprises, financial and real estate companies, Tencent's advertisement customers are mainly from online gaming industries because of its huge amount of loyal online gaming users (Wang, 2009). Membership fees and virtual currency income are also playing important roles in the total income. Credit Suisse (2011) calculated that 27% of Tencent's total income was from Qzone and predicted this number will rise up to 36% in year 2013. Therefore, Tencent's social networking sites do not only gather loyal users but also bring profits to Tencent.

²² Source: <http://qzone.qq.com/>

Subscription Package	Products	Price (RMB/Month)	Highlighted Benefits
QQ Membership	QQ IM ecommerce / Others	10	50 privileges for IM, ecommerce and other fields
Yellow Diamond Noble	Qzone	10	Free Qzone decoration, beautiful letter paper, farm gift package value 420RMB/month, 50G photo album
Red Diamond Noble	QQ Show	10	All QQ avatars are free; free flower gifting to friends
Green Diamond Noble	Qzone	10	Free to use all music background in Qzone, free to download MP3 and free to upload music
Blue Diamond Noble	Board & Chess Games	10	QQ Game kick-out and anti-kick-out functions, double score
QQ Speed Purple Diamond	QQ Speed	10	Kick-out ability, anti-kick-out protection, multiple experience is increased, exclusive items and tasks, discount coupon
Pink Diamond Noble	QQ Pet	10	QQ Pet shopping offers a 12% discount, free dish wash and other services
QQ Dance Purple Diamond	QQ Dance	20	Anti-kick-out protection, multiple experience is increased, and other benefit packaged in ad-hoc VIP gift
DNF Black Diamond	D&F	20	Extends upper tiredness limit, experience rewards after clearance, noble gamer identification
Journey to Fairyland VIP	Journey to Fairyland	20	8% extra experience increase, exclusive task and scenes for VIP, auto reply, noble gamer identification
CF VIP	Cross Fire	30	VIP identification, gamer experience level increase by 25%, privilege to buy certain virtual items, anti-kick-out (twice/month), kick-out ability across camps, penalty-free quit during ongoing games
QQ R2Beat Purple Diamond	R2Beat	10	QQ R2Beat kick-out and anti-kick out functions, discount coupon
QQ Tang Purple Diamond	QQ Tang	10	QQ Tang exclusive VIP role and items, anti-kick-out protection
Reading VIP	QQ Book	10	Free to read all books covered in the VIP monthly package
Super QQ	Mobile QQ	10	Mobile QQ service, upgraded more fast

Table 10: Tencent Subscription Packages (Credit Suisse, 2011)

4.4 Renren.com

It is obviously to see from Figure 10 that from the color to the structure of the webpage, Renren.com is a perfect copy of Facebook. The functions of the website are also similar to Facebook.



Figure 10: Screen Cut of Renren.com Personal Page²³

The original Renren.com was made by several university students in 2005 as an internal network for university student contact within the communities. The original name of the network was called as “Xiaonei” which meant “inside the school”. In 2006, Xiaonei.com was acquired by China InterActive Corp. By the time of a few years, Xiaonei.com has collected a considerable number of users who are mainly high school and university students. After the first tier of the loyal student users graduated from schools, it seemed not so suitable to always go back to “inside the school” website. Thus “Xiaonei.com” was renamed as “Renren.com” meaning “everyone” and started facing to the whole society. Those loyal users of Renren.com who had graduated from schools then made the networks connected by their old school friends and new work friends. Even nowadays, Renren.com is still keeping some special services and applications made for school students such as recruiting information.

Talking about business model, Renren has raised a conception called as “SoLoMo” which is a combination of words social, local, and mobile. Renren has combined social networking site, mobile services and e-business, and makes profits based on the “SoLoMo” business model (Xue & Hu, 2010). The combination of social networking site and local-based service is another Renren’s operating idea. Except for income from

²³ <http://renren.com/>

normal advertisements, VIP membership fee and virtual currencies, Renren also made a lot of money from cost-per-sale income from companies.

4.5 Kaixin001

Comparing with the other social networking sites, Kaixin001 has a clearer target group – the Chinese white collars (Yu, 2010). The word “Kaixin” in Chinese means “be happy” – the key operating idea of Kaixin001. It is designed for Chinese white collars so that they can have their own spaces to relax and relieve stress. Most of the white collars in China are working under big pressures with long working hours, earn well but not rich. Internet is the best place for them to relax and entertain, because it is cheap, can be reached anytime and anywhere, and with rich information. According to the characteristics of Chinese white collars and their needs, Kaixin001 has successfully designed several social games such as Happy Farm, Happy City, Happy Restaurant, and Happy Parking (see Figure 11).



Figure 11: Happy Games²⁴

²⁴ From upper left to lower right: Happy Farm, Happy City, Happy Restaurant and Happy Parking. Source: <http://www.kaixin001.com/>

Although Kaixin001 has social networking site personal pages and functions, users are using Kaixin001 for playing social games rather than using the normal functions (Yu, 2010). Happy games are the best ways people interact on Kaixin001. They can chat to each other during gaming, steal others' vegetables from their farms, serve food to their friends in their own restaurants, fighting for parking places, and even "trade" friends.

There are two key revenue sources of Kainxin001. The first is product placement advertisements. Differing from other websites having normal advertisements (text, picture or video), Kaixin001 places advertisements to its social games. For example, companies paid to advertise their cars and car parts in the Happy Parking game, so that cars and car parts in the game look the same and are the same brands as their products. Similar cases are for example a juice company paid so that in Happy Farm users can plant fruits with its brand name and make juice; or the guards of the Happy Farm will look like some roles in a movie which is going to be on show soon.

The other revenue source is the virtual currency income. 1 Happy coin costs 1 RMB, and users can use Kaixin coins to buy virtual goods as gifts for friends, for their own social games, and also buy virtual apartments. When the real apartment prices in China is unreasonable high, everyone is dreaming of having an own apartment so that on Kainxin001 buying a virtual apartment can somehow satisfy people's desire. As well as, since the target group of Kaixin001 is white collars, they are able and willing to spend a couple of hundred RMB per month for virtual goods to be happy, which is much cheaper than shopping and entertainment in real life in China.

5. Characteristics of Chinese Teenagers

5.1 “One Family One Child” Policy

The “One Family One Child” policy of China started from year 1979. The earlier one-child generation has grown up as the backbones and the future of China. “One-Child” in China is not just a simple word or policy, but has already become a social phenomenon (Zheng, 1999). One-child family education style formed the one-child generation’s personality and psychological defects (Xie, 2004). The “One Child” policy has also speeded up China step to aging society. From 2002, China has fixed the “One Child” policy allowing some of the families having a second child under certain conditions in certain areas of China²⁵. However, the change has not yet made any significant effects in the society. The whole society and academic world have paid close attentions to the results “One Child” policy has brought to Chinese young generations, families and the whole country (Zheng, 1999). “One Child” policy is the root which has made the characteristics of Chinese teenagers.

The first ones affected by the “One Child” policy were not the children but their parents. The family education methods have been subverted because there is only one child in the family (Xie, 2004). First of all, parents are over protecting their children, afraid of them being hurt or misled by the other people or the society. They prevent their children from keeping in touch with friends and society when they are young. The parents put all their hopes on their only one child and put all their efforts on educating them to become “talent”. They don’t mind of spending a lot of money on their children’s educations, do everything else for them so that they can “concentrate” in studying. As well as, traditional feudal concepts make Chinese parents believe in obedience (Huang & Huang, 2009). They care about their children doing what they are told to do, but usually ignore the children’s own interests and opinions. As a result, Chinese one-child generation is well intellectual developed but lack of independence and socialization skills. They are selfish and capricious, lack of confidence and concerns, and feel superior but lonely (Xie, 2004).

²⁵ Law of the People's Republic of China on Population and Family Planning, 2013

5.2 Educational System of China

Some research shows that a Chinese child's growing-up is 70% affected by the family education, 20% affected by the school education, and 10% affected by the social education (Huang & Huang, 2009). China has been implemented 9-year compulsory education system – 6 years primary school education and 3 years junior high school education. According to the data collected by Ministry of Education of China in 2012²⁶, 99.8% of Chinese school age children got into primary school, 98.3% of primary school graduates got into junior high school and 88.9% of junior high school graduates got into senior secondary schools. There are three different senior secondary schools in China – high school, adult secondary schools and vocational schools. Among students in the senior secondary schools, half are high school students. In 2012, 86.5% of graduates from high schools got into higher education. In general, one fourth of the senior secondary school students can get into higher education schools. Although China has put much effort on educational system development, competitions are still hard.

Chinese school education is famous from the basic teaching and calculating and memorizing training. However, Chinese school education ignores training of imagination, creativity and ability (Wang, 2010). In Chinese schools, score tells everything. From primary to junior high schools, high schools and universities, Chinese children with better exam scores get into better schools. Therefore, Chinese school education is score oriented and exam oriented. Score and exam oriented education decreases students' self-study interests, blocks the free development of their imaginations and creativities, and breaks the relationships between students and between students and teachers. Even worse, some students start cheating to get higher scores (Wang, 2010).

5.3 Comparison between Chinese and Western Education

Comparing with Chinese children, western children are growing up affected 50% by family education, 20% by school education and 30% by social education (Huang & Huang, 2009). In western families, parents wish to educate their children as independent people. They emphasize the practical abilities and independent thinking abilities. In

²⁶ Promotion Rate of Graduates of School of All Levels. www.moe.edu.cn

western families, parents respect their children's thinking; treat them as independent and equal family members (Huang & Huang, 2009). They wish their children to be happy, and to do what they like. They believe children can learn from playing, and pay attentions to train the individuality, creativity and the spirit of exploration of their children (Li & Zhang, 2001).

Comparing with Chinese children, western children are in better physical conditions, more independent, working better in teams, more active and creative, and more practical and social (Huang & Huang, 2009). Chinese children are better in memorizing and hard studying. The conservative and law-abiding characteristics of Chinese children are not only because of the recent "One Child" policy and competitive educational systems, but also because of the historical and cultural background of China (Li & Zhang, 2001). Thousands of years' Chinese philosophy is "not to change", moderation, and patriarchal. Generations of Chinese people have been keeping the traditions. Although Chinese people have realized the distance between Chinese children and western children and the importance of ability education, it will take a while to subvert thousands of years' traditions and cultures.

5.4 After School Time of Chinese Teenagers

The family education and school education have decided the way how Chinese children are spending their after school time. Differing from western children's plenty of after school time and very easy homework, more than half Chinese children claim that they do not have enough after school time and are under big pressure of doing homework (Li, et al., 2012). Most of Chinese children's after school time is spent on extra lessons arranged by their parents for better exam scores. Because of the over-protection of their parents and not really many places for children to hang around, Chinese children spend most of their after school time indoor. 35% of Chinese children do not do sports, but prefer to read books and listening music. Internet has become indispensable in Chinese children's life (Li, et al., 2012). They spend their time with friends online instead of going out, play games and get to know the society from Internet. Therefore, Internet addiction and Internet safety have become more serious issues among Chinese teenagers.

6. Earlier Research and Theoretical Models

A research model of factors influencing teenagers in choosing social networking sites in this study is developed based on the earlier research and theoretical models in social media and related areas. The research model supposes teenagers are influenced by four key factors while they are choosing social networking sites – people, technology, advertisements, and willingness of payment. The following parts of this chapter will introduce the theories and models supporting the research model and its factors.

6.1 Six Degree Separation

Six degree separation theory is a social network theory describing the connection between two random-selected people – any two random-selected people in this world can be connected to each other by no more than six steps of intermediate friend chains (Zhang & Tu, 2009). The theory was proposed by Stanley Milgram in year 1967, by carrying out an experiment by asking random people in random places forwarding letters to each other. It was found that an average of six degree separation was between people's connections. Six degree separation has carried out a small-world concept and brought the small world phenomenon (Laddha, 2010). The theory is not only applied in social networks but also in business advertising and marketing areas.

As social networking sites have the characteristic of online social networks, almost everyone on social networking sites can be connected to each other, and be a friend of some friends. This idea has been considered as the motivation of social networking sites (Zhang & Tu, 2009). It is also the reason why the user amounts on popular social networking sites are geometrically increasing. The networks can be only connected if the same friends are using the same social networking sites. Social networking site users are influencing their friends and every six intermediate friends of each friend to join the same network and use the same social networking site. Therefore, six degree separation is not only about how social networking sites users make friends within the sites, but also how they are influencing their friends and being influenced by their friends on choosing social networking sites.

6.2 Technology Acceptance Model

Technology Acceptance Model is the mostly used research model in Internet industry. It was proposed by Fred Davis (Davis, 1985) for predicting intention to use and acceptance of information systems and information technology by individuals (Chen, Li & Li, 2011). Technology Acceptance Model (shown in Figure 12) explains that the attitude of a user toward using a system is influenced by two major factors: perceived usefulness and perceived ease of use (Chuttur, 2009). A user's attitude toward using a system will turn either to a rejection or actual use of the system. Both perceived usefulness and perceived ease of use of a system are influenced by the system design characteristics.

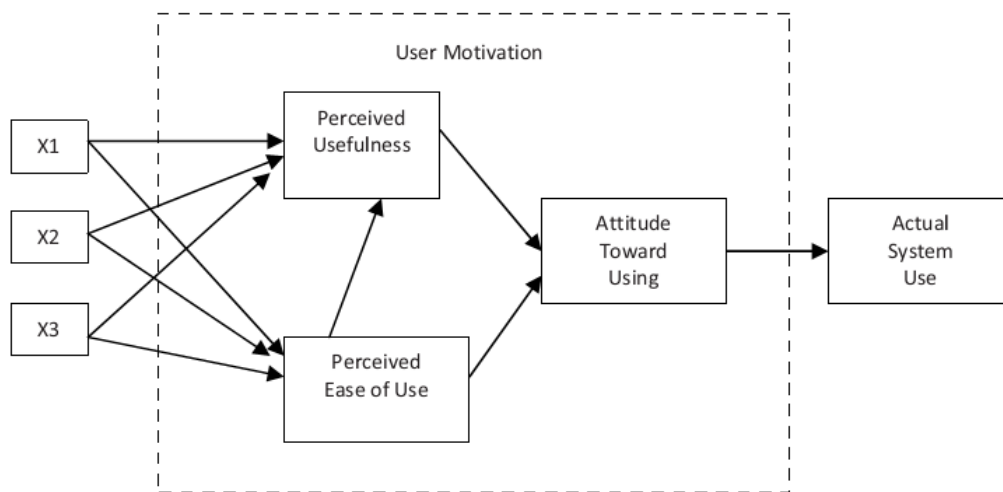


Figure 12: Technology Acceptance Model (Davis, 1985)

In Technology Acceptance Model, perceived usefulness refers to if users feel the system useful for them, As an example, if an email improves work quality, productivity, performance and effectiveness. Perceived ease of use is if the users feel the system is easy to use, for example, if the system is easy to learn how to use, to remember how to use, and if it requires much mental effort to use or to become skillful. In this research, technology is also considered as a factor affecting users' attitude toward using information systems. The research model considers three elements of technology which might affect users' attitudes – functions as the usefulness, ease of use, and design of the website such as decoration and images.

6.3 Online Advertising Avoidance

Online advertising is a new advertising method along with the development of Internet. Online advertising takes the advantage of Internet's widely spread characteristic. Advertisements have become the main revenue source for many Internet companies. Moreover, companies and organizations joined social networking sites to interact with their customers and potential customers. However, users' attitudes towards advertisements are differed from different products or different websites. Advertisers have paid close attentions to users' attitudes towards different advertisements. A concept of advertising avoidance was born out, meaning the actions media users make to differentially reduce their exposure to advertisement content (Kelly, Kerr and Drennan, 2010). Kelly, Kerr and Drennan (2010) accordingly made up a model of advertising avoidance in the online social networking environment (shown in Figure 13).

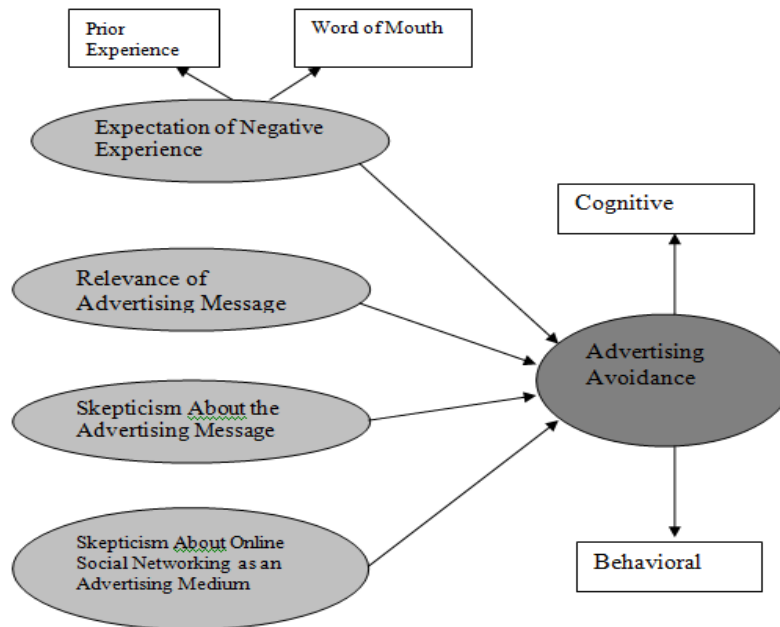


Figure 13: Model of Advertising Avoidance in the Online Social Networking Environment (Kelly, Kerr, and Drennan, 2010)

The model of advertising avoidance in the online social networking environment explains the factors affecting users' attitude towards advertisements. Expectation of advertisements refers to a result of prior negative experiences or the expectation of negative experiences due to word of mouth (Kelly, Kerr, and Drennan, 2010); perception

of relevance of advertising message refers to if the information will be processed according to if it is of interest of the received; skepticism of advertising message means that users will ignore advertisements and potentially disregard other advertisements on the social networking sites if they are skeptical of the advertisements; and skepticism of online social networking sites as a credible advertising medium means users' trusts toward social network sites, as if they think the social networking sites are lack of credibility or not.

Online advertising avoidance model being applied in the research model of this study is not to get to the bottom of how each factor affects Chinese teenagers' attitudes toward advertisements, but to consider advertising as one factor which might influence users' attitude toward the whole social networking site.

6.4 Social Networking Sites Revenue Models

No matter how popular a social networking site is, one of the key criteria of successful business is that if it profits or not. Enders et al. (2008) classified three most common revenue models of social networking sites shown in Figure 14 – advertising models, subscription models, and transaction models.

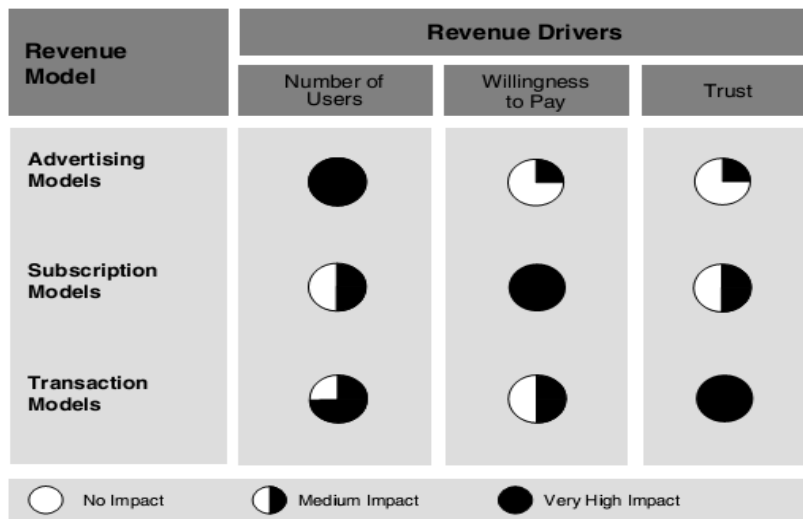


Figure 14: Revenue Models and Revenue Drivers for SNSs (Enders et al., 2008)

Advertising revenue models require high levels of website traffic and are driven by the amount of the users. Willingness to pay and trust do not affect the revenue in this model,

therefore the most important thing is to attract as many users as possible. In subscription models, social networking sites profit by the subscription fees paid by users. Willingness to pay is the key driver of this model, however the number of users and trust also play important roles. Trust is significantly influencing the willingness of users paying for the subscriptions, and of course the profit will exponentially grow when the number of users increases. In transaction models, social networking sites either sell physical or digital goods and services, or sell third party contents and services to their users. Making users trust the credibility of the social networking sites is the key driver in this model so that they are willing to pay for the transactions; and number of users multiplies the profits.

As a conclusion, social networking sites' profits are driven by advertisements relying on the number of users, users' willingness to pay for social networking sites and their trusts. Therefore, except for people, technology, and advertisement factors, it is also necessary to understand how willing the Chinese teenagers are to pay for social networking sites and how payment influence them on choosing social networking sites.

7. Research Methodology

7.1 Research Model and Research Questions

After studied the theories and research models of social networking sites, it is believed that there are many factors influencing people on choosing social networking sites such as people, technology, advertisements and payments. Based on the theories and models introduced above, a research model of factors influencing users on choosing social networking sites is developed for this research shown in Figure 15. In this model, people examines how “my friends are using” influence users on choosing social networking sites; technology refers to the functions, design of the website, and ease to use influences.

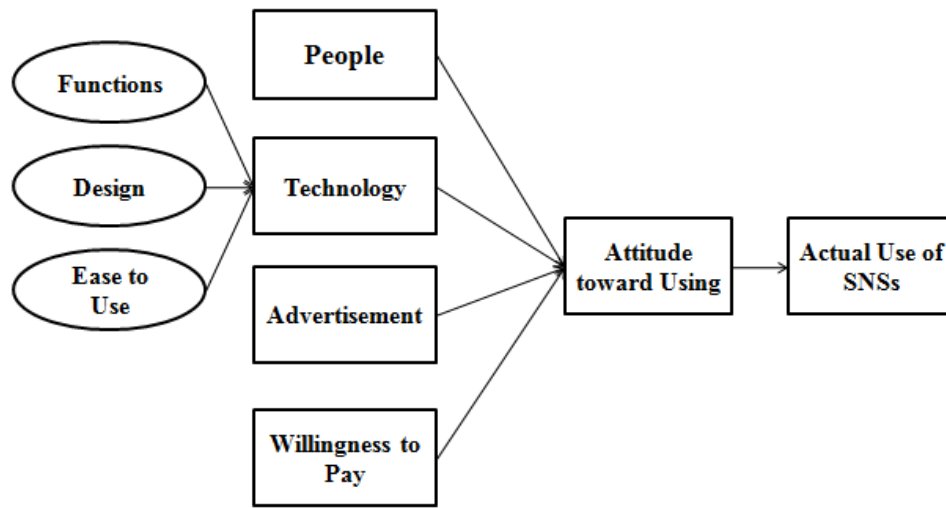


Figure 15: Model of Factors Influencing Users on Choosing SNSs

According to the research model, several research questions are expected to be answered after the research is processed from the data of the questionnaire:

Q1: What is the general situation of the respondents using social networking sites?

- Q1.1 How many respondents have social networking site accounts? How many have accounts in different social networking sites at the same time? Which social networking sites? Which devices do they use to access social networking sites?

- Q1.2 Do demographic factors significantly affect the amount (only one or many) or brands of social networking sites they are using?
- Q1.3 What are the reasons respondents are using certain brand social networking sites? Do respondents using only one social networking site and using many social networking sites at the same time significantly affect the reasons they are using social networking sites?

Q2: What are the main activities the respondents doing on social networking sites?

- Q2.1 Do demographic factors significantly affect the activities they are doing on social networking sites?
- Q2.2 Do respondents using only one social networking site and using many social networking sites at the same time significantly affect the activities they are using social networking sites?

Q3: How do the factors mentioned in the research model influencing Chinese teenagers on choosing social networking sites?

- Q3.1 How do each factors weight when they make decisions? Do demographic factors significantly affect the weights?
- Q3.2 How does the factor “all my friends are using” weight differently to those who are using different amount (only one or many) or brands of social networking sites?

Q4: How many respondents are willing to spend money on SNSs and how much? Do demographic factors significantly affect their decisions?

7.2 Questionnaire

To understand the most truly situation of Chinese teenagers using social networking sites, this research has made a survey among Chinese junior high and high school students by an anonymous questionnaire. The samples are taken from a randomly chosen junior and high school in Beijing from age 12 to 18. The questionnaire includes 22 multi-choice questions, of which 16 questions can have only one chosen answers, and 6 can have more than one chosen answers (see the Appendix).

The questions are separated into 4 parts. Questions 1 to 8 are asking about the general information and situation of the respondents including amount of computer and mobile phone, Internet accessing methods, time spent after school especially on PC and Internet. Questions 9 to 13 are concerning to students' behaviors in using social networking sites – which one, why, how, what to do, and for how long. Questions 14 to 16 are about how much pocket money the students have, on what they are spending the money; how many of them are willing to spend money on social networking sites, and how much. The rest questions are importance scale questions seeking for answers of how the factors – payment, “all my friends are using”, advertisements, ease of use, functions and website designs – are important to the students when they are choosing social networking sites.

Descriptive statistics is the main method used in this research to process the data collected from questionnaires, to describe for example the percentage of use in different genders and ages. Analysis of variance will be used to examine if some certain factors have significant effects on students' decisions such as if age significantly affects their decisions in choosing certain social networking sites or having certain activities on social networking sites. A weighted scoring method will be used to find out how important of each factor influencing the students on making decisions to use a social networking site, followed by analysis of variance examining if certain factors significantly affect the importance.

600 copies of the questionnaire were sent to one random chosen junior and high school in Beijing, and 600 students were randomly chosen to answer the questionnaire from grade 7 to grade 12. All the 600 questionnaires were returned and of which 574 questionnaires were valid. The validity rate of data is 95.67%. The other 26 invalid questionnaires were either empty or incomplete. Respondents are from 11 to 18 years old, of which only 2 are 11 years old and 27 are 18 years old. To ease the investigation, 11 years old respondents and 12 years old respondents are integrated into one age group as 12 years old & under, and 18 years old respondents are integrated with 17 years old respondents as 17 years old & upper. Figure 16 shows the age and gender distribution of the respondents.

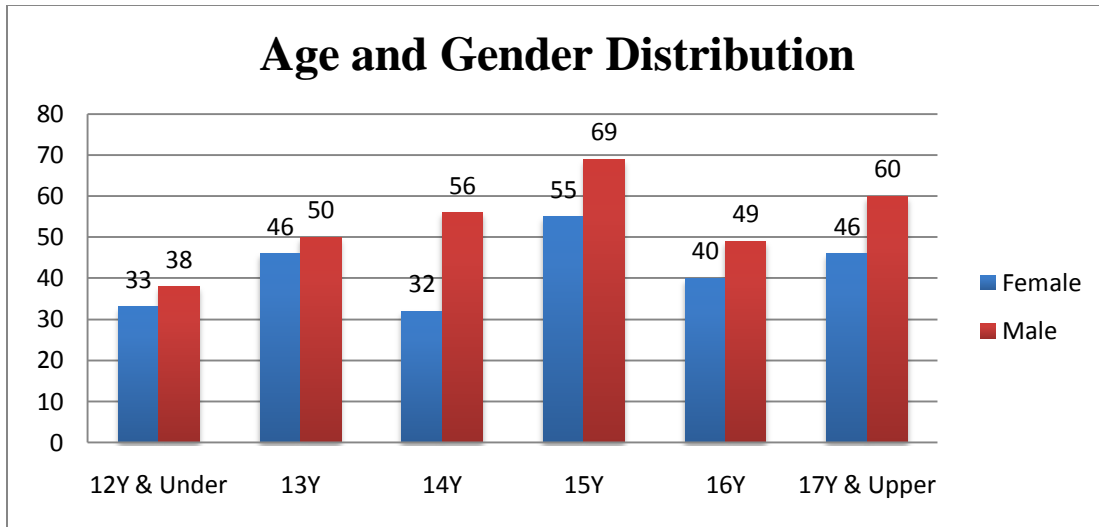


Figure 16: Respondent Age and Gender Distribution

7.3 Qualitative Research versus Quantitative Research

Quantitative research and qualitative research are usually used in studying people's opinions, feelings, experiences or behaviors (Davies, 2007). Quantitative refers to research which involves data collection by mail or personal interviews from a sufficient volume of customers to allow statistical analysis; and qualitative research is exploratory research used to uncover people's motivations, attitude and behavior. A comparison between qualitative research and quantitative research is listed in Table 11.

In most of the research papers, a mixed research methodology is applied so that "qualitative methods might be used to understand the meaning of the conclusions produced by quantitative methods; and quantitative methods might to give precise and testable expression to qualitative ideas."²⁷ This research will also combine the two methods: using quantitative methods to carry out statistical results from primary data collected from questionnaires, and qualitative method to identify the natures of the research population.

²⁷ www.wikipedia.org

Criteria	Qualitative Research	Quantitative Research
Purpose	To understand & interpret social interactions	To test hypotheses, look at cause & effect, and make predictions
Group Studies	Smaller & not randomly selected	Larger & randomly selected
Type of Data Collected	Words, images, or objects	Numbers and statistics
Form of Data Collected	Qualitative data such as open-ended responses, interviews, participant observations, field notes, and reflections	Quantitative data based on precise measurements using structured & validated data-collection instruments
Type of Data Analysis	Identify patterns, features, and themes	Identify statistical relationships
Objectivity and Subjectivity	Subjectivity is expected	Objectivity is critical
Scientific Methods	Exploratory or bottom-up: the researcher generates a new hypothesis and theory from the data collected	Confirmatory or top-down: the research tests the hypothesis and theory with the data
View of Human Behavior	Dynamic, situational, social & personal	Regular & predictable
Research Objectives	Explore, discover & construct	Describe, explain and predict
Focus	Wide-angle lens; examines the breadth & depth of phenomena	Narrow-angle lens; tests a specific hypotheses
Nature of Observation	Study behavior in a natural environment	Study behavior under controlled conditions; isolate causal effects
Final Report	Narrative report with contextual description & direct quotations from research participants	Statistical report with correlations, comparisons of means, and statistical significance of findings

Table 11: Qualitative vs. quantitative research (Johnson et al., 2008 & Lichtman, 2006)

8. Empirical Research

8.1 General Information

Before processing the research questions, the general information of the respondents is concluded according the following questions – how many computers do they have in the families? What are their Internet connection methods at home? How many of them have mobile phones and how many of the mobile phones can access Internet? How much time do they spend online and do what?

Table 12 and Table 13 show that 97% of the respondents have at least one computer at home. Among those who have computers at home, 4% of computers have no Internet access and 92% are connected to Internet by either broadband or wireless Internet accessing methods. 89% of the respondents have mobile phones, and among those who have mobile phones 70% can access Internet. Percentages of female respondents using mobile phones and mobile Internet are higher than male respondents. The percentages of respondents using mobile phones and mobile Internet are increasing by age growing.

Number of Computer	Frequency	Percentage	Internet Access Methods	Frequency	Percentage
No Computer	17	3%	No Access	21	4%
One	216	38%	Dial-up	23	4%
Two	182	32%	Broadband	469	84%
More than Two	159	28%	Other (Wireless)	44	8%
Total	574	100%	Total	557	100%

Table 12: Number of Computers & Internet Access Methods

	Use of Mobile Phone				Mobile Phone Internet Access				
	Do Not Have Mobile Phones		Do Have Mobile Phones		Do Not Have Internet Access		Do Have Internet Access		
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Percent
Male	49	15%	273	85%	Male	93	34%	180	66%
Female	18	7%	234	93%	Female	58	25%	176	75%
<12 Y	12	17%	59	83%	<12 Y	29	50%	29	50%
13 Y	13	14%	83	86%	13 Y	32	35%	59	65%
14 Y	16	18%	72	82%	14 Y	21	30%	50	70%
15 Y	11	9%	113	91%	15 Y	29	26%	83	74%
16 Y	8	9%	81	91%	16 Y	19	24%	61	76%
>17 Y	7	7%	99	93%	>17 Y	21	22%	74	78%
Total	67	11%	507	89%	Total	151	30%	356	70%

Table 13: Use of Mobile Phone & Mobile Phone Internet Access

Table 14 tells the story of how much time respondents spend their time online. 27 respondents claim that they are not using computers at all, of which 10 do not have computers at home. About 30% of the respondents spend more than 5 hours per week online, and 12% spend more than 10 hours per week.

	Not At All		0 – 2 Hours		2 – 5 Hours		5 – 10 Hours		> 10 Hours	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
<12 Y	0	0%	32	45%	24	34%	10	14%	5	7%
13 Y	5	5%	20	21%	43	45%	13	14%	15	15%
14 Y	5	6%	25	28%	36	41%	14	16%	8	9%
15 Y	4	3%	37	30%	51	41%	19	16%	13	10%
16 Y	4	4%	26	30%	31	35%	18	20%	10	11%
>17 Y	9	9%	34	32%	31	29%	11	10%	21	20%
Total	27	5%	174	30%	216	38%	85	15%	72	12%

Table 14: Average Time Online per Week

There are 5 options of activities online for the respondents to chose – studying, gaming, interacting with friends, reading news and searching information, and watching videos. As well as, respondents can write down other activities they are doing online if there is any. Most of the respondents chose one or more options from the five given options; and only a few mentioned other activities such as reading books, listening music and online shopping. As shown in Table 15 and Figure 17, the most significant result is that 73% of male respondents play online games while only 38% female respondents play games online. Gaming is the most chosen activities among male respondents and female respondents mostly chose watching videos online. In total, the most chosen online activity is interacting with friends and the second is watching videos.

	Studying		Gaming		Interacting with Friends		News & Information		Watching Video	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	156	52%	212	70%	205	66%	141	47%	170	56%
Female	160	65%	93	38%	162	66%	120	49%	179	73%
<12 Y	48	68%	41	58%	44	62%	30	42%	44	62%
13 Y	47	52%	59	65%	59	65%	48	53%	60	66%
14 Y	43	52%	56	67%	66	80%	41	49%	56	67%
15 Y	74	62%	65	54%	82	68%	60	50%	84	70%
16 Y	55	65%	38	45%	60	71%	42	49%	52	61%
>17 Y	49	51%	46	47%	56	58%	40	41%	56	58%
Total	316	58%	305	56%	367	66%	261	48%	349	64%

Table 15: Activities Online in Frequency and Percentage

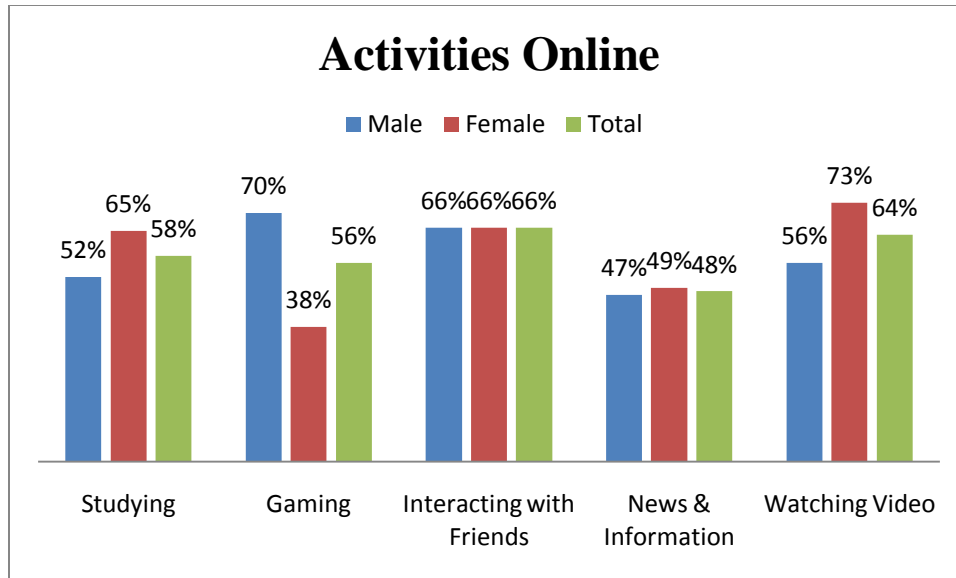


Figure 17: Activities Online in Gender

A two-factor analysis of variance without replication is made to understand if demographic factors significantly affect samples' online activities. The P-values of the factors will be compared with significance level $\alpha=0.05$. If the P-value is smaller than $\alpha=0.05$, it means the factors significantly affecting the results of the analysis, otherwise the factors do not significantly affecting the results of the analysis. Same rules will be also applied in later analysis of this research.

As shown in Table 16, the P-values of both gender and activity factors are bigger than the significance level $\alpha=0.05$, thus neither gender nor activity varieties significantly affect samples' activities of online. However, both P-values of age and activity factors are smaller than the significance level $\alpha=0.05$, thus age and activity varieties significantly affect samples' activities online.

ANOVA	Gender Factor Affecting Activities Online					
	SS	df	MS	F	P-value	F crit
Rows (Gender)	2890	1	2890	2.147103	0.216708	7.708647
Columns (Activities)	3385.6	4	846.4	0.628826	0.66795	6.388233
Error	5384	4	1346			
Total	11659.6	9				

ANOVA	Age Factor Affecting Activities Online					
Source of Variation	SS	df	MS	F	P-value	F crit
Rows (Gender)	2812.967	5	562.5933	19.23834	5.02E-07	2.71089
Columns (Activities)	1159.133	4	289.7833	9.909381	0.000138	2.866081
Error	584.8667	20	29.24333			
Total	4556.967	29				

Table 16: ANOVA Analysis of Demographic Factors Affecting Activities Online

8.2 Research Process

Q1: What is the general situation of the respondents using social networking sites?

- Q1.1 How many respondents have social networking sites accounts? How many have accounts in different social networking sites at the same time? Which social networking sites? Which devices do they use to access to social networking sites?
- Q1.2 Do demographic factors significantly affect the amount (only one or many) or brands of social networking sites they are using?
- Q1.3 What are the reasons respondents are using certain brand social networking sites? Do respondents using only one social networking site and using many social networking sites at the same time significantly affect the reasons they are using social networking sites?

After calculating the data, it is found that 94% of the respondents have at least one social networking site accounts, among which 35% have only one social networking site account and 65% have accounts in more than one social networking site (shown in Figure 17). 40% of male social networking site users have only one social networking site account, and the percentage of female social networking site users having only one account is much smaller – 29%. An ANOVA analysis examined that demographic factors do not significantly affect if respondents have social networking site accounts or not, nor how many account the respondents have in different social networking sites.

SNSs Accounts					Number of SNSs Accounts				
	Do Not Have SNSs Accounts		Do Have SNSs Accounts			Have Only One SNSs Account		Have Many SNSs Accounts	
	Freq.	Percent	Freq.	Percent		Freq.	Percent	Freq.	Percent
Male	27	8%	295	92%	Male	119	40%	176	60%
Female	10	4%	242	96%	Female	70	29%	172	71%
<12 Y	6	8%	65	92%	<12 Y	34	51%	31	49%
13 Y	11	11%	85	89%	13 Y	42	49%	43	51%
14 Y	2	2%	86	98%	14 Y	30	35%	56	65%
15 Y	8	6%	116	94%	15 Y	31	27%	85	73%
16 Y	4	4%	85	96%	16 Y	29	33%	56	6%
>17 Y	6	6%	100	94%	>17 Y	23	23%	77	77%
Total	37	6%	537	94%	Total	189	35%	348	65%

Table 17: Number of Respondents Having SNSs Accounts & Number of Accounts

As shown in Table 18 and Table 19, 20% of the respondents spend more than 5 hours per week on social networking sites, and 46 respondents claimed that they are not spending any time on social networking sites. However, earlier data results told that only 37 respondents did not have any social networking site accounts, which means there are 9 respondents having social networking site accounts but not actively using them. Demographic factors were tested not significantly affecting the time respondents spend on social networking sites. Only 5% of the respondents are using only mobile phone to access social networking sites, and the rest ones are either using only computers or using both computers and mobile phones to access social networking sites. Demographic factors significantly affect neither the time respondents spending on social networking sites, nor the devices they use to access social networking sites.

	Not At All		0 – 2 Hours		2 – 5 Hours		5 – 10 Hours		> 10 Hours	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	15	6%	90	36%	94	37%	30	12%	23	9%
Female	31	10%	142	44%	87	27%	29	9%	33	10%
<12 Y	8	11%	39	55%	18	25%	3	4%	3	4%
13 Y	15	16%	44	46%	23	24%	6	6%	8	8%
14 Y	3	3%	38	43%	29	33%	12	14%	6	7%
15 Y	8	6%	50	40%	42	34%	10	8%	14	11%
16 Y	4	4%	28	31%	31	35%	17	19%	9	10%
>17 Y	8	8%	33	31%	38	36%	11	10%	16	15%
Total	46	8%	232	40%	181	32%	59	10%	56	10%

Table 18: Average Time of Use of SNSs per Week

	Use Only Computer		Use Only Mobile Phone		Use Both	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	91	31%	17	6%	187	63%
Female	57	24%	9	4%	176	73%
<12 Y	31	48%	3	5%	31	48%
13 Y	29	34%	1	1%	55	65%
14 Y	22	26%	1	1%	63	73%
15 Y	29	25%	9	8%	78	67%
16 Y	21	25%	6	7%	58	68%
>17 Y	16	16%	6	6%	78	78%
Total	148	28%	26	5%	363	68%

Table 19: Devices for Using SNSs

As shown in Table 20 and Table 21, Qzone is the biggest winner as 94% of the respondents are using either only Qzone or using Qzone and other social networking sites at the same time. Among those who are using only one social networking site, 87% are using Qzone. ANOVA analysis result shows that the P-value of age factor affecting respondents using different social networking sites is smaller than $\alpha=0.05$. Therefore, age factor significantly affects the variety of social networking sites being used by the respondents. Same result can be also observed from Table 19 that along with the age growing, more respondents are using Renren.com. Demographic factors do not significantly affect the variety of social networking sites being used by respondents who are using only one social networking site.

	Qzone		Kaixin001		Weibo		Renren	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	276	94%	78	26%	80	27%	151	51%
Female	229	95%	53	22%	103	43%	136	56%
<12 Y	62	95%	18	28%	25	38%	16	25%
13 Y	83	98%	22	26%	21	25%	23	27%
14 Y	83	97%	25	29%	38	44%	40	47%
15 Y	114	98%	31	27%	33	28%	68	59%
16 Y	72	85%	14	16%	26	31%	59	69%
>17 Y	91	91%	21	21%	40	40%	81	81%
Total	505	94%	131	24%	183	34%	287	53%

Table 20: Brand Distribution of Use of SNSs

	Qzone		Kaixin001		Weibo		Renren	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	105	88%	4	3%	3	2%	8	7%
Female	57	86%	2	3%	0	0%	7	11%
<12 Y	31	94%	1	3%	0	0%	1	3%
13 Y	41	98%	1	2%	0	0%	0	0%
14 Y	29	97%	0	0%	1	3%	0	0%
15 Y	29	94%	1	3%	0	0%	1	3%
16 Y	16	59%	0	0%	2	7%	9	43%
>17 Y	16	70%	3	13%	0	0%	4	17%
Total	162	87%	6	3%	3	2%	15	8%

Table 21: Brand Distribution of Use Only One SNS

There are 6 options for respondents to choose the reasons why they are using certain brand social networking sites – free to use, all my friends are using, functions, fantastic looking, games, and ease of use. No respondents gave other reasons which are excluded in these 6 options. Table 22 shows the frequencies and percentages of each reason chosen by respondents in different genders and ages. “All my friends are using” is the most chosen reasons why respondents are using certain brand social networking sites; functions, ease of use and free to use are also often chosen; and the looking and games of the sites are very little chosen. AVNOA analysis shows that both gender and age factor significantly affect the reasons why respondents are using certain social networking sites.

	Free		All Friends Are Using		Functions		Fantastic Looking		Game		Ease of Use	
	F	P	F	P	F	P	F	P	F	P	F	P
M	121	41%	196	66%	155	53%	53	18%	51	17%	131	44%
F	88	36%	163	67%	114	47%	39	16%	36	15%	103	43%
<12 Y	23	35%	38	58%	35	54%	10	15%	17	26%	19	29%
13 Y	31	36%	53	62%	43	51%	10	12%	20	24%	32	38%
14 Y	36	42%	56	65%	56	65%	23	27%	14	16%	50	58%
15 Y	46	40%	86	74%	61	53%	22	19%	24	21%	43	37%
16 Y	34	40%	59	69%	35	41%	14	16%	7	8%	45	53%
>17 Y	39	39%	67	67%	39	39%	13	13%	5	5%	45	45%
Total	209	39%	359	67%	269	50%	92	17%	87	16%	234	44%

Table 22: Reasons of Using SNSs in (Gender & Age)

The other wondering about reasons of using social networking sites is that if those who are using only one social networking site differ from those who use many at the same time. Table 23 shows the frequencies and percentages of reasons chosen by respondents using only one social networking site and many. Figure 18 gives a more intuitive visual of the result that beside “all my friends are using” as the most chosen reason to both respondent groups, it is a more outstanding reason for those who are using one only social networking site. ANOVA analysis also proved that the two different respondent groups make significant effect on the reasons being chosen.

	Free		All Friends Are Using		Functions		Fantastic Looking		Game		Ease of Use	
	F	P	F	P	F	P	F	P	F	P	F	P
Only One	73	39%	121	64%	72	38%	24	13%	33	17%	66	35%
Many	136	39%	238	68%	197	57%	68	29%	54	16%	168	48%

Table 23: Reasons of Using SNSs (Using Only One vs. Using Many)

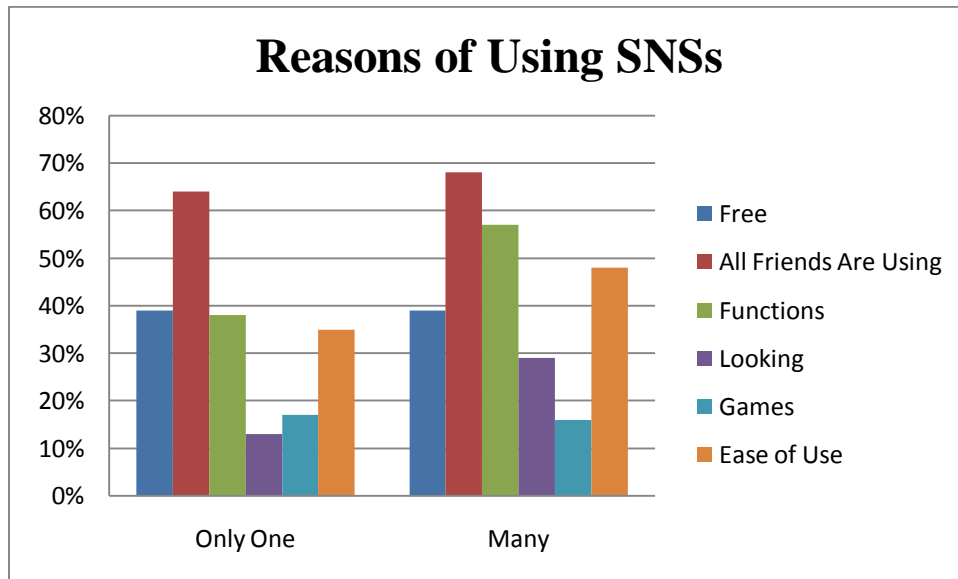


Figure 18: Reasons of Using SNSs (Using Only One vs. Using Many)

Q2: What are the main activities the respondents doing on social networking sites?

- Q2.1 Do demographic factors significantly affect the activities they are doing on social networking sites?

- Q2.2 Do respondents using only one social networking site and using many social networking sites at the same time significantly affect the activities they are using social networking sites?

Table 24 shows the frequencies and percentages of respondents' activities on social networking sites. More than 80% of the respondents are using social networking sites to contact their friends, and very little use them for self-express. 11 respondents mentioned other activities except for the given options – 5 are using social networking sites for study use and other 6 are following hotspot events by using social networking sites. ANOVA analysis tells that gender factor does not significantly affect respondents' activities on social networking sites but age factor does.

A same way of analysis is used to examine the activity differences between respondents using only one social networking site and using many at the same time as while examining reasoning differences. The percentages of two respondent groups using social networking sites to contact friends are both higher than 80% as shown in Table 25. Furthermore, activities of those who are using only one social networking site are much more centered in contacting friends and making more friends as shown in Figure 19. ANOVA analysis also proved that the two different respondent groups significantly affect the activities respondents are doing on social networking sites.

	Playing Games		Make New Friends		Contacting Friends		Self Express		Look Around	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	114	39%	99	34%	244	83%	30	10%	64	22%
Female	64	26%	80	33%	214	88%	30	12%	76	31%
<12 Y	31	48%	25	38%	58	89%	7	11%	6	9%
13 Y	27	32%	26	31%	67	79%	8	9%	20	24%
14 Y	39	45%	33	38%	74	86%	6	7%	25	29%
15 Y	39	34%	38	33%	100	86%	13	11%	37	32%
16 Y	19	22%	30	35%	77	91%	12	14%	23	27%
>17 Y	23	23%	27	27%	82	82%	14	14%	29	29%
Total	178	33%	179	33%	458	85%	60	11%	140	26%

Table 24: Activities on SNSs (Age & Gender)

	Playing Games		Make New Friends		Contacting Friends		Self Express		Look Around	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Only One	58	2%	53	28%	155	82%	13	7%	34	18%
Many	120	34%	126	36%	303	87%	47	14%	106	30%

Table 25: Activities on SNSs (Use Only One vs. Use Many)

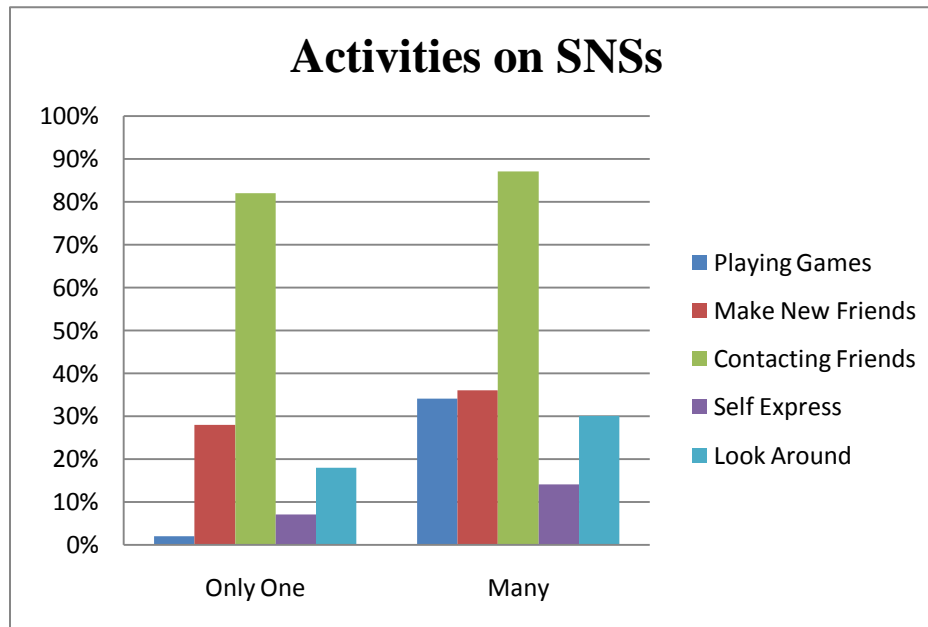


Figure 19: Activities on SNSs (Use Only One vs. Use Many)

Q3: How do the factors mentioned in the research model influencing Chinese teenagers on choosing social networking sites?

- Q3.1 How do each factors weight when they make decisions? Do demographic factors significantly affect the weights?
- Q3.2 How does the factor “all my friends are using” weight differently to those who are using different amount (only one or many) or brands of social networking sites?

According to the research model, 6 importance scale questions were asked to examine how important the factors influencing respondents on choosing social networking sites. 3 questions asked about technology acceptance from ease of use, function varieties and website design; and the other 3 questions are about willingness to pay, influence by people (“all my friends are using”), and advertisement factors. The options of the

questions have 5 scales from extremely important, very important, important, a little to not at all. Extremely important option weights 5 points, very important weights 4 points, and the rest accordingly weights 3, 2 and 1.

The average importance weights of each factor influencing respondents on choosing social networking sites are listed in Table 26. The function variety factor and Ease of Use factor weight the most on average while respondents choosing social networking sites. Friends’ influences are also more than important for respondents to choose social networking sites, yet payment and advertisement factors are less important. On average, all the factors weight more to male respondents than female respondents especially the “all my friends are using” factor and the function variety factor. Except function and ease of use factors, all the other factors weight lower than the median weight value to female respondents, which means most of the factors are not so important to them. The ANOVA analysis result tells that both gender and age factors significantly affect the importance weights of factors influencing respondents on choosing social networking sites. Although respondents using only one social networking sites and using many at the same time significantly affect the reasons why they are using the current social networking sites and the activities they are doing on social networking sites, they do not significantly affect how important the factors might influence them on choosing social networking sites according to AVNOA analysis of the result from Table 27.

	Willingness To Pay	All Friends Are Using	Advertisement	Ease of Use	Function Varieties	Design
Male	3.13	3.45	2.72	3.41	3.93	3.13
Female	2.79	2.69	2.21	3.00	3.25	2.66
<12 Y	4.00	3.86	2.97	3.85	4.30	3.70
13 Y	3.48	3.57	2.78	3.83	4.28	3.35
14 Y	2.92	2.98	2.25	3.11	3.63	2.89
15 Y	2.46	2.88	2.40	2.91	3.30	2.42
16 Y	2.76	2.94	2.33	3.16	3.43	2.78
>17 Y	2.70	2.74	2.44	2.84	3.19	2.81
Total	2.98	3.11	2.50	3.23	3.63	2.92

Table 26: Weights of Factors Affecting Samples Choosing SNSs

	Willingness To Pay	All Friends Are Using	Advertisement	Ease of Use	Function Varieties	Design
Use Only One	2.95	3.08	2.47	3.32	3.6	2.85
Others	3	3.13	2.51	3.18	3.64	2.96

Table 27: Weights of Factors Affecting Choice of Samples Using Only One SNS and Others

Q4: How many respondents are willing to spend money on SNSs and how much? Do demographic factors significantly affect their decisions?

As shown in Table 28, 58% of the respondents are not willing to spend money on social networking sites at all, and 10% are willing to pay more than 25 RMB per week on social networking sites. An ANOVA analysis examined that demographic factors do not significantly affect their willingness of spending money on social networking sites.

	Not At All		0 – 10 RMB		10 – 25 RMB		25 – 50 RMB		> 50 RMB	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	154	61%	39	15%	42	17%	12	5%	5	2%
Female	178	55%	51	16%	48	15%	26	8%	19	6%
<12 Y	38	54%	13	18%	12	17%	6	8%	2	3%
13 Y	68	71%	10	10%	7	7%	8	8%	3	3%
14 Y	42	48%	16	18%	21	24%	5	6%	4	5%
15 Y	65	52%	25	20%	20	16%	10	8%	4	3%
16 Y	56	63%	9	10%	15	17%	6	7%	8	3%
>17 Y	63	59%	17	16%	15	14%	3	3%	8	8%
Total	332	58%	90	16%	90	16%	38	7%	24	4%

Table 28: Willingness of SNSs Payment per Week

8.3 Findings

There are five key findings concluded after processing the research data. First of all, most of the teenagers are using at least one social networking site. One third teenagers are loyally using only one social networking site, and the loyalty is higher among male teenagers than females by 10 percents. 80% of the teenagers spend less than 5 hours per week on social networking sites which means less than 1 hour a day. It is understandable because Chinese teenagers spend more after school time on study and homework. However, the average time they have spend on social networking sites per week is almost all the time they are spending online. Even though teenagers are using mobile phones to access social networking sites, mobile phones are the assist and secondary devices they

are using to access social networking sites. Very few use only mobile phones to access social networking sites.

Second, Tencent is the biggest winner yet facing the challenges from Renren.com. 94% of the teenagers are using Qzone, but only less than one third are using Kaixin001 and Sina Weibo. Only 25% of 12 years old teens are using Renren.com, however, the percentage progressively grows to 81% among over 17 years old teenagers. Same results appear among those who are loyal to only one social networking site. The results match the description of the four social networking sites earlier in this research that Qzone is the earliest launched and most common used; and Kaixin001 is less like a social networking site but focuses on the social game revenue from white collars. Since Renren.com has its loyal users among high school and university students, the number of its teenager users will certainly increase by the age of growing and after they get into high schools. Sina Weibo is a most well-known and popular platform for its users to follow and discuss about hotspots and social events. However, since Chinese teenagers are less social, over protected, and concentrating in studying for exams, it is understandable that Sina Weibo is out of their interests.

It is also worth to pay attention that more than 10 respondents mentioned that they are using a social networking service named WeChat, although it is more like an instant messenger for mobile devices. WeChat is developed by Tencent supporting Android, iPhone, Blackberry and Windows phone system. WeChat users can share pictures, send text messages and voice messages, and chat in text and videos by smart phones for free. The application can be free downloaded from mobile phone application stores. In March 2012 – one year after WeChat was launched – the number of its users already broke 100 million, and by September 2012 the number grew to 200 Million. The free text and color messages are seriously challenging the traditional mobile phone operators. There is hearsay that Ministry of Industry and Information Technology of China commanded WeChat to charge fees from their users and was strongly opposed by WeChat users. Anyways, WeChat is still free to use today.

Third, the most chosen reason why teenagers are using the current social networking sites is because all their friends are using the same ones, and the rate is much higher than the

other chosen reasons. Consequently, the most common activity teenagers are doing online is to interact with their friends. Teenagers are using social networking sites mainly to contact their friends, who are the main reason why they are using certain social networking sites – friends have to use the same ones so that they can interact. “All my friends are using” as the key reason and contacting friends as the key activity are even more outstanding among those who are using only one social networking site. It can be explained as those who are using only one social networking site are more likely to use the social networking site only to contact their friends.

However, it is interesting that the fourth finding of the survey is that “all my friends are using” is not the most important factor influencing teenagers on choosing social networking sites as expected. It is possible that the respondents naturally considered social networking sites are all used by their friends, so that they did not take the factor into consideration while choosing social networking sites. “All my friends are using” is still important but not as important as how functions matter to teenagers to choose social networking sites. This finding reflected the popularity of Technology Acceptance Model being applied in social media users’ behavior and decision making. The results tell that among the four factors influencing teenagers on choosing social networking sites in the research model, technology and people factors are the primary influences while the willingness of payment and advertisement only play secondary roles.

Finally, about the details of how many teenagers are willing to spend money on social networking sites and how much they are willing to spend – more than half of them do not want to spend any money on social networking sites at all. It is obvious that characteristics of Chinese teenagers using social networking sites are that they are not actively using the variety of products, services and applications of social networking sites for self express or other online events and activities, but only using social networking sites as communication tools to contact their friends. Therefore, they are not willing to, and do not need to spend any money on social networking sites since all the social networking sites can be signed up and used to interact with friends for free. However, if the rest of the teenagers are willing to pay at least 10 RMB per week, they are then able to afford the subscription fees or virtual items of social networking sites. As introduced in

Chapter 5, subscription fees and virtual items of Chinese social networking sites are not so expensive. The companies are still able to make money depending on the huge population base.

9. Conclusion

9.1 Summary of the Study

China is indeed a rapid developing potential market with full of opportunities. Not only the economy, but also the educational system, social welfare system, laws and policies, and the quality of people's life have all being improved all the time. The rapid but unbalanced developed economy, huge gap between rich and poor, and the not yet completed social welfare system formed the own consumption characteristics of Chinese people.

Chinese Internet technology development started later than other developed countries, but is catching up fast. The Internet users and mobile Internet users of China have increased by millions during the last decade. There is still much space for the mobile Internet technology and smart phone market development. Based on the development of Web 2.0 technologies, social networking sites as emerging online communication platform for people to interact with each other started being popular in China from year 2005. Four most popular and competitive Chinese social networking sites – Qzone, Renren.com, Sina Weibo, and Kaixin001 were launched one after another from year 2005 to 2008. Each of these social networking sites has its own advantages, loyal user group, characteristics of business and revenue model.

Being affected by the “One Family One Child” policy of China started in 1979, Chinese teenagers became the “One Child” generation with “Chinese characteristics” personalities and psychologies. They are over protected, dependent, selfish, and lack of imaginations, creativities and social abilities. The serious competition caused by the huge population makes Chinese school education only pay attentions to scores and exams but ignore to train the imaginations and activities of the children as well. Being grounded by the parents, Chinese children barely spend their already very little after school time outdoor to spend time with friends or do sports. Consequently, Internet has become the “best friend” of Chinese teenagers and social networking sites have become the best platform for them to hang around with friends.

Knowing that Chinese teenagers are spending a lot of time online and on social networking sites, a survey research about how Chinese teenagers behave on social networking sites was carried out by gathering information from primary data collected from a questionnaire, and a research model was developed to understand what are the factors influencing Chinese teenagers on choosing social networking sites. As a result, most of the Chinese teenager respondents of the questionnaire are using Internet and at least one social networking site. Chinese teenagers using social networking sites mainly to contact their friends and the most used social networking sites by Chinese teenagers are Qzone and Renren.com by older teenagers. While choosing social networking sites, technology is the most important factor teenagers will consider about. Since the main activity Chinese teenagers doing on social networking sites is contacting friends, more than half of the teenagers are not willing to spend money on social networking sites, but only use the basic functions to communicate with their friends. There are still Chinese teenagers who are willing to spend money on social networking sites and are able to afford the subscription fees and virtual items of social networking sites.

9.2 Recommendations to Investors

As unbalanced developed is one of the main characteristics of Chinese Internet economy, web companies, social media companies, and mobile application companies should target at the eastern and coastal Chinese cities with higher Internet penetration rate and better purchasing abilities. However, since Internet technology has not yet been well developed in western Chinese cities and rural areas and the government is putting much effort on shorten the distance between rich and poor, companies in Internet infrastructure technology areas could consider of developing their business in those areas where Internet has not been widely penetrated yet. Wi-Fi technology and smart phones are the trend of Chinese mobile Internet development in the next few years. Android and iOS mobile phone systems are rather preferred by Chinese mobile phone buyers than Windows phones. As mentioned in CNNIC's report (2012), most of the Chinese smart phone buyers are considering of buying low price smart phones, thus cheap smart phone will dominate the Chinese smart phone market in the future.

Considering of the huge amount of Chinese social networking site users and their abilities of spreading information, Chinese social networking sites can be used as very efficient online marketing platforms for companies. Companies from different industries can choose different Chinese social networking sites to promote their products and events according to the variety of their user groups, characteristics, special functions and applications of different social networking sites. As an example, car companies can place their brand and products into Kaixin001's social game Happy Parking as advertisements.

Chinese "One Child" generation is also a potential target group for companies. As mentioned earlier in this research, even though Chinese parents are strict to their children, they are willing to spend however much money to make their children better lives. Chinese teenagers might not have much money in their pockets, however, the parents will not hesitate to pay for nourishment or English studying software for their children as long as they think it is helpful.

As discussed in the earlier research, Chinese teenagers spend most of their after school at home and on Internet. Therefore, even though Chinese social media are really good at copying and there are already portal Chinese social media platforms with huge amount loyal users, there is still space for companies developing their own social media in Chinese social media market, especially toward teenager target group. Companies can take uses of the characteristics of Chinese teenagers to develop social media for example with more educational functions, and to enter the market from a certain network group for example some after-school classes where gather students from different schools. However, companies should be really careful with choosing the business and revenue models since the purchasing abilities of Chinese teenagers are comparatively weak.

9.3 Limitation of the Study

First of all, as discussed earlier in this research, the biggest characteristic of the development of Chinese economy, Internet and social networking site industries is the unbalance between Eastern and coastal cities, and urban and rural areas. Levels of Internet penetration rates, quality of livings, purchasing abilities, and educations can be very different between the rich and poor in China. The samples of this research were

randomly taken however from one junior and high school in Beijing – the capital of China – as one of the most developed cities in China. The Internet penetration rate, income level, and educational levels of Beijing are much higher than most of other Chinese cities. Therefore, the results of this research can describe the situation of Chinese teenagers using social networking sites in those well developed eastern and coastal urban areas, but cannot represent the teenagers from all over the country. Teenagers' life in western cities and rural areas can be totally different.

The other limitation of the research is that the factors influencing Chinese teenagers on choosing social networking sites are limited in the research model. There might be other factors influencing teenagers on choosing social networking sites however not taken into consideration in the research model. As the factors weighted rather low to the female respondents, it is unable to find out the reasons why they weighted so low or if there are other factors matter to them from the information collected from the questionnaire. Therefore, for further research in the same area, the cities for data collecting can be various in different locations and economy development levels. More factors that might influence Chinese teenagers on choosing social networking sites can be examined.

Appendix: Questionnaire of Teenagers' Behaviors in SNSs

- 1) **How many computers do you have at home (including desktop and laptop)?**
A) 0 B) 1 C) 2 D) more than 2
- 2) **What is your home computers' internet accessing method?**
A) no internet access B) dial-up C) broadband D) if other: _____
- 3) **Do you have a mobile phone?**
A) yes B) no
- 4) **Can your mobile phone access to Internet?**
A) yes B) no
- 5) **How many hours on average do you spend on spare time (not to be used in study) per week?**
A) not at all B) less than 2 hours C) 2-5hours D) 5-10 hours E) more than 10 hours
- 6) **What do you do in your spare time? (Multiple choice. Please list your answer in a descending order.)**
A) read books B) sports C) hang around friends D) use computer E) watch TV F) if other: _____
- 7) **How many hours on average do you spend on Internet per week?**
A) not at all B) less than 2 hours C) 2-5hours D) 5-10 hours E) more than 10 hours
- 8) **What do you do online? (Multiple choice. Please list your answer in a descending order.)**
A) study B) play games C) online chatting D) explore & get information E) watch videos F) if other: _____
- 9) **Which of the following social networking sites are you using at the moment? (Multiple choice. Please list your answer in a descending order.)**
A) not at all B) QQ C) Kaixin001 D) Sina Weibo E) RenRen.com F) if other: _____
- 10) **What are the reasons you are using the above mentioned social networking services? (Multiple choice. Please list your answer in a descending order.)**
A) free to use B) "All my friends are using it." C) powerful multifunction D) brilliant appearance and avatars E) interesting games F) easy to use G) if other: _____
- 11) **What devices do you use to visit the social networking sites?**
A) computer B) mobile phone C) both
- 12) **What do you do on social networking sites? (Multiple choice. Please list your answer in a descending order.)**
A) play games B) make new friends C) interact with friends D) express myself E) on look F) if other: _____
- 13) **How many hours do you spend on social networking sites per week?**
A) not at all B) less than 2 hours C) 2-5hours D) 5-10 hours E) more than 10 hours
- 14) **How much pocket money on average do you have per week?**
A) less than 25 yuan B) 26-50 yuan C) 51-100 yuan D) more than 100 yuan
- 15) **What do you spend your pocket money on? (Multiple choice. Please list your answer in a descending order.)**
A) books B) snacks C) games and software D) clothes and fashion E) membership fee or virtual goods in social media F) music, movie or game downloading G) if other: _____
- 16) **How much money on average are you willing to spend on social networking sites per week?**
A) Not at all B) less than 10 yuan C) 10-25 yuan D) 25-50 yuan E) more than 50 yuan
- 17) **How important do membership fee and virtual goods prices affect you to choose a social networking site?**
A) extremely important B) very important C) important D) a little E) not at all
- 18) **How important does whether your friends are using a social network service affect you to choose a social networking site?**
A) extremely important B) very important C) important D) a little E) not at all
- 19) **How important does advertisement affect you to choose a social networking site?**
A) extremely important B) very important C) important D) a little E) not at all
- 20) **How important does ease of use affect you to choose a social networking site?**
A) extremely important B) very important C) important D) a little E) not at all
- 21) **How important does the variety of functions affect you to choose a social networking site?**
A) extremely important B) very important C) important D) a little E) not at all
- 22) **How important does the design of website decorations and images affect you to choose a social networking site?**
A) extremely important B) very important C) important D) a little E) not at all

References

Boyd, D. (2007). Why youth (heart) social network sites: the role of networked publics in teenage social life. *MacArthur Foundation Series on Digital Learning – Youth, Identity and Digital Media Volume*, MA: MIT press.

Boyd, D.M. & Ellison, N.B. (2008). Social networking sites: definition, history, and scholarship. *Journal of Computer-Mediated Communication*. Vol. 13 Issue 1: pp. 210-230.

Chang, J. (2012). Analysis of the characteristics, affecting factors and development trend of China's private consumption (中国居民消费的特点、影响因素以及发展趋势分析). *Jiangsu Business Forum*. Vol. 2: pp. 7-12.

Chen, S., Li, S. & Li, C. (2011). Recent related research in technology acceptance model: a literature review. *Australian Journal of Business and Management Research*. Vol. 1 No. 9: pp. 124-127.

Childnet International (2008). Young people and social networking services: a childnet international research report. www.digizen.org

Chuttur, M., (2009). Overview of the technology acceptance model: origins, developments and future directions. *Working Papers on Information System*. Vol. 9 Article 27.

CICC (2006). Growing up Chinese consumption: analysis of total consumption and consumption structures of Chinese citizens (成长中的中国消费——中国居民消费总量和结构分析). International Capital Corporation Limited.

CNNIC (2012). Survey of online behaviors of Chinese youths 2011 (2011年中国青少年上网行为调查报告).

CNNIC (2012). Research of behaviors of Chinese social networking sites users 2012 (中国网民社交网站应用研究报告).

CNNIC (2012). Research of online behaviors of Chinese mobile phone users (中国手机网民上网行为研究报告).

CNNIC (2012). Survey of Chinese mobile Internet development (中国移动互联网发展状况调查报告).

CNNIC (2013). Statistics of Chinese Internet development (中国互联网络发展状况统计报告).

Credit Suisse (2011). Social networking sites survey: Tencent Holdings 2011.

Davies, M. B. (2007). Doing a successful research project: using qualitative research or quantitative methods. New York: Palgrave Macmillan.

Davis, F. (1985). A technology acceptance model for empirically testing new end-user information systems: theory, and results. *Unpublished Doctoral Dissertation*. MIT Sloan School of Management.

Deepa, S.D., Neha, C. & Ranjith, P.V. (2012). Social networking sites – a new era of 21st century. *Journal of Management*. Vol. 8 Issue 1: pp. 66-73.

Enders, A., Hungenberg, H. & Denker, H. (2008). The long tail of social networking: revenue models of social networking sites. *European Management Journal*. 26: pp. 199-211.

FOST Project Report (2010). Current consumption situation and characteristics of household consumption structure changes (当前消费形式和居民消费结构变化特点). Beijing Fost Economic Consulting Co., Ltd.

Gustafsson, N. (2009). This time it's personal: social networks, viral politics and identity management. *Emerging Practices in Cyberculture and Social Networking*. Editions Rodopi: pp. 16-29.

Healey, J. (2008). Social impacts of digital media. *Issues in Society*. Vol. 324.

- Huang, C. & Huang, X. (2009). A comparative study on the family education between China and America (中美家庭教育的比较及启示). *Wuhan University of Technology Journal: Social Science Edition*. Vol. 22 No. 4.
- Johnson, B. & Christensen, L. (2008). Educational research: quantitative, qualitative, and mixed approaches. Thousand Oaks: Sage Publications.
- Kaplan, A.M. & Haenlein, M. (2009). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*. 53: pp. 59-68.
- Kelly, L., Kerr, G., & Drennan K. (2010). Avoidance of advertising in social networking sites: the teenage perspective. *Journal of Interactive Advertising*. Vol. 10 No. 2
- Laddha, P. (2010). Degree of separation in social networks. *Social and Information Networks*. Cornell University.
- Lenhart, A., Purcell, K., Smith, A. & Zickuhr, K. (2010). Social media & mobile internet use among teens and young adults. *Pew Internet & American Life Project*. Pew Research Center.
- Li, R. & Zhang, J. (2001). A comparative study on factors affecting the development of students' creativities between China and America (中美学生创造力发展影响因素的比较及其启示). Qufu Normal University.
- Li, W., Xu, C. & Ai, C. (2008). The impacts of population age structure on household consumption in China 1989-2004 (中国人口年龄结构和居民消费 1989-2004). *Economic Research*. Vol. 7: pp. 118-129.
- Li, X., Liu, H., Shao, P., Meng, M. & Zhu, X. (2012). How Chinese middle school students arrange their after school time (关于中学生如何安排课余生活的研究). <http://wenku.baidu.com/view/18a95a4afe4733687e21aab9.html>
- Lichtman, M. (2006). Qualitative research in education: a user's guide. Thousand Oaks: Sage Publications.

- Luo, Y. & Gao, Q. (2011). Characteristics of Sina Weibo and its business model (微博的特性及其商业模式初探). *Literary Life*. Vol. 3: pp. 271-272.
- Lv, Q. (2009). Income and consumption situation of Chinese urban and rural areas 2009 (2009年中国城乡居民收入和消费状况). Chinese National Bureau of Statistics.
- Min, D. (2004). Chinese online public opinion (中国互联网上的民意表达). Chinese Academy of Social Sciences, Journalism and Communication Institute.
- Tapscott, D. (1998). *Growing up digital: the rise of the net generation*. New York: McGraw-Hill.
- Wang, L. (2010). Abuses of Chinese educational system (中国教育体制弊端). <http://wenku.baidu.com/view/23f2de8271fe910ef12df89e.html>
- Wang, W. (2009). Tencent business model (腾讯商业模式). *Business Model Case Study*. Shanghai Yi Hui He Investment Co., Ltd.
- Winder, D. (2008). *Being virtual: who you really are online*. West Sussex: John Wiley & Sons.
- Xie, X. (2004). Discussion of One-Child family education (论独生子女的成长教育). *Journal of Mianyang Normal University*. Vol. 8.
- Xue, M. & Hu, Z. (2010). A study of Renren Network business model (人人网商业模式的探析与启示). *Economic Forum*. Gen. 481 No. 09: pp. 158-160.
- Yu, K. (2010). Analysis of Kaixin001 online marketing strategies (基于开心网的网络营销策略分析). *China Financial and Economic News*: 04.12.2010.
- Zhang, L. & Tu, W. (2009). Six degrees of separation in online society. *Proceedings of Web Science 2009: Society Online*.
- Zhang, X. (1999). Psychological characteristics and education of one child (独生子女的心理特征及其教育培养). *Journal of Tianzhong*. Vol. 14 No. 4: pp. 88-90.

Zhu, H., Shan, X. & Hu, J. (2011). Analysis of Chinese online public opinion 2011 (2011年中国互联网舆情分析报告). <http://yuqing.people.com.cn/GB/16698341.html>

Zikmund, W. G. (2003). Business research methods (7th edition). Kentucky: Thomson South-Western.