Statistical Report on Internet Development in China

(January 2014)

China Internet Network Information Center

Preface

In 1997 state competent departments decided to let China Internet Network Information Center (CNNIC) organize relevant Internet entities to jointly carry out an Internet development survey. Ever since then, CNNIC has published 31 statistical reports on Internet development in China, and this report is the 33rd report. The Internet has become a key sector that affects the development of our society and economy and changes people's lifestyle. All the reports of CNNIC have witnessed the whole development process of China's soaring Internet industry. With precise and objective data, the reports provide significant basis for government departments and companies to understand the development of Internet in China and make relevant decisions. Therefore, they have attracted much attention from all circles and have been cited widely both at home and abroad.

Since 1998, CNNIC has been issuing the Statistical Report on Internet Development in China every January and July by convention. The continuous survey and study on the scale of Internet users, structural features, access modes and network applications were provided in the 33rd report, which follows regular contents and style.

Data collection in this Report also received great support from the government, enterprises and all walks of life. All surveys went smoothly under the guidance of the Ministry of Industry and Information Technology, and data collection of basic resources was completed in time with the close cooperation of Internet organizations, survey websites and media. We hereby express our sincere gratitude to all of them. Meanwhile, we would like to extend our sincere thanks to Internet users who have participated in our 33rd statistical survey on Internet development.

China Internet Network Information Center

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CONTENTS

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Abstract

1. Basic Information

◇ By the end of December 2013, China has had 618 million Internet users, with a total of 53.58 million new ones. The Internet penetration rate was 45.8%, a growth of 3.7 percentage points compared with the end of 2012.

◇ By the end of December 2013, China had 500 million mobile Internet users, a growth of 80.09 million compared with that at the end of 2012. Among all the Internet users, the proportion of those using mobile phones to access the Internet rose to 81.0%.

◇ By the end of December 2013, the rural Internet users had accounted for 28.6% of the total in China, reaching 177 million, up by 21.01 million compared with the figure in 2012.

◇ Of all Internet users in China, those who surfed the Internet via desktop computers and notebook computers accounted for 69.7% and 44.1% respectively, slightly down compared with 2012 by 0.8 percentage point and 1.8 percentage points respectively. Those who used mobile phones to surf the Internet grew rapidly from 74.5% to 81.0%, an increase of 6.5 percentage points.

◇ There were totally 18.44 million domain names in China. Specifically, the .CN domain names increased by 44.2% over the same period of last year to 10.83 million, and accounted for 58.7% of the total domain names in China. China has had 3.2 million websites by the end of December 2013. The number has increased 0.52 million in the year with a growth rate of 19.4%.

◇ 93.1% of the enterprises used computers and 83.2% used the Internet to handle official business in China by the end of December 2013, with a utilization ratio of fixed broadband reaching 79.6%. Meanwhile, the enterprises carrying out online sales and online procurement accounted for 23.5% and 26.8% respectively, and 20.9% of the enterprises carried out marketing and promotion via the Internet.

2. Trends and Features

Growth of the Internet users in China is limited, and surfing the Internet with mobile phones is still the main impetus of the growth of Internet users

By the end of December 2013, China has had 618 million Internet users, with a total of 53.58 million new ones. The Internet penetration rate was 45.8%, up by 3.7 percentage points over the end of 2012. The penetration growth basically complied with the situations in 2012, and the overall growth of Internet users continuously to slow down. In the meantime, mobile Internet users continued to maintain a good momentum of growth, and reached 500 million, with an annual growth rate of 19.1%. Mobile phones continued to maintain their No. 1 position as the Internet terminal. The high percentage of new Internet users surfing the Internet with mobile phones also indicates the boosting role of mobile phones in the growth of Internet users. Of the new Internet users in 2013, up to 73.3% surfed the Internet with mobile phones, a percentage far higher than that of the Internet users using other devices. Mobile phones are still the main driving force for the growth of Internet users in China.

Internet development in China is transforming from "quantity" to "quality"

The Internet penetration rate in China was 45.8% by December 2013, up by 3.7 percentage points over the end of 2012, and continued its slow pace of growth since 2011. On the whole, the theme of Internet development in China has transformed from "increase of penetration" to "deepened degree of usage". The policies and environmental changes in recent years have also provided strong support for the depth of usage. Firstly, the national supporting policy has been issued. In 2013, the State Council issued Some Comments of the State Council on Facilitating Information Consumption and Expanding Domestic Demand, indicating the role of Internet in the overall economy and society. Secondly, Internet has better combined itself with traditional economy, such as its good applications in shopping, logistics, payment or even finance. Thirdly, Internet applications have gradually changed people's life style, and have had a significant impact on people's basic necessities of life.

Rapid development of high-flow mobile phone applications

In 2013, the services requiring high flow, such as mobile phone video and music, grew rapidly. Specifically, the users of mobile phone video grew significantly. The number of users who used mobile phones to watch video online or download video was 247 million in China by the end of December 2013, an increase of 112 million over the end of 2012, or a growth rate of up to 83.8%. Mobile video has risen to the fifth major application of the mobile internet. The utilization ratio growth of the mobile high-flow applications is mainly attributed to three factors. Firstly, users have tended to use mobile phones as their Internet access devices, and the overall Internet users have a continuously lower computer utilization ratio. Secondly, the basic environment of usage has improved, such as the development of smart phone and wireless network which have attracted more users to surf the Internet with mobile phones. Finally, the Internet access cost has reduced, such as lower Internet access expenses, monthly package cooperation between video operators and internet operators, and other measures which have helped reduced the threshold of use of mobile video.

Rapid development of comprehensive platform applications based on social contact

In 2013, the Internet applications such as Microblog, social networking sites and forums had a lower utilization ratio, while the platform applications related to instant messaging based on social contact elements developed steadily. The detailed figures show that the Microblog users dropped by 27.83 million, and the utilization ratio dropped by 9.2 percentage points in 2013. The overall instant messaging users, however, grew to 532 million with the boost of mobile end, up by 64.4 million over the end of 2012 and with a utilization ratio of up to 86.2%, maintaining the No. 1 position. The mobile instant messaging developed rapidly, because on the one hand, instant messaging is well integrated with mobile communication, on the other hand, such applications as information sharing, communication, payment and finance have been added based on social contact elements, which has greatly increased user stickiness.

Sluggish growth of Internet game users vs. rapid growth of mobile online game users

The growth of Internet game users slowed down significantly in 2013. The utilization ratio by Internet users dropped from 59.5% in 2012 to 54.7%. The number of Internet game users was 338 million, with an increase of 2.34 million only. Different from the overall size of Internet game

users, the mobile-end Internet game users grew rapidly. The number of mobile online game users in China had reached 215 million by the end of December 2013, representing a growth of 75.94 million, or 54.5%, over the end of 2012. The sluggish growth of users in the overall industry and the rapid growth of mobile-end game users indicate that more users are shifting from the computer end to the mobile end in the game industry, and that the impact of mobile-end online games on the PC-end online games begins to emerge.

Sustained growth of online shoppers, with group purchase as the highlight

Business applications continue to maintain a high development speed, which is particularly prominent in online shopping, as well as the similar group purchase. In 2013, the number of online shoppers in China reached 302 million, with a utilization ratio of up to 48.9% and representing a growth of 6.0 percentage points over 2012. The number of group purchase users reached 141 million, with a utilization ratio of 22.8% and representing a growth of 8.0 percentage points over 2012. With an annual growth of users by 68.9%, it is the most rapidly growing business application. The rapid development of business applications is closely related to the improvement of payment and logistics and the boosting of the whole environment, while the "reverse" growth of group purchase means that group purchase has entered a rational development period after the savage growth.

Steady progress of Internet basic applications and improvement of e-business applications for SMEs

On the whole, the application of computers and Internet are satisfactory among the Chinese enterprises, but stress should be laid on micro-businesses. In terms of Internet basic applications, the gap between the enterprises in East China and those in West China has slightly narrowed, but the gap between Central China and other regions is still big. Online marketing still accounts for a small proportion for the Chinese enterprises, while instant messaging tools, search engines and e-business platforms are the top three ways of promotion. With an enormous user base, strong user stickiness and diversified management tools, instant messaging tools have become the important tool in corporate marketing. In terms of the consumer behavior mode, the search behavior directly points to buying, and e-business platforms are just the place for such purchasing behavior. With

limited marketing and promotion costs, SMEs are apt to select a way with controllable investment and high cost performance.

Chapter I Introduction

I. Survey Methodology

(I) Survey on Individual Internet Users

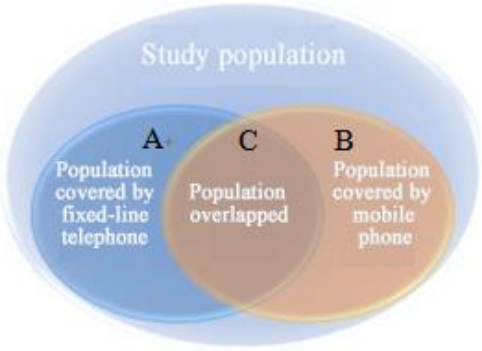
1.1 Survey Population

Permanent residents 6 years of age or above who have fixed-line telephones (including home phones, PHS and dormitory telephones) or mobile phones

◇ Sample size

Totally 60,000 survey samples in which 30,000 for fixed-line telephones and the other 30,000 for mobile phones, covering 31 provinces, autonomous regions and municipalities directly under the Central Government in Mainland China.

◇ Division of survey population



The survey population can be divided into three categories:

Subpopulation A: Survey subpopulation using fixed-line telephones (including residents with home phones, PHS users, students with dormitory telephones, and other users with dormitory telephones);

Subpopulation B: Survey subpopulation with mobile phones;

Subpopulation C: Survey subpopulation with both fixed-line telephones and mobile phones (there is overlap between subpopulation A and subpopulation B, the overlapped part is

subpopulation C), C=A∩B.

1.2 Sampling method

CNNIC surveys subpopulation A, B and C. Double sampling is adopted for the survey so as to cover more Internet users. The first sampling frame is subpopulation A, the people with fixed-line telephones. The second sampling frame is subpopulation B, the people with mobile phones.

For the survey population with fixed-line telephones, stratified two-stage sampling is adopted. To ensure the sufficient representation of samples, the whole country is divided into 31 tiers according to the province, autonomous region and municipality directly under the central government and the sampling is made independently at each tier.

The self-weighted sampling method is adopted for each province. The sample sizes are allocated for each district, city and prefecture (including the governed districts and counties) in accordance with the proportion of the people at the age of 6 or above in the city covered by fixed-line telephones in the total population covered in the whole province.

Sampling in subpopulation B is the similar to that in subpopulation A. The whole country is divided into 31 tiers according to the provinces, autonomous regions and municipalities directly under the central government, and sampling is made independently in each tier. Samples are allocated in accordance with the proportion of the residents in each district or city to make the sample allocation in each province conform to the self-weighting method.

To ensure the residence fixed-line telephones are taken with almost the same probability in each district, city or prefecture, that is, the local number with more residence fixed-line telephones have will more likely be taken, and for easier operability in the visit and implementation work, the residence fixed-line telephone numbers in each district, city and prefecture are taken according to the following procedures:

The survey of the subpopulation with mobile phones is to take all mobile phone local numbers in each district, city and prefecture; then certain 4-digit numbers are generated randomly based on the valid sample size in each district, city or prefecture, and then combined with the mobile phone numbers in each district, city or prefecture to form a number library (local number + the random 4-digit number); randomly order the number library; dial and visit the randomly

ordered number library. Survey of the subpopulation with fixed-line telephones is similar to that of the subpopulation with mobile phones: a random number is generated to form a telephone number with the local number, and then these numbers are dialed and visited. To avoid repeated sampling, only the people with fixed-line telephones are visited.

1.3 Survey method

The computer-assisted telephone interviewing (CATI) system is adopted for the survey.

1.4 Differences between survey population and targeted population

A study for the population who are not covered by telephones in 2005 by CNNIC shows that Internet users are very few in this subpopulation. Currently, the subpopulation is downsizing gradually with the development of our telecom industry. In this survey, there is an assumption, i.e.

Internet users who are not covered by fixed-line telephones and mobile phones are negligible.

(II) Enterprise Survey

2.1 Survey target

The overall targets of the telephone survey are those enterprises which have registered with industry and commerce administration authorities at all levels, and obtained the License of Business Corporation and the corporate capacity in accordance with Administrative Regulations of The People's Republic of China Governing the Registration of Legal Corporations and Regulations of the People's Republic of China on Administration of Registration of Companies.

2.2 Sampling method

This survey adopts the approach of stratified random sampling.

2.2.1 Standard for regional stratification

Thirty-one provinces, municipalities directly under the Central Government and autonomous regions are divided into Eastern China, Central China, West China and Northeast China based on their economic development according to relevant standards issued by National Bureau of

Statistics of the PRC:

- East China consists of 10 provinces, municipalities directly under the Central Government and regions, namely Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan.
- Central China consists of 6 provinces, namely Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan.
- West China consists of 12 provinces, municipalities directly under the Central Government and regions: Inner Mongolia, Gangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang.
- Northeast China consists of 3 provinces: Liaoning, Jilin and Heilongjiang.

2.2.2 Standard for industrial stratification

Business entities are divided into eighteen major industry categories according to the statistical standard issued by National Bureau of Statistics of the PRC. Based on the similarity and differences in the use of Internet by industries, CNNIC combines the eighteen major industry categories into nine industrial categories:

No.	Industry name
1	Agriculture, forestry, animal husbandry, and fishing
	Mining
	Production and supply industries for electric power, fuel gas and water
2	Manufacturing
3	Construction
	Transportation, storage and postal services
4	Information transmission, computer service and software
	Finance
	Leasing and commercial service
5	Wholesale and retail
6	Accommodation and catering
	Resident service and other services
7	Real estate
8	Scientific research, technical service and geological survey

	Water conservancy, environment and public facility management
9	Education
	Health, social security and social welfare
	Culture, sports and entertainment

Cross stratification is conducted by two indicators: region and combined industries, with a total of 4*9=36 layers. Samples are equally distributed at each layer according to the distribution of business entities by province, city and industry in the second economic census in 2008. Business entities are randomly sampled from each layer for investigation, and the ultimate effective samples cover a total of 6000 enterprises.

2.3 Implementation method of the survey

This project adopts the approach of Computer Assisted Telephone Interview (CATI）. Randomness and accuracy of the survey are controlled as follows:

1) Calls are made from 9 am to 6 pm on working days.

2）After the survey is accomplished, the telephone investigation company is asked to provide the detailed dialing information of all the phones for random checks.

3) To avoid the randomness being influenced by the put-through rate, numbers that cannot be connected will be dialed for at least three times.

4) To avoid the influence of investigator's personal perspective to the investigation, it is stated that items that are not needed to be read out cannot be given any prompt and the questions should be asked properly.

5) After telephone survey, the data are pre-processed to check the logical relation between the value of a variable and the variable itself. Unqualified samplings shall be all deleted.

(III) Online Survey

Online survey focuses on the use of typical Internet applications. CNNIC conducted online survey from December 10 to December 31, 2013. The questionnaire is on the CNNIC website, and the links are available on government websites and major websites of China. Internet users voluntarily participated in and filled out the questionnaire. After the questionnaires were returned,

questionnaires' validity is verified and invalid questionnaires were sieved out by special techniques.

(IV) Automatic Online Search and Data Report

Automatic online search is used to conduct technical statistics about quantity of domain names and websites, and their geographical distribution. Statistical data for reporting mainly includes the number of IP addresses and international Internet bandwidth.

4.1. Total number of IP addresses

The data of IP addresses counted by province come from the IP address databases of Asia-Pacific Network Information Center (APNIC) and CNNIC. Registered data that can clearly distinguish the provinces of the addresses in each database can be added respectively by province to generate data of each province. As address allocation is a dynamic process, the statistical data are only for reference. The Ministry of Industry and Information Technology, as the national competent department for the administration of IP addresses, will require IP address allocation organizations (such as China Telecom) to report the IP addresses they own biannually. To ensure accuracy of IP data, CNNIC will compare and verify APNIC statistical data and the reported data to confirm the final quantity of IP addresses.

4.2. Total number of domain names and websites in China

Total number of domain names and websites in China can be derived from:

Number of domain names: The number of domain names with .CN and .中国 comes from CNNIC database; and the number of gTLDs comes from the data released by WebHosting.Info, a domain name statistical agency.

Number of websites: It is worked out by CNNIC according to the list of domain names. The list of domain names with .CN and .中国 comes from the CNNIC database, while the list of gTLDs comes from relevant international domain name registries.

4.3. International Internet bandwidth

The Ministry of Industry and Information Technology can regularly obtain the number of

total bandwidths of Internet connecting Chinese carriers with other countries and regions through the report system of telecom enterprises. The reported data are included in the Statistical Report on Internet Development in China.

II. Definitions of Terms in the Report

◇ **INTERNET USERS:** Chinese residents six years of age or above who have used Internet in the past 6 months.

◇ **Mobile INTERNET USERS:** Internet users who have used mobile phones to access and surf Internet in the past 6 months, but not limited to those surfing Internet via mobile phones only.

◇ **Computer INTERNET USERS:** Internet users who have used computer to access and surf Internet in the past 6 months, but not limited to those surfing Internet via computers only.

◇ Rural INTERNET USERS: Internet users who have been living in rural areas of China in the past 6 months.

◇ Urban INTERNET USERS: Internet users who have been living in urban areas of China in the past 6 months.

◇ **IP ADDRESS:** As the basic resource in Internet, the IP address functions to identify online computers, servers and other devices on Internet. Connection with the Internet can be realized only when an IP address (in any form) is acquired.

◇ **DOMAIN NAME:** Domain name in the Report only refers to the English domain name, which is a string comprised of numbers, letters, and hyphens (-) and separated by dots (.). It is a hierarchical structural Internet address identifier corresponding to the IP address. The common domain names are divided into two categories: country code top-level domain (ccTLD), such as the domain names ended with ".CN" which represents China; and generic top-level domain (gTLD), such as the domain names ended with ".COM", ".NET" and ".ORG".

◇ **WEBSITE:** It refers to the web sites with domain name itself or "WWW. + domain name" as the web address, including the web sites under our top-level domain name

".CN" and gTLD. The registrant of the website is within the territory of P.R.C. For example: for the domain name of "cnnic.cn", it has only one website and the corresponding web address is "cnnic.cn" or "www.cnnic.cn". Other web addresses like "whois.cnnic.cn" and "mail.cnnic.cn" with such domain name as the suffix are regarded as different channels of the website.

◇ Enterprises/ SMEs: The enterprises mentioned in this report all refer to small- and medium-sized enterprises (SMEs), and privately-owned businesses are excluded in accordance with the definition stated in the *Regulations on the Standard for the Classification of Small- and Medium-sized Enterprises* jointly issued by the Ministry of Industry and Information Technology, the National Bureau of Statistics of China, the National Development and Reform Commission and the Ministry of Finance. In the *Regulations on the Standard for the Classification of Small- and Medium-sized Enterprises*, SMEs are classified into three types: medium-sized, small-sized and mini-sized. The specific criteria are determined in accordance with such indicators as enterprises' practitioners, operating income and total assets as well as industry characteristics.

◇ **Scope of survey:** Unless otherwise expressly indicated, data in this Report only refer to mainland China, excluding Hong Kong, Macao and Taiwan.

◇ **Deadline of survey data:** The deadline of the statistical survey data is 31 December 2013.

Chapter II Size and Structural Features of Internet Users

I. Size of Internet Users

(I) Overall Size of Internet Users

By the end of December 2013, China has had 618 million Internet users, with a total of 53.58 million new ones. The Internet penetration rate reached 45.8%, rising 3.7 percentage points over the previous year. Growth of the population of Internet users continued to slow down.

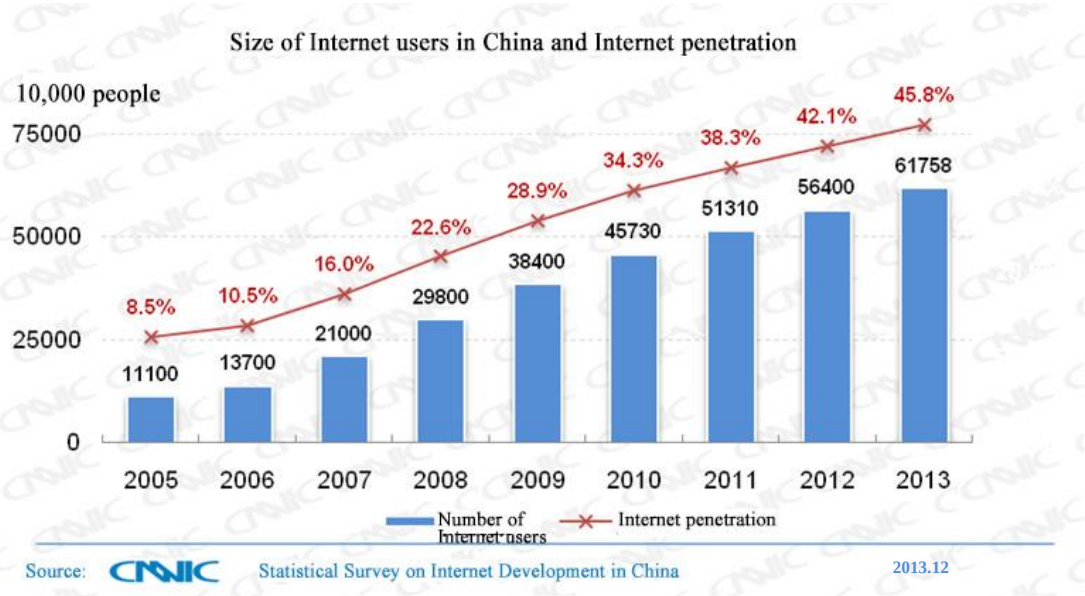


Figure 1 Size of Chinese Internet users and Internet penetration rate

The growth of the size of Internet users in China in recent years is mainly attributed to the following four factors: Firstly, the government of China has formulated a series of policies on the information field, and continuously strengthened construction of basic network facilities, providing good basic network conditions for Internet access. Secondly, operators and major manufacturers have actively facilitated Internet application and development, sped up penetration

of network applications into social life, such as taxi taking and payment, better combined online applications with offline applications, and attracted more people to use the Internet. Thirdly, traditional media and new media have strengthened interaction, increased the awareness of the entire society about the Internet, and boosted more people to use the Internet. Fourthly, the sociability of network applications and the convenience of instant communication have expanded the impact of Internet users on non-Internet users while increasing stickiness of Internet users, and facilitated non-Internet users to become Internet users. All these factors have jointly boosted the growth of Internet users, especially the continuous increase of mobile Internet users. Of the new Internet users in 2013, up to 73.3% surfed the Internet with mobile phones, a percentage far higher than that of the users using other devices, which means mobile phones are still the main driving force of the growth of Internet users in China.

With the increasing saturation of the Internet penetration, the theme of Internet development in China has transformed from "increase of penetration" to "deepened degree of usage". The policies and environmental changes in recent years have also provided strong guarantee for the depth of usage. Firstly, the national guaranteeing policy has been issued. In 2013, the State Council issued Some Comments of the State Council on Facilitating Information Consumption and Expanding Domestic Demand, affirming the role of Internet in the overall economy and society. Secondly, Internet has better combined itself with traditional economy, such as its good applications in shopping, logistics, payment or even finance. Thirdly, Internet applications have led to new social lifestyles, and have had a significant impact on people's lives.

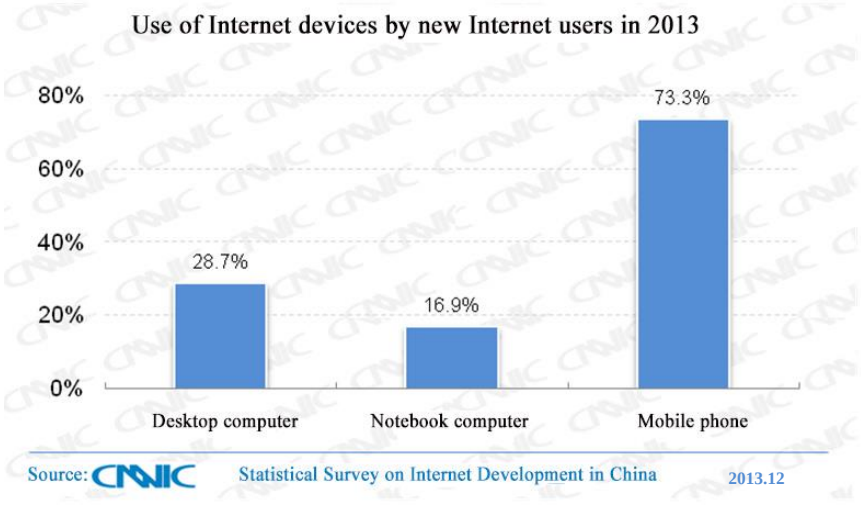


Figure 2 Usage of Internet-based Devices of New Internet Users

The analysis of the Internet access intention of non-Internet users in the future shows that in 2013, 11.9% of non-Internet users said they would definitely or be likely to surf the Internet in the coming six months, which is similar to the figure by the end of 2012, and indicates that potential Internet users with Internet access intention among non-Internet users have gradually turned themselves into Internet users; 13.7% of non-Internet users said they were not sure whether they would surf the Internet in the future, a figure slightly higher than that by the end of 2012. The percentage of those who would definitely not or probably not surf the Internet dropped slightly, which indicates that those users who have no Internet access intention among non-Internet users have begun to have the intention, and these people will also become the important source of the growth of Internet users in the next phase.

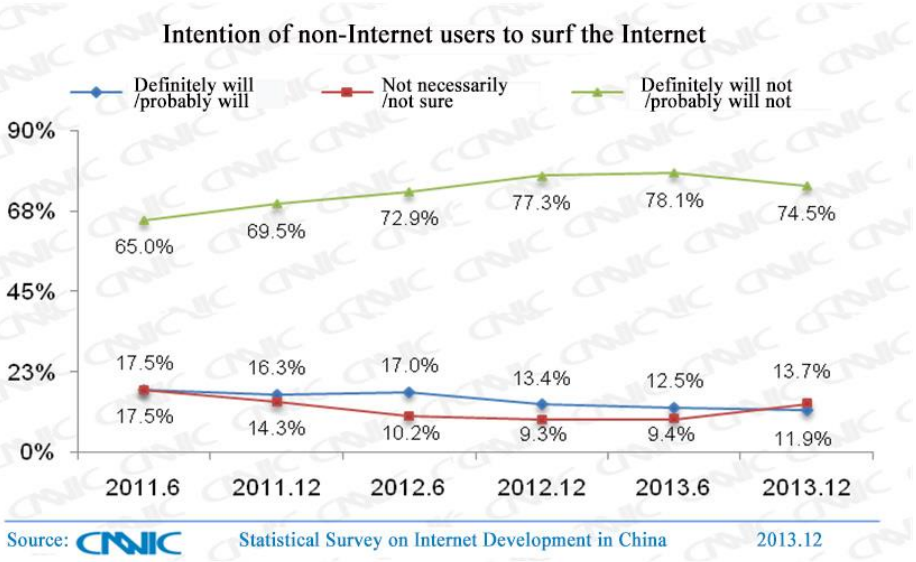


Figure 3 Non-Internet users' intention to use the Internet in the future

Gradual improvement of the Internet infrastructure, convenience of network access and decrease of Internet terminal costs have kept reducing the factors which hinder non-Internet users from surfing the Internet, such as network devices and network conditions, while the percentage of the factors of "too old/too young" and "don't know how to use computers and networks" have kept increasing. This indicates, on the one hand, that it will be more difficult to penetrate the Internet in the future, and the population susceptible to transformation have become increasingly saturate, on the other hand, that the ability to use ICT (Information Communication Technology) is still the focus of the further penetration of the Internet, and more efforts should be put into the

Internet education and popularization in the future.

Surfing the Internet with mobile phones will still be the important factor that boosts the growth of Internet users in China. Mobile phones have a lower a technical threshold compared with computers, and are an important way for the Internet to penetrate into rural areas and the low-income population. In the course of popularization of surfing the Internet with mobile phones, operators will still play their boosting role, and facilitate mobile phone users to transform to mobile Internet users via the network packages and promotion of 3G numbers. For residents in rural areas and other relatively backward areas, more applications related to rural life should be developed while the Internet access via mobile phones is promoted, so as to increase the interest of rural residents in the Internet and facilitated them to use the Internet.

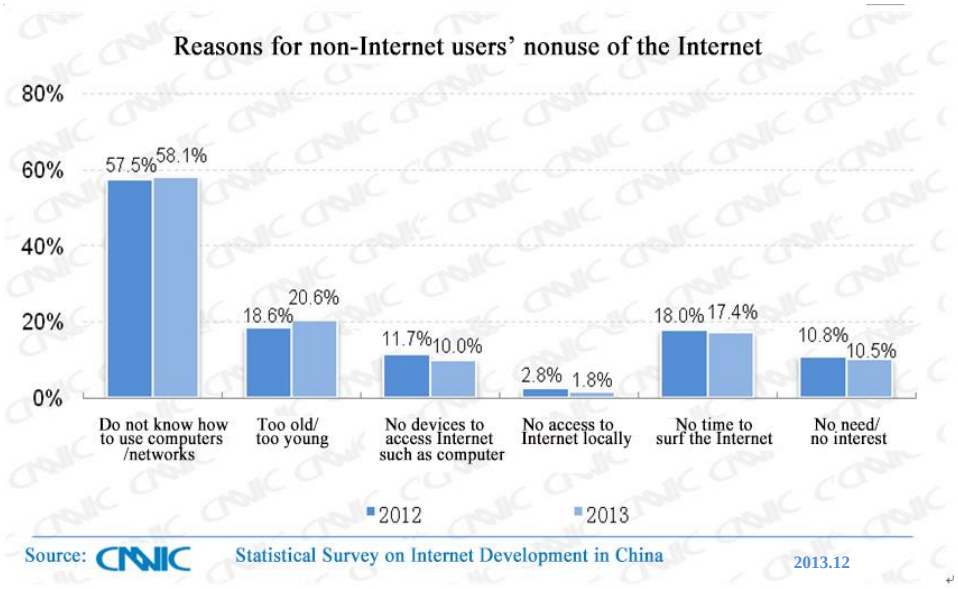


Figure 4 Reasons for non-Internet users not to use the Internet

On August 1, 2013, the State Council issued the "Broadband China" Strategy and Implementation Plan, which emphasized better strategic guidance and systematic deployment, rapid and healthy development of the broadband infrastructure in China, and more efforts in "Fiber to the Home", access to broadband in rural areas and broadband access for public interest organizations. It is foreseeable that construction of basic network facilities will continue to be enhanced, and the service capability of network infrastructure will be improved in the future. The all-inclusive and multidimensional network access support will boost the sustained growth of Internet users in China and the further penetration of network applications, and facilitate

technological development and application innovations of the Internet in China.

(II) Size of Mobile Internet Users

By the end of December 2013, China had 500 million mobile Internet users, a growth of 80.09 million compared with that at the end of 2012. Among all the Internet users, the proportion of those using mobile phones to access the Internet rose to 81.0% from 74.5%, and the number of mobile Internet users grew steadily.

The size of mobile Internet users grew continuously, because the popularization of 3G, development of wireless network and falling prices of smart phones have laid a good foundation for internet access via mobile phones, and have facilitated Internet users to use various mobile phone applications. Those who have limited network or terminal access, in particular, have been provided with the possibility of accessing the Internet. According to the data released by the Ministry of Industry and Information Technology, the sales of smart phones to dealers in China reached 348 million units from January to October 2013, and the sales grew rapidly; the number of 3G mobile telephone users reached 386 million by November, 2013, a growth of 154 million over the same period of last year. On the other hand, the diversity and deep-going nature of mobile phone application services, especially the new instant messaging tools and life-related applications, have further expanded the impact of internet access via mobile phone on daily life, and improved the stickiness of mobile Internet users to Internet access while meeting the diversified living needs living needs of Internet users.

With the rapid popularization of smart terminals, lower service fees of telecommunication network and increasingly complete coverage of Wi-Fi, internet access via mobile phone has become the main impetus of the Internet development. It has not only facilitated the Internet penetration in China, but also generated more new applications, reconstructed the business mode of traditional industries, and resulted in the rapid growth of the Internet economy scale.

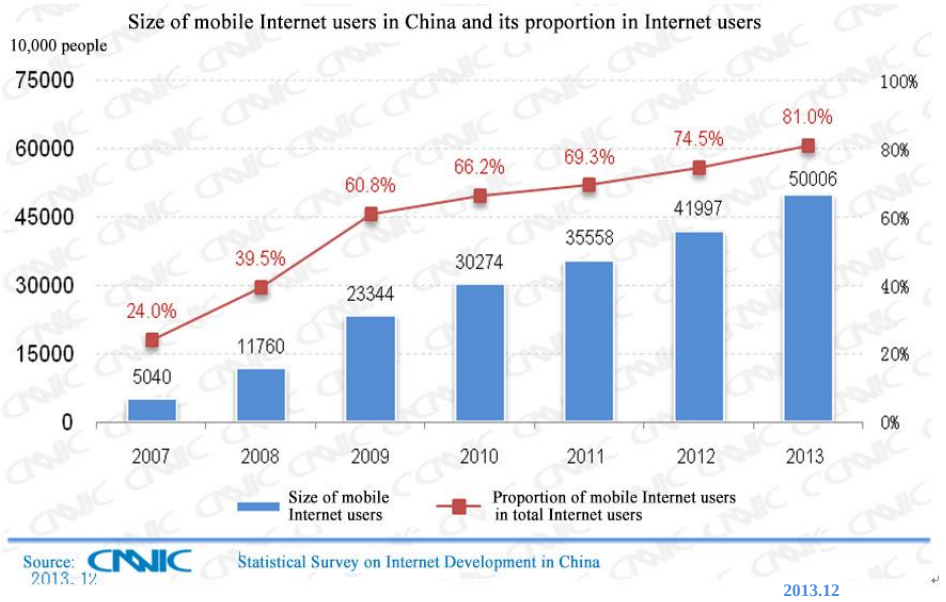


Figure 5 Size of Mobile Phone Internet Users

(III) Size of Internet Users in Provinces

In 2013 the size of Internet users grew by a certain margin in all provinces and municipalities. Of the 31 provinces, municipalities directly under the Central Government and autonomous regions, 25 have had up to ten million Internet users, and 13 have had an Internet penetration which is higher than the national average level, including newly added Qinghai Province and Hebei Province compared with 2012 whose Internet penetration was 47.8% and 46.5% respectively.

The regional differences of Internet development in China still existed in 2013. The Internet penetration rate was relatively high in Beijing, Shanghai, Guangdong, etc, higher than 65%, and relatively low in Jiangxi, Yunnan, Guizhou, etc., lower than 33%. In 2013 Internet users grew the fastest in those provinces with relatively low Internet penetration, such as Jiangxi, Yunnan, Guizhou and Henan, while Internet users grew slightly slower in those regions with relatively high Internet penetration, such as Beijing, Shanghai and Guangdong. With the increasing popularization of the Internet devices and further implementation of the broadband network program, the regional differences in the Internet development in China will be further reduced in the future.

Table1 Size of Internet users and penetration rate of Internet in provinces (municipalities directly under the central government and autonomous regions) of the Mainland China between 2012 and 2013

Province	Size (10,000 persons)	Penetration rate	Size growth	Ranking of penetration rate
Beijing	1556	75.2%	6.7%	1
Shanghai	1683	70.7%	4.8%	2
Guangdong	6992	66.0%	5.5%	3
Fujian	2402	64.1%	5.4%	4
Tianjin	866	61.3%	9.2%	5
Zhejiang	3330	60.8%	3.4%	6
Liaoning	2453	55.9%	11.6%	7
Jiangsu	4095	51.7%	3.6%	8
Xinjiang	1094	49.0%	13.7%	9
Shanxi	1755	48.6%	10.4%	10
Qinghai	274	47.8%	15.1%	11
Hebei	3389	46.5%	12.7%	12
Hainan	411	46.4%	7.0%	13
Shaanxi	1689	45.0%	8.9%	14
Shandong	4329	44.7%	12.0%	15
Chongqing	1293	43.9%	8.2%	16
Inner Mongolia	1093	43.9%	13.3%	17
Ningxia	283	43.7%	9.7%	18
Hubei	2491	43.1%	7.9%	19
Jilin	1163	42.3%	9.5%	20
Heilongjiang	1514	39.5%	13.9%	21
Guangxi	1774	37.9%	11.9%	22
Tibet	115	37.4%	13.9%	23
Hunan	2410	36.3%	9.5%	24
Anhui	2150	35.9%	15.0%	25
Sichuan	2835	35.1%	10.7%	26
Henan	3283	34.9%	15.0%	27
Gansu	894	34.7%	12.5%	28
Guizhou	1146	32.9%	15.6%	29
Yunnan	1528	32.8%	15.7%	30

Jiangxi	1468	32.6%	15.9%	31
The whole country	61758	45.8%	9.5%	--

(IV) Size of Rural Internet Users

By the end of December 2013, the rural Internet users had accounted for 28.6% of the total in China, reaching 177 million, up by 21.01 million compared with the figure in 2012. In 2013 the rate of growth was 13.5% for rural Internet users and 8.0% for urban Internet users, with the gap between urban and rural Internet users continuously narrowing.

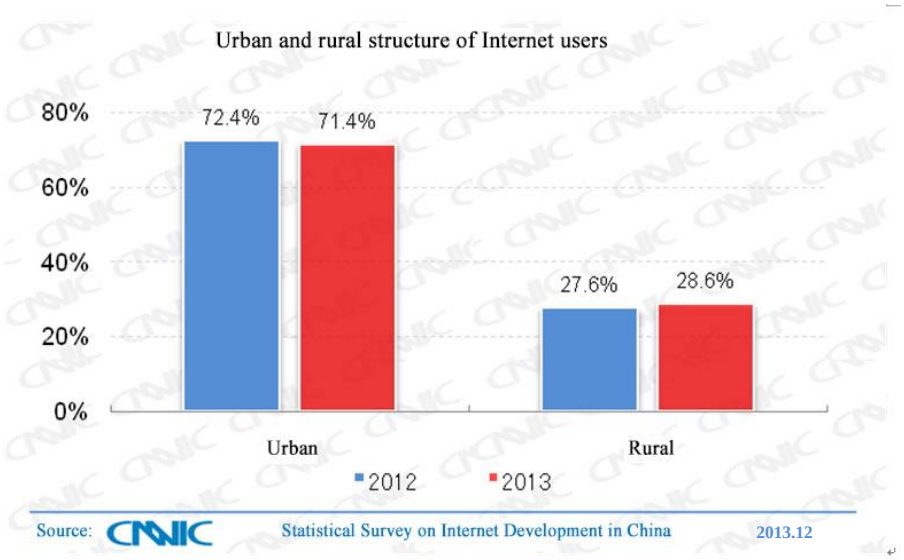


Figure 6 Urban-rural Structure of Chinese Internet Users

With the urbanization process in China in recent years, the proportion of the rural population in the total population has dropped continuously, but the proportion of rural Internet users in the total Internet users has kept rising in China, which has reflected the achievement made in the Internet popularization in rural areas. In 2013, the Internet penetration in rural areas in China reached 27.5% and extended the trend of growth since 2012. The gap between cities and rural areas in terms of Internet popularization has further narrowed, and rural areas are still the important impetus for the growth of Internet users in China at present.

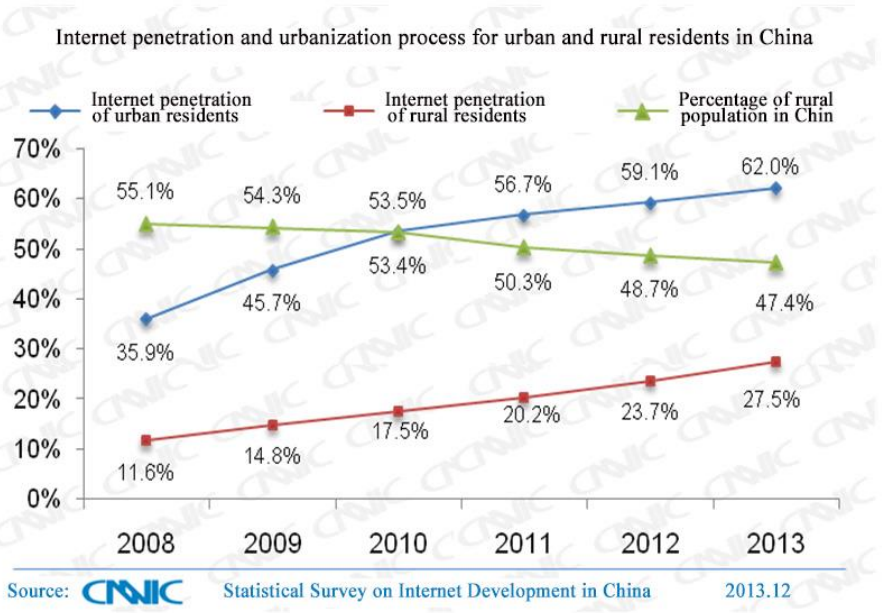


Figure 7 Internet penetration and urbanization process in China's urban and rural areas

II. Attributes of Internet Users

(I) Gender Structure

By the end of December 2013, the sex ratio of Internet users was 56:44, similar to that of 2012. The sex ratio of the Internet users in China basically remains stable under the impact of the huge base number of Internet users.

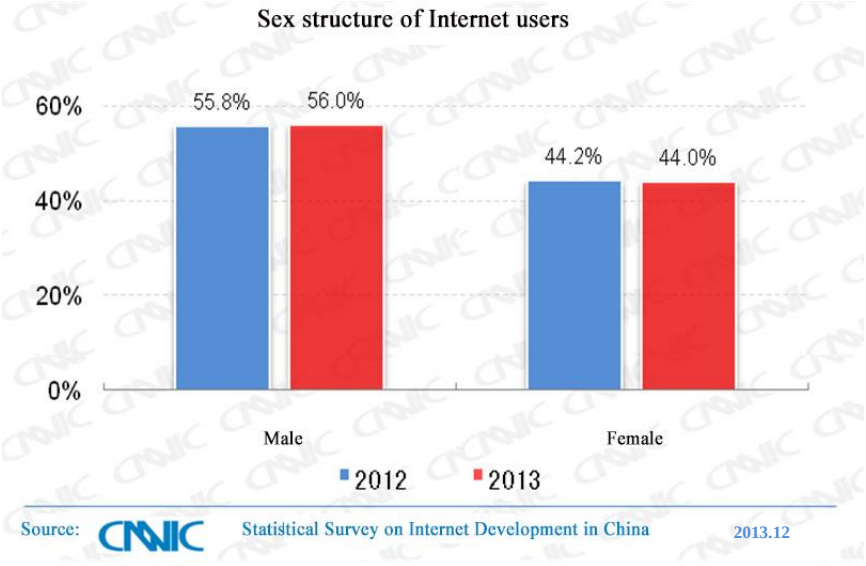


Figure 8 Gender Structure of Chinese Internet Users

(II) Age Structure

Internet users aged 20-29 have accounted for 31.2%, the largest proportion, of the total Internet users by the end of December 2013, and have a similar structure to that by the end of 2012. The proportion of low-age and advanced-age Internet users increased slightly, meaning that the Internet was becoming more and more popular.

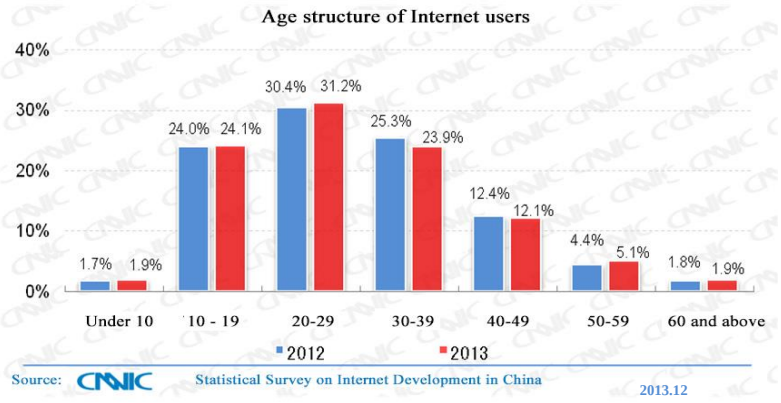


Figure 10 Age Structure of Chinese Internet Users

(III) Education Structure

As of December, 2013, Internet penetration rate among people with an education background of high school or above has attained a comparatively high level, and the growth possibility would be limited in the future. The population with primary school education or below accounted for 11.9% in 2013, slightly rising compared with 2012 and maintaining a growth trend. The Internet users in China continue to cover the population with low levels of education.

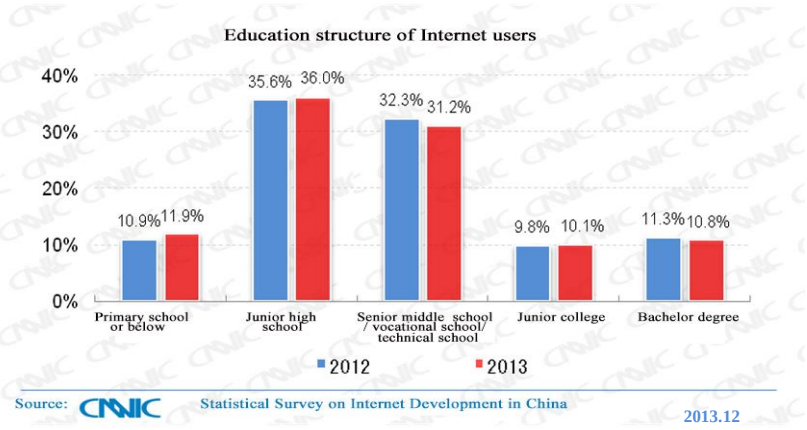


Figure 11 Education Structure of Chinese Internet Users

(IV) Occupational Structure

Students are still the largest population among the Internet users in China, accounting for 25.5%. The Internet penetration has been high among this population. Self-employed persons/freelances are the second largest population among Internet users, accounting for 18.6%. Managers account for 2.5% and general employees account for 11.4% of the total Internet users in companies and enterprises.

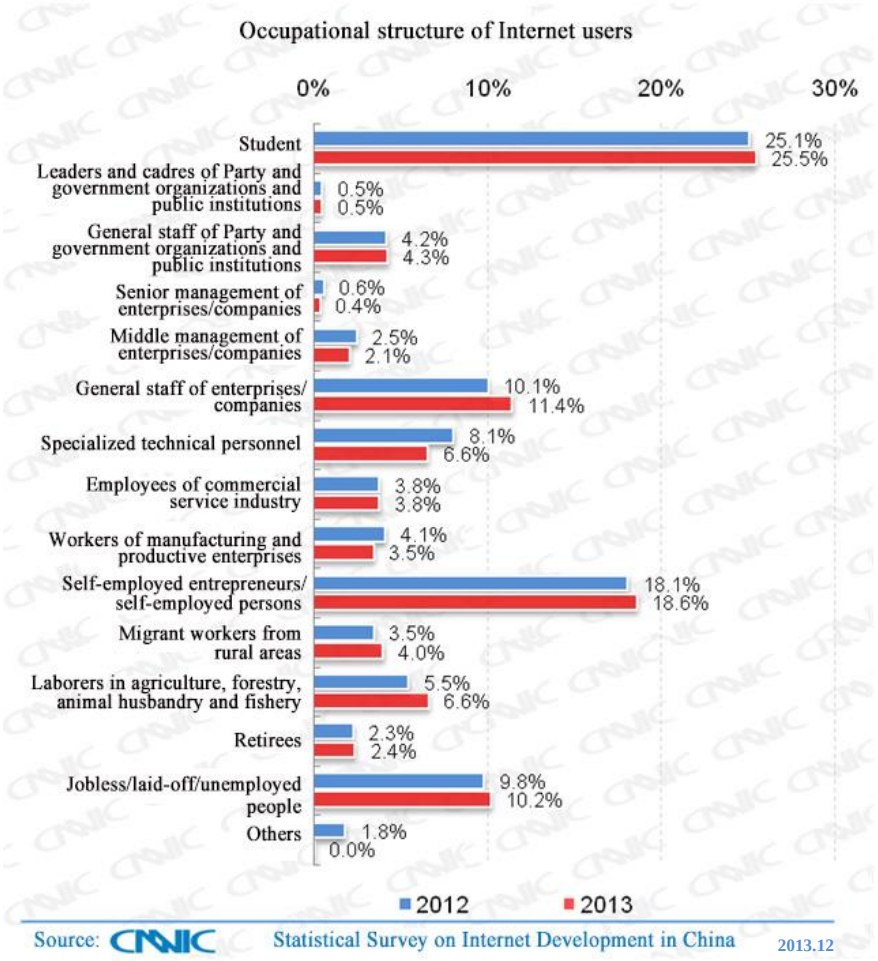


Figure 12 Occupational Structure of Internet users

(V) Income Structure

Internet users with a monthly income [1] of 2001-3000 yuan and 3001- 5000 yuan are of the

[1] Specifically, the income of students includes living allowances provided by families, salary earned from work-study programs, scholarships and others. The income of peasants includes the living allowances provided by children, income of agricultural production, and government subsidy. The income of those who are jobless, laid off or unemployed includes the living allowances provided by children, government relief and subsidy, pension, and subsistence allowances. The income of retirees includes the living allowances provided by children and pension.

biggest size, and account for 17.8% and 15.8% respectively. Internet users with a monthly income of 500 yuan or below or no income account for 20.8%.

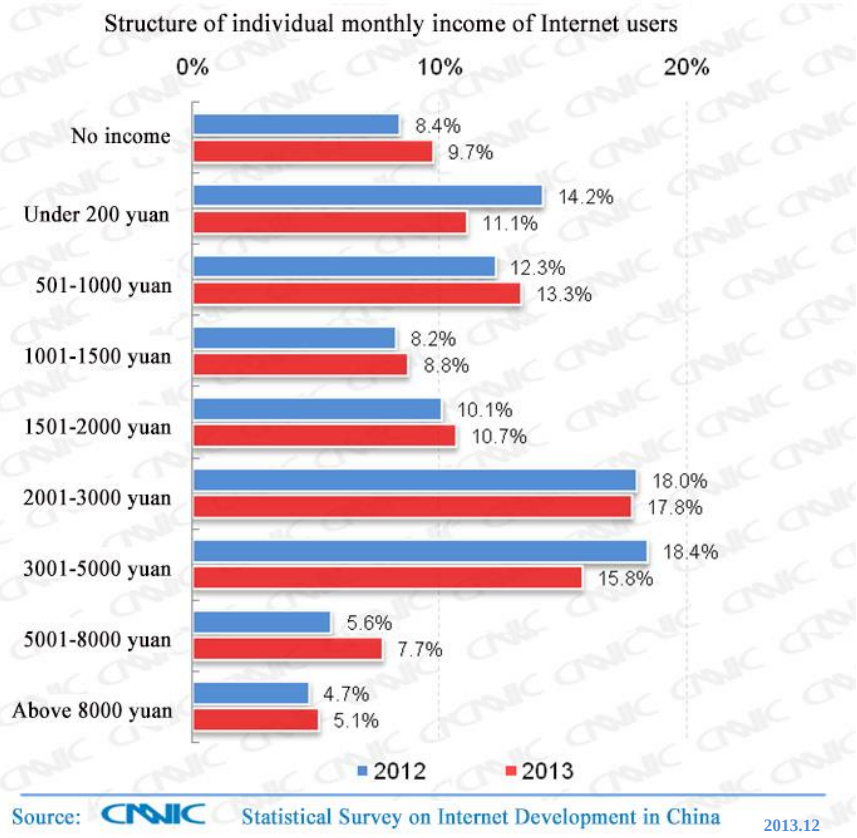


Figure 13 Structure of Monthly Income of Chinese Internet Users

III. Access Modes

(I) Internet Access Devices

In 2013 Internet users who used mobile phones to surf the Internet kept growing, rising from 74.5% to 81.0%, a growth of 6.5 percentage points. The proportion of the Internet users who used desktop computers or notebook computers to access the Internet dropped slightly.

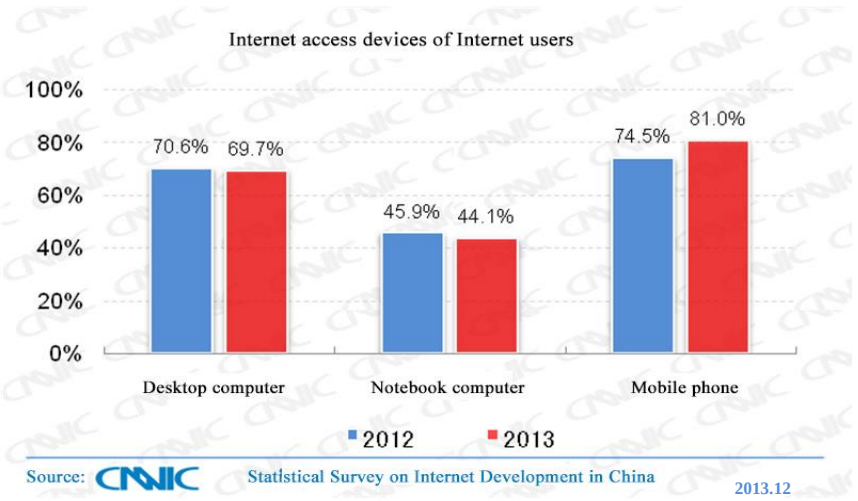


Figure 14 Internet Access Devices

(II) Locations to Surf the Internet

In 2013 the Internet users who accessed the Internet from such locations as homes, Internet bars or schools dropped slightly by 1.9, 3.7 and 4.4 percentage points respectively. Specifically, Internet users who accessed the Internet via computers at school dropped by the largest margin, mainly because the smart-phone prices and the network service fees have dropped, enabling more students to access the Internet via mobile phones. Diversified Internet access devices and convenient network access have further reduced the proportion of Internet users who use computers to access the Internet.

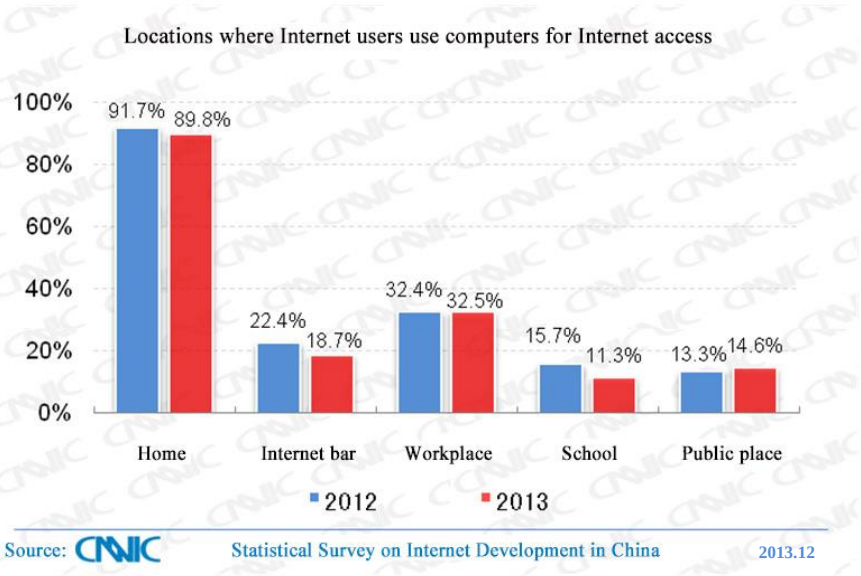


Figure 15 Locations for Internet users to surf Internet on computers

(III) Online Duration

In 2013 the online duration of Internet users in China per capita per week reached 25.0 hours, an increase of 4.5 hours over the previous year. The online duration of Internet users has kept increasing in recent years, especially in 2013 when the online duration increased the most. In 2013 the rapid development of Wi-Fi and 3G network better satisfied the needs of Internet users to use various applications. The use of large-flow applications, in particular, has increased the Internet users' duration of using various applications. In addition, diversified Internet applications have enabled mobile Internet users to shift from relatively simple applications, such as fragmented reading and news, to those applications with long duration and great stickiness, such as social contact and living service applications, all of which have increased the overall use duration in terms of application coverage.

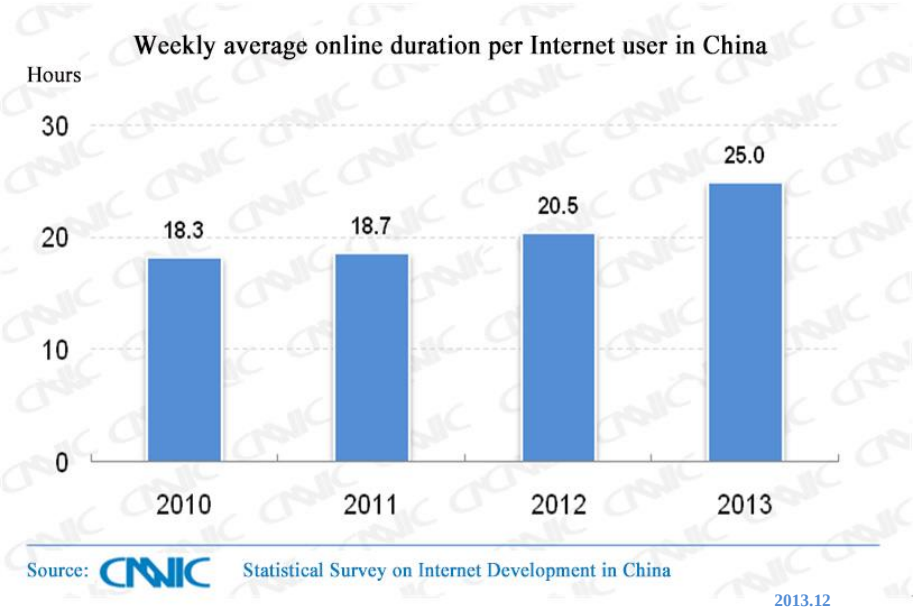


Figure 16 Weekly Average Online Duration of Internet Users

Chapter III Fundamental Internet resources

I. Overview of Fundamental Resources

China has 330 million IPv4 addresses and 16670/32 of IPv6 addresses at the end of December 2013.

There were totally 18.44 million domain names in China. Specifically, the .CN domain names increased by 44.2% over the same period of last year to 10.83 million, accounting for 58.7% of the total domain names in China.

There were altogether 3.2 million websites, an increase of 19.4% compared with that in the same period of last year.

International Internet bandwidth reached 3,406,824Mbps, an increase of 79.3% compared with that in the same period of last year.

Table 3. Comparison of Internet Fundamental Resources in China between 2012 and 2013

	December 2012	December 2013	Annual increment	Annual growth rate
IPv4	330,534,912	330,308,096	-226,816	-0.1%
IPv6 (piece/32)	12,535	16,670	4,135	33.0%
Domain name	13,412,079	18,440,611	5,028,532	37.5%
Including .CN domain name	7,507,759	10,829,480	3,321,721	44.2%
Website	2,680,702	3,201,625	520,923	19.4%
Including .CN website	1,036,864	1,311,227	274,363	26.5%
International internet bandwidth (Mbps)	1,899,792	3,406,824	1,507,032	79.3%

II. IP Addresses

By the end of December 2013, the number of IPv6 addresses in China had reached 16670/32, a 33.0% growth compared with that of the same period last year, ranking the second worldwide.

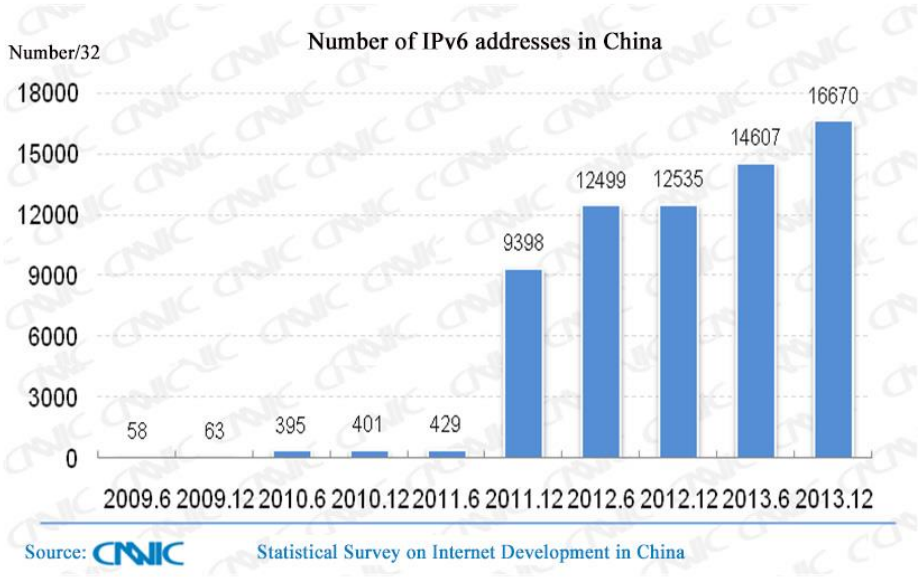


Figure 16 Number of IPv6 addresses in China

The total number of IPv4 addresses in China remained basically unchanged, reaching 330 million by the end of December 2013.

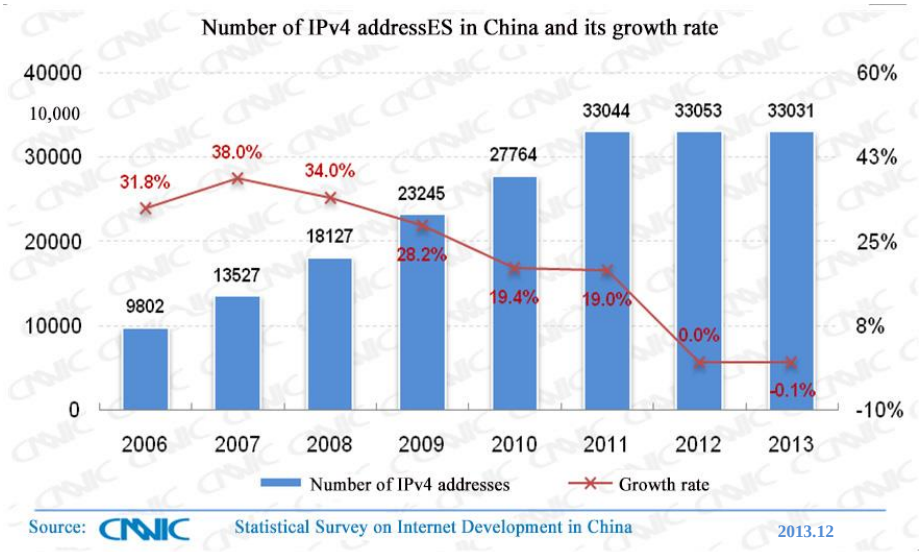


Figure 18 Changes in IPv4 address resources in China

III. Domain Names

Stimulated by the increase in.CN domain names, the total number of domain names in China increased to 18.44 million, growing by 37.5% year on year.

Table 4 Number of domain names in each category

	Number	Proportion in total domain names domain names
CN	10,829,480	58.7%
COM	6,311,480	34.2%
NET	743,996	4.0%
中国	274,553	1.5%
ORG	164,476	0.9%
INFO	64,515	0.3%
BIZ	51,742	0.3%
Others	369	0.0%
Total	18,440,611	100.0%

Note: gTLDs come from the data released by WebHosting.Info (a statistical organ) on December 30.

The number of .CN domain names had reached 10.83 million by the end of December 2013, increasing by 44.2% year on year and accounting for 58.7% of all domain names of China; and .COM domain names were 6.31 million, taking up 34.2%. In addition, the total .中国 domain names reached 270,000.

Table 5 Number of .CN domain names in each category

	Number	Proportion in total CN domain names
cn	8,874,726	81.9%
com.cn	992,580	9.2%
adm	713,055	6.6%
net.cn	125,510	1.2%
org.cn	59,758	0.6%
gov.cn	55,207	0.5%
ac.cn	4,429	0.0%
edu.cn	4,150	0.0%
mil.cn	65	0.0%
Total	10,829,480	100.0%

IV. Websites

China has had 3.2 million websites[2] by the end of December 2013. The number has increased 0.52 million in the year with a growth rate of 19.4%.

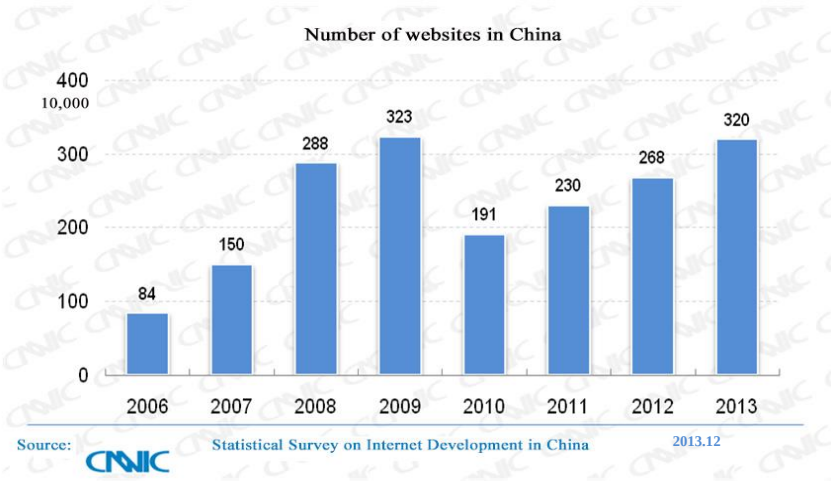


Figure 18. Number of Websites in China

Note: Websites with the domain name of ".EDU.CN" are excluded.

V. Web Pages[3]

China has had 150 billion web pages by the end of December 2013, a year-on-year increase of 22.2%.

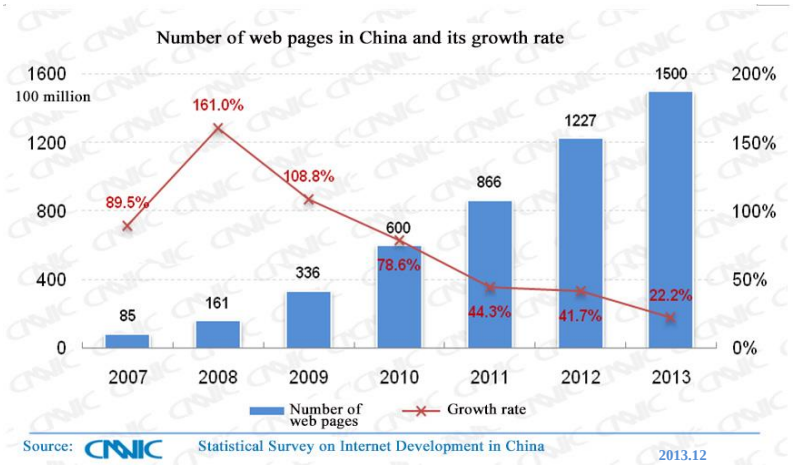


Figure 20 Number of Web Pages in China

[2]It refers to those websites whose domain name registrants are in China
[3]Source of data: Baidu Online Network Technology (Beijing) Co., Ltd.

In 2013, both the average number of web pages per website and the average number of bytes per web page kept growing, indicating more diversified contents on the Internet in China: the average number of web pages per website reached 46,900, an increase of 2.3% over the same period of last year, and the average number of bytes per webpage reached 50KB, an increase of 19.0%.

Table 6 Number of Web Pages in China

	Unit	2012	2013	Growth rate
Total web pages	Page	122,746,817,252	150,040,762,685	22.2%
Static web page	Page	60,379,347,181	89,696,746,139	48.6%
	Proportion in total web pages	49.19%	59.78%	--
Dynamic web page	Page	62,367,470,077	60,344,016,546	-3.2%
	Proportion in total web pages	50.81%	40.22%	--
Web page length (total number of bytes）	KB	5,140,463,284,447	7,479,873,203,607	45.5%
Average number of web pages per website	Page	45,789	46,864	2.3%
Average number of bytes per page	KB	42	50	19.0%

VI. International Internet Bandwidth

By the end of December 2013, China has had 3,406,824Mbps of international Internet Gateway bandwidth, up 79.3% annually.

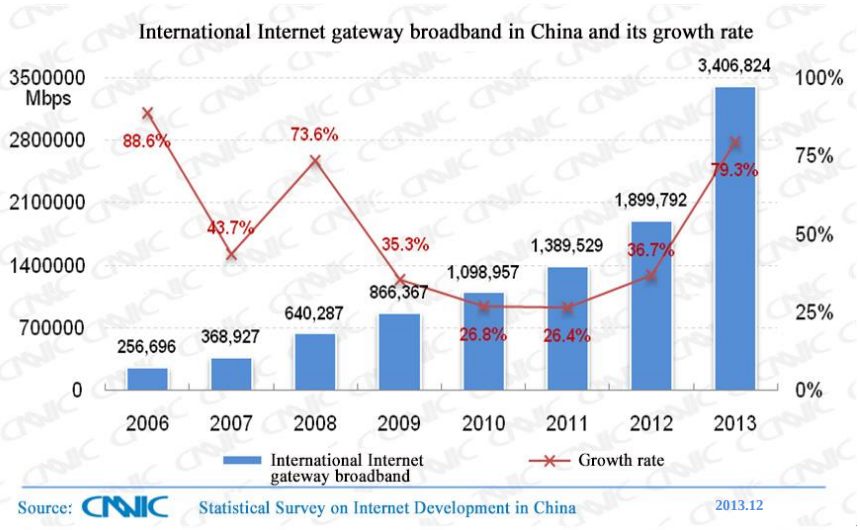


Figure 22 Changes of China's International Internet Gateway Bandwidth

Table 22 Number of international Internet bandwidths of backbone networks

	Number of International Internet bandwidths (Mbps)
China Telecom	2190878
China Unicom	850215
China Mobile	287629
China Education and Research Network	55500
China Science and Technology Network	22600
China International Economy and Trade Net2	2
Total	3406824

Chapter IV Internet Applications of Internet Users

I. Overall Condition of Internet Applications

Facilitated by the mobile internet, the network applications that tally with the operating characteristics of mobile phones further grew in 2013. As the No.1 Internet application, instant messaging had a continuously rising utilization ratio, while Microblog and other communication-type applications had a continuously declining utilization ratio. E-business applications maintained the rapid development, while the size of online shoppers grew significantly. Those applications with high requirements for network flow and user experience, such as mobile video and mobile game, had an upward trend of utilization ratio.

Rapid development of high-flow mobile phone applications

In 2013, the services requiring high flow, such as mobile phone video and music, grew rapidly. Specifically, the users of mobile phone video grew significantly. The number of users who used mobile phones to watch video online or download video was 247 million in China by the end of December 2013, an increase of 112 million over the end of 2012, or a growth rate of up to 83.8%. Mobile video has risen to the fifth major application of the mobile internet. The utilization ratio growth of the mobile high-flow applications is mainly attributed to three factors. Firstly, users have tended to use mobile phones as their Internet access devices, and the overall Internet users have a continuously lower computer utilization ratio. Secondly, the basic environment of usage has improved, such as the development of smart phone and wireless network which have attracted more users to surf the Internet with mobile phones. Finally, the Internet access cost has reduced, such as lower Internet access expenses, monthly package cooperation between video operators and internet operators, and other measures which have helped reduce the threshold for use of mobile video.

Rapid development of comprehensive platform applications based on social contact

In 2013, the Internet applications such as Microblog, social networking sites and forums had a lower utilization ratio, while the platform applications related to instant messaging based on social contact elements developed steadily. The detailed figures show that the Microblog users dropped by 27.83 million, and the utilization ratio dropped by 9.2 percentage points in 2013. The overall instant messaging users, however, grew to 532 million with the boost of mobile ends, up by 64.4 million over the end of 2012 and with a utilization ratio of up to 86.2%, maintaining the No. 1 position. The mobile instant messaging developed rapidly, because on the one hand, instant messaging is well integrated with mobile communication, on the other hand, such applications as information sharing, communication, payment or even banking have been added based on social contact elements, which has greatly increased user stickiness.

Sluggish growth of Internet game users and rapid growth of mobile online game users

The growth of Internet game users slowed down significantly in 2013. The utilization ratio by Internet users dropped from 59.5% in 2012 to 54.7%. The number of Internet game users was 338 million, with an increase of 2.34 million only. Different from the overall size of Internet game users, the mobile-end Internet game users grew rapidly. The number of mobile online game users in China had reached 215 million by the end of December 2013, representing a growth of 75.94 million, or 54.5%, over the end of 2012. The sluggish growth of users in the overall industry and the rapid growth of mobile-end game users indicate that more users are shifting from the computer end to the mobile end in the game industry, and that the impact of mobile-end online games on the PC-end online games begins to emerge.

Sustained growth of online shoppers, with group purchase as the highlight

Business applications continue to maintain a high development speed, which is particularly prominent in online shopping, as well as the similar group purchase. In 2013, the number of online shoppers in China reached 302 million, with a utilization ratio of up to 48.9% and representing a growth of 6.0 percentage points over 2012. The number of group purchase users reached 141 million, with a usage rate of 22.8% and representing a growth of 8.0 percentage

points over 2012. With an annual growth of users by 68.9%, it is the most rapidly growing business application. The rapid development of business applications is closely related to the improvement of payment and logistics and the boosting of the whole environment, while the "reverse" growth of group purchase means that group purchase has entered a rational development period after the savage growth.

Table 9 Utilization ratio of network applications by Internet users in China from 2012 to 2013

	2013		2012		
Applications	Number of Internet users (10,000)	Utilization ratio by Internet users	Number of Internet users (10,000)	Utilization ratio by Internet users	Annual growth rate
Instant messaging	53215	86.2%	46775	82.9%	13.8%
online news [4]	49132	79.6%	46092	78.0%	6.6%
Search engine	48966	79.3%	45110	80.0%	8.5%
Online music	45312	73.4%	43586	77.3%	4.0%
Blog/personal space	43658	70.7%	37299	66.1%	17.0%
Online video	42820	69.3%	37183	65.9%	15.2%
Online games	33803	54.7%	33569	59.5%	0.7%
Online shopping	30189	48.9%	24202	42.9%	24.7%
Microblog	28078	45.5%	30861	54.7%	-9.0%
Social networking websites	27769	45.0%	27505	48.8%	1.0%
Online literature	27441	44.4%	23344	41.4%	17.6%
Online payment	26020	42.1%	22065	39.1%	17.9%
E-mail	25921	42.0%	25080	44.5%	3.4%
Online banking	25006	40.5%	22148	39.3%	12.9%
Travel booking[5]	18077	29.3%	11167	19.8%	61.9%
Group buying	14067	22.8%	8327	14.8%	68.9%
Forum/bbs	12046	19.5%	14925	26.5%	-19.3%

[4]Online news: No survey on the users of online news was made in December 2012, and the data here were collected in June 2013.
[5]Travel booking: The online travel booking in this report is defined as the online booking of air tickets, hotels, train tickets or travels in the past six months.

(I) Acquisition of Information

1. Search engine

The number of search engine users in China had reached 490 million by the end of December 2013, representing a growth of 38.56 million, or 8.5%, compared with the end of 2012, and the utilization ratio was 79.3%.

As one of the basic services of the Internet, the search engine industry has become mature, but changes still exist in the industry: at the industry level, search engine enterprises have sped up integration among themselves, and increased their competitiveness through merger, acquisition or share holding, etc.; at the enterprise level, the growth of mobile Internet users has resulted in more fierce competition for the mobile-end entrance; at the technology level, the technologies based on such search forms as natural language, voice, photos, and two-dimension codes are developing. With the whole search industry in the mature stage, the sustainable development of search engines in the future will also depend on the search result safety and user trust.

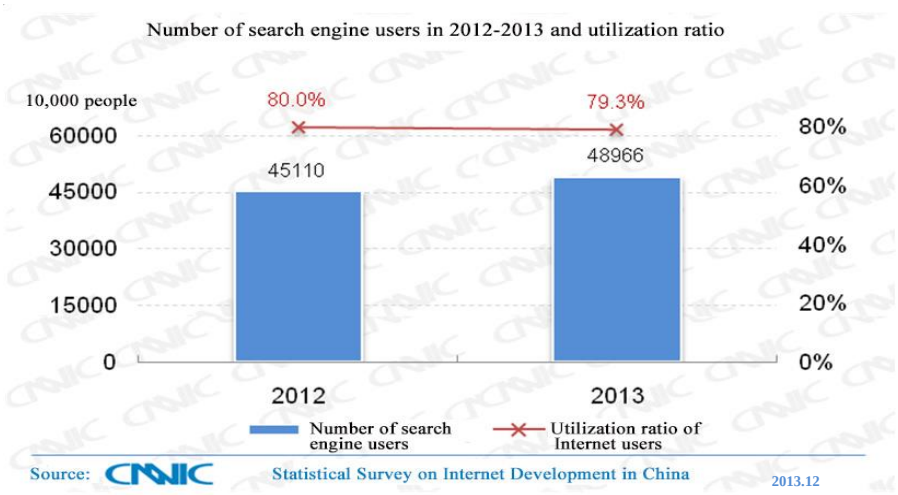


Figure 23 Number of users and utilization ratio of search engines from 2012 to 2013

(II) Business Transactions

1. Online shopping

By the end of December 2013, China has had a total of 302 million online shoppers, a growth of 59.87 million, or 24.7%, over the previous year, and the utilization ratio rose from

42.9% to 48.9%.

The growth of online shoppers in 2013 is attributed to the following three factors: Firstly, E-business enterprises have shifted from being "price driven" to being "service driven", and from pure price war to service competition, which has improved the consumption experience of online shopping. Secondly, the optimization of the whole application environment, such as improvement of the Internet security environment, and development of mobile payment and price comparison search, has provided more convenient conditions for online shopping. Finally, the laws and regulations concerning online shopping are being perfected. The government sped up the legislation process for the Internet retail market in 2013. The new edition of Law on Protection of the Rights and Interests of Consumers has included personal information protection and responsibility tracing related to online shopping, which has protected the basic rights and interests of consumers for online shopping.

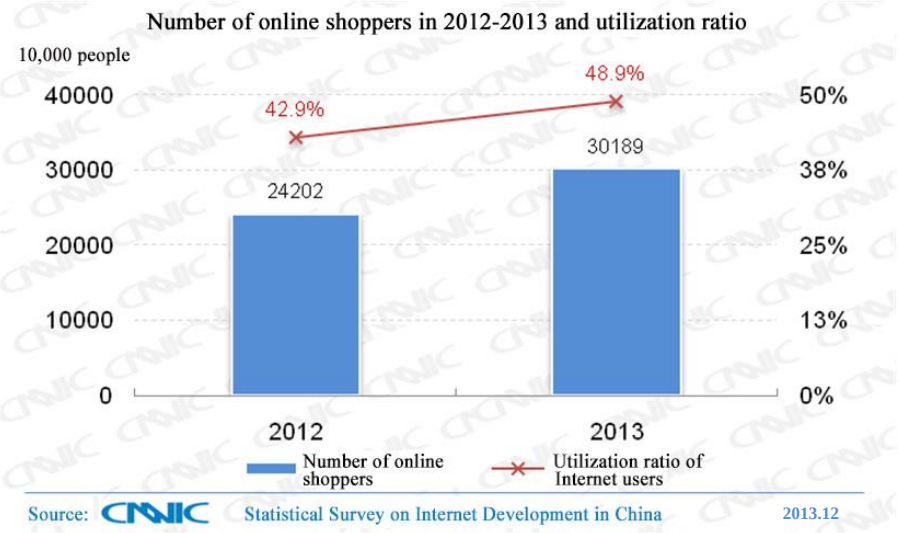


Figure 24 Number of users and utilization ratio of online shopping from 2012 to 2013

2. Group Buying

Group buying has become the most rapidly growing network application. The number of Internet-based group shoppers had reached 141 million by the end of December 2013, a year-on-year increase of 68.9%, and the utilization ratio increased to 22.8%, a year-on-year increase of 8 percentage points.

The rapid development of mobile ends has boosted the rapid growth of group buying, and the utilization ratio of mobile group buying has risen from 4.6% at the end of 2012 to 16.3%. The

local living services, as represented by group buying, have deeply tallied with such functions as mobile phone positioning. In 2013, the group buying service was further integrated with maps, travel, information service for living and other fields at the mobile phone ends, and rapidly penetrated into Internet users, and the entire industry was also developing in depth and breadth towards the offline living services.

Group buying has returned to a rational development path after undergoing an eruptive growth in the industry. On the one hand, professional group buying websites have increased their operation efficiency through product positioning and personnel optimization, including such measures as selection of high-yield products, improvement of service quality and improvement of trust, which has greatly increased users' willingness to use. On the other hand, E-business platforms such as online shopping and travel-booking platforms have introduced and attached importance to group buying, which has further boosted the development of the group buying industry, thanks to the advantages of platform enterprises in user size and trust.

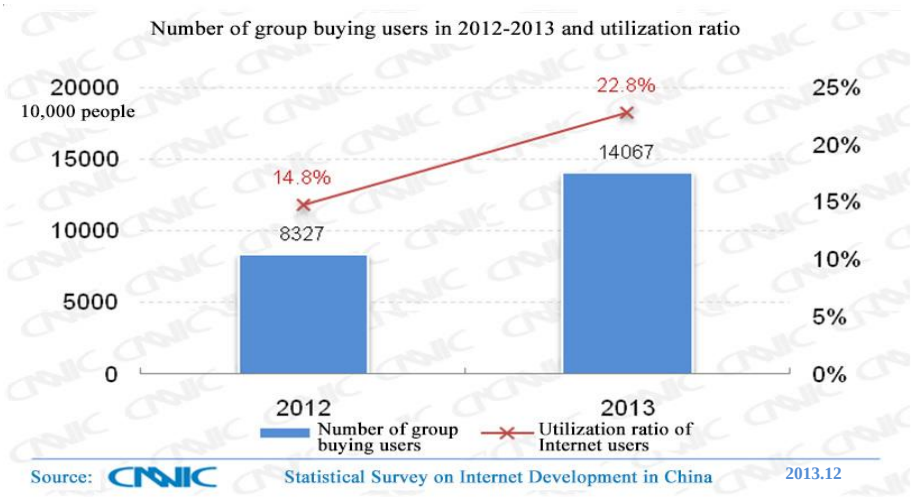


Figure 23 Number of users and utilization ratio of group buying from 2012 to 2013

3. Online Payment

The number of users of online payment had reached 260 million by the end of December 2013, representing a growth of 39.55 million, or 17.9%, with the utilization ratio increased to 42.1%.

The rapid growth of online payment users is mainly attributed to the following three factors: Firstly, the growth of Internet users in the Internet-based business application has directly boosted

the development of online payment. Secondly, a number of platforms have introduced the payment function, which has expanded the payment channels. Thirdly, the offline economy and online payment have been better combined, which has caused the change of way of payment by users. For example, AliPay is used to pay taxi fares.

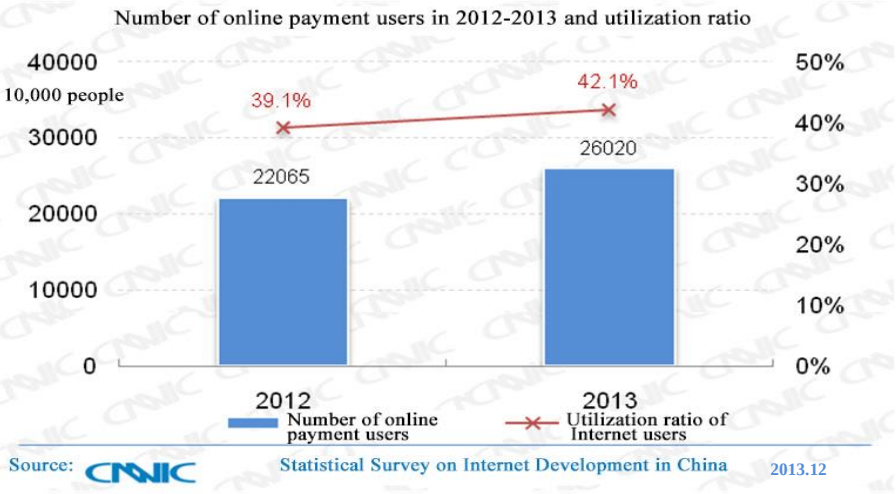


Figure 26 Number of users and utilization ratio of online payment from 2012 to 2013

4. Travel booking [6]

The number of Internet users that had booked air tickets, hotel rooms, train tickets and travel itinerary on the Internet had reached 181 million by the end of December 2013, representing a growth of 69.1 million, or 61.9%, with the utilization ratio increased to 29.3%. In 2013, the Internet users who booked train tickets, air tickets, hotels and travels online accounted for 24.6%, 12.1%, 10.2% and 6.3% respectively. The users who booked train tickets online grew the fastest by 10.6 percentage points, becoming the main contributors to the growth of online travel booking users.

[6]The online travel booking in this report is defined as the online booking of air tickets, hotels, train tickets or travels in the past six months.

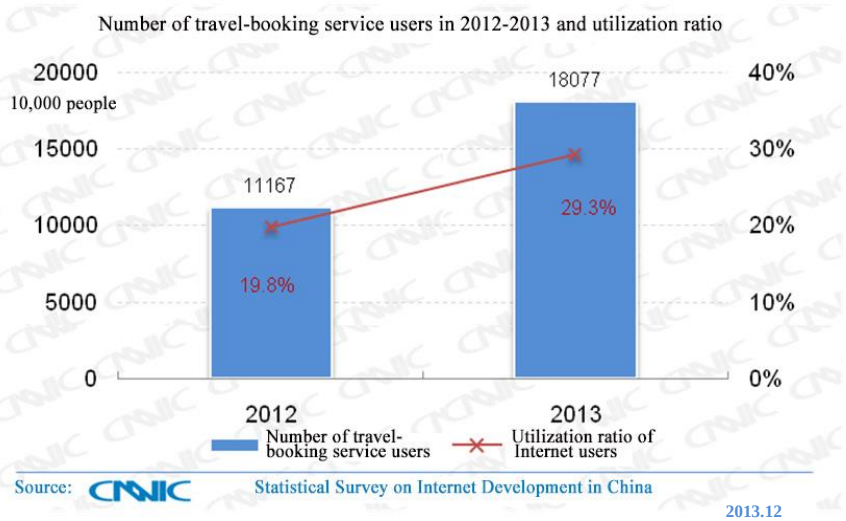


Figure 27 Number of users and utilization ratio of travel booking from 2012 to 2013

The growth of online travel booking users is mainly attributed to the following four factors: Firstly, it is the connected effect of the national economy and travel demand. Studies have shown that when the Per Capital GDP reaches 5000 U.S. dollars, the tourism industry has stepped into the mature tourist economy. In 2012, China achieved a Per Capital GDP of more than 6000 U.S. dollars, and had entered a diversified development stage featured by sightseeing, leisure and vacation. The travel booking demands of residents were fully released. Secondly, rich information on scenic spots on the travel booking websites, practicability of travel strategies provided by media, as well as convenience of payment have greatly improved the user experience in online travel booking. Thirdly, further utilization of the Internet by users, marketing and promotion by enterprises, and rich mobile APP have facilitated offline booking [7] users to progressively shift to online booking.

[7] Offline travel booking: It is a way of travel booking mainly relying on the telephone and physical store.

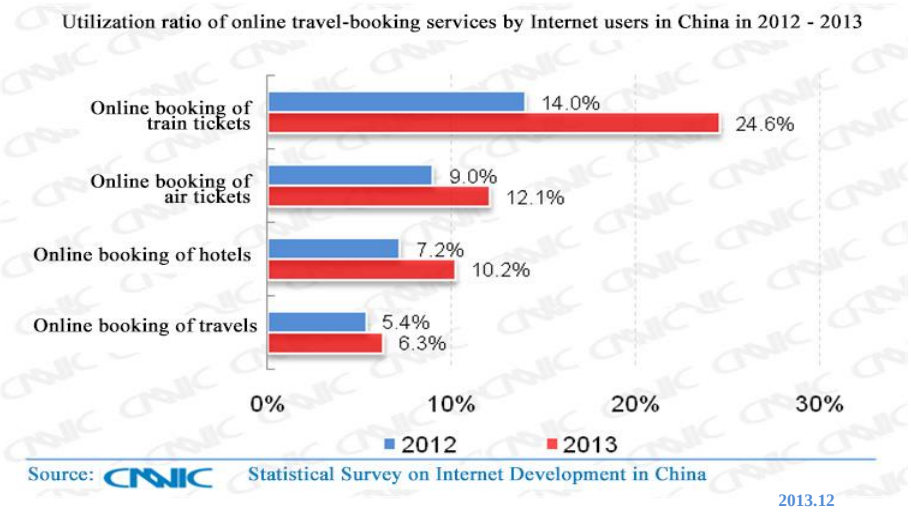


Figure 28 Utilization Ratios of Travel Booking Services of China's Internet Users from 2012 to 2013

(III) Communication

1. Instant Messaging

The number of instant messaging users in China had reached 532 million by the end of December 2013, representing a growth of 64.4 million, or 13.8%, compared with the end of 2012. The utilization ratio of instant messaging was 86.2%, up by 3.3 percentage points over the end of 2012 and ranking the first. As one of the most fundamental applications for Internet users, instant messaging has limited space for direct creation of commercial values, and is focused on the development of value-added services.

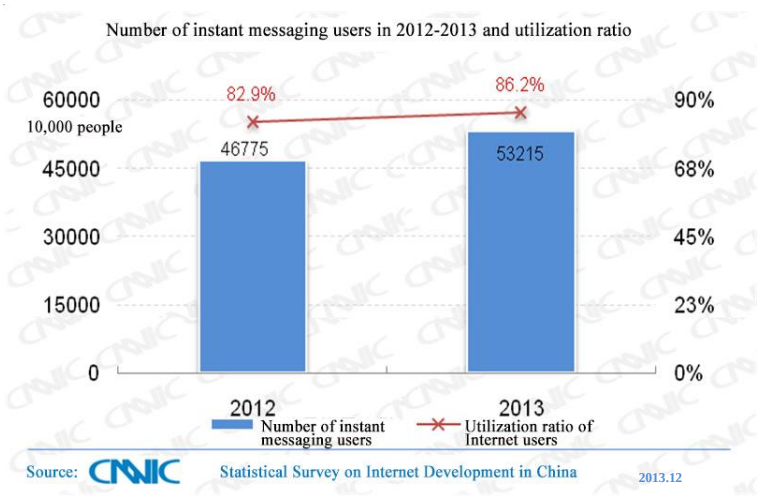


Figure 29 Number of users and utilization ratio of instant messaging from 2012 to 2013

2. Blog/Personal Space

The number of users of blog and personal space had reached 437 million by the end of December 2013, representing an increase of 63.59 million over the end of 2012. 70.7% of the Internet users used blog and personal space, up by 4.6 percentage points compared with that at the end of 2012. Blog users had accounted for 14.2% of the Internet users by the end of 2013, a decrease of 10.6 percentage points from the end of 2012, and both the user size and user activitiy kept declining. According to the CNNIC Internet data platform (www.cnidp.cn), the number of blog visits decreased by 27.2% from the previous year, and the total browsed web pages declined by 22.3% in the second half of 2013.

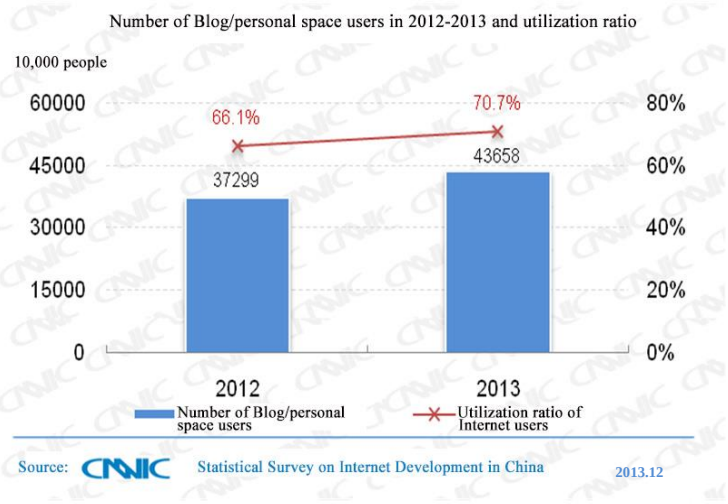


Figure 30 Number of users and utilization ratio of blog/personal space from 2012 to 2013

3. Microblog

In 2013, there was a turning point in the Microblog development, and both the user size and utilization ratio dropped by a large margin. By the end of December 2013, the number of Microblog users had reached 281 million, representing a decrease of 27.83 million, or 9.0%, from the end of 2012. The utilization ratio of Internet users using Microblog reached 45.5%, down by 9.2 percentage points from the end of the previous year. The Microblog development is not optimistic: on the one hand, commercialization based on social networks is not satisfactory with limited profitability; on the other hand, the impact of the competitors has resulted in decreased Microblog users.

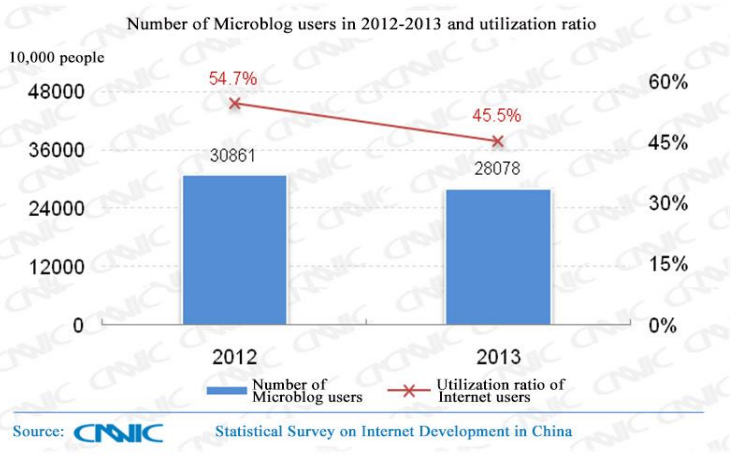


Figure 31 Number of users and utilization ratio of Microblog from 2012 to 2013

4. Social networking websites

The number of users of social networking websites had reached 278 million by the end of December 2013, and the utilization ratio was 45.0%, down by 3.8 percentage points from the end of 2012. Though users' utilization ratio of social networking sites has dropped in recent years, the social elements have become the basic elements of the Internet applications. For example, online shopping, games and videos have introduced social elements one after another to boost their development.

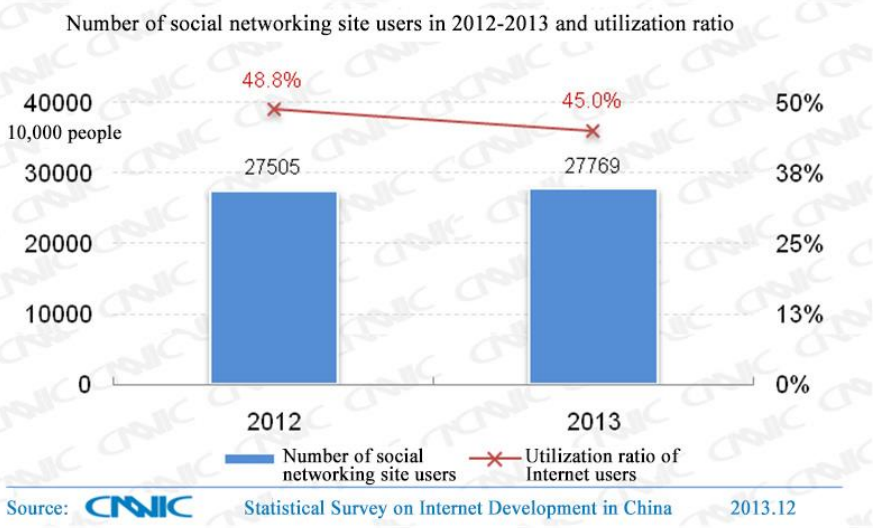


Figure 32 Number of users and utilization ratio of social networking websites from 2012 to 2013

(IV) Online Entertainment

1. Online Games

By the end of December 2013, China has had a total of 338 million online game users, and the utilization ratio dropped from 59.5% in 2012 to 54.7%. The growth of online game users was only 2.34 million compared with that of the previous year, showing a limited space of growth. However, different from the overall size of online game users, the mobile online game users have shown a trend of rapid growth, which indicates that the users in the online game industry have further shifted to the mobile ends.

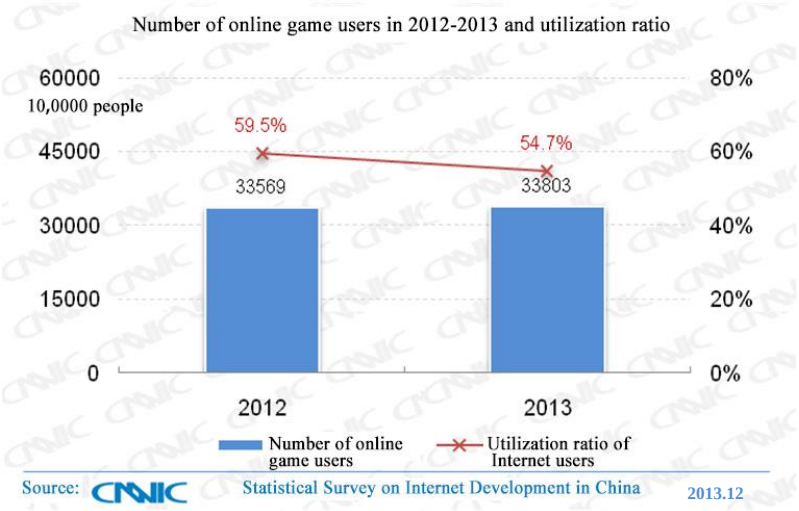


Figure 33 Number of users and utilization ratio of online games from 2012 to 2013

2. Online Literature

The number of online literature users in China had reached 274 million by the end of December 2013, representing a growth of 40.97 million, or 17.6%, over the end of 2012. The utilization ratio of online literature was 44.4%, up by 3 percentage points over the end of 2012.

Gradual improvement of the development environment for online literature is attributed to two factors: on the one hand, more efforts have been put into copyright protection to promote the healthy development of the online literature industry. The policy provisions of the Third Plenary Session of the Eighteenth Central Committee of the CPC have laid stress on protection of intellectual property rights and copyrights, and put more efforts to combat piracy against online literature, which helps increase the profitability of enterprises with genuine online literature. On the other hand, people's acceptance of online literature has increased the value of the online literature works and thus increased the profitability of online literature. The mode of profit making has further covered such industries as games, cartoons, film and television from the mode

of user payment and offline publication in the early stage.

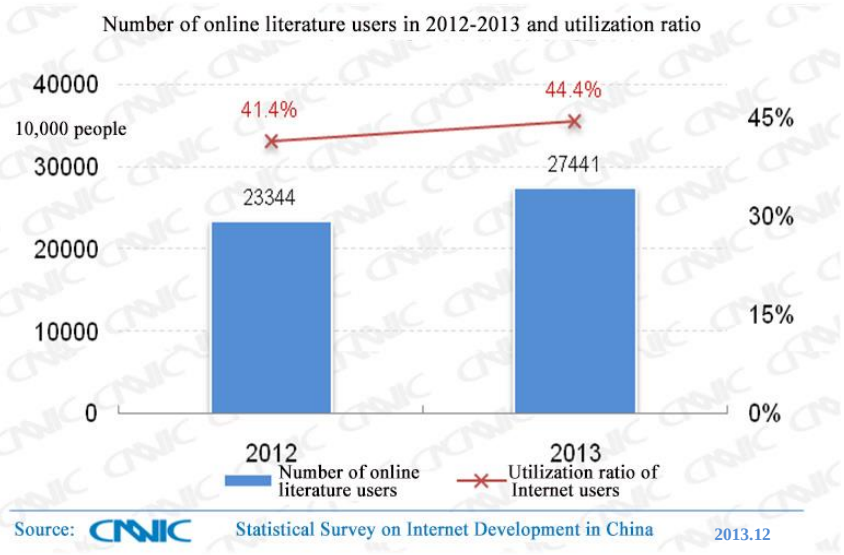


Figure 34 Number of users and utilization ratio of online literature from 2012 to 2013

3. Online Video

The number of online video users in China had reached 428 million by the end of December 2013, representing a growth of 56.37 million, or 15.2%, over the end of the previous year. The utilization ratio of online video was 69.3%, up by 3.4 percentage points over the end of the previous year.

Online video users continue to show a trend of rapid growth, which is attributed to the improvement of the following aspects: Firstly, the network construction and video devices have provided better service conditions for online video. Secondly, online video has richer content and attracts more Internet users to watch video online. Finally, the deep cooperation between online video and traditional TV media has boosted the consumption of online video.

In 2013, great changes took place in the online video industry in China. At the strategy level, video websites put more efforts in merger, acquisition and integration, and multi-industry, online and offline integration occurred, keeping changing the layout of the online video industry. At the product level, video enterprises not only optimized and upgraded their PC-end and mobile-end products, but also strengthened their businesses related to living room entertainment, and launched such hardware products as set-top box, router and Internet TV related to online video, in

an attempt to win the "scrabble for living room". At the website content level, many video enterprises on the one hand strengthened development of self-made plays in order to reduce the copyright purchase costs and minimize losses, and on the other hand bought more offline hot plays in order to attract new customers and increase the advertising income.

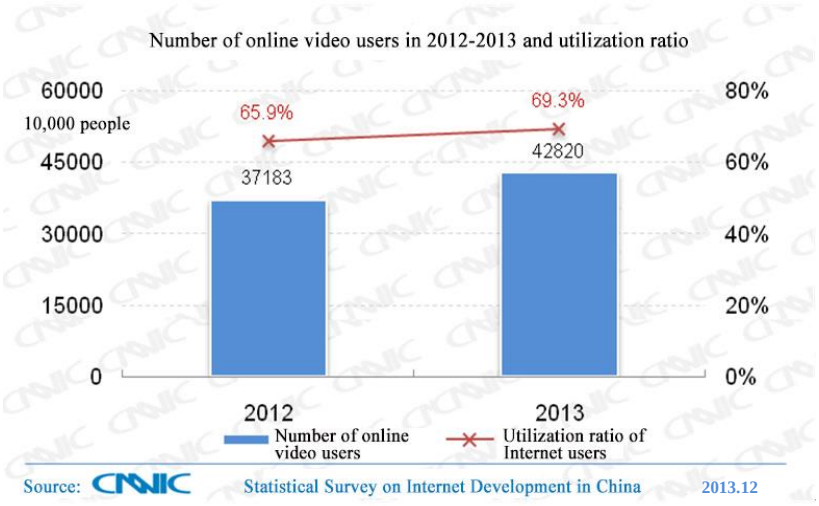


Figure 35 Number of users and utilization ratio of online video from 2012 to 2013

II. Application of Mobile Phone Internet Users

In 2013, the overall mobile internet industry in China maintained a strong momentum of development, the features of mobile terminals were further reflected, and application development in the industry showed new features. Specifically, communication applications are still the mainstream mobile applications, and ranked the first among all applications in terms of user size and utilization ratio, but the users of mobile instant messaging accounted for the vast majority, and the utilization ratio of Microblog, social networking sites and forums dropped to some extent. Leisure and entertainment applications developed rapidly, and the users of mobile game, mobile video and mobile music grew by a large margin with a good momentum of growth. Mobile e-business applications had relatively low penetration, but the utilization ratio of all applications in the field showed a rapid growth.

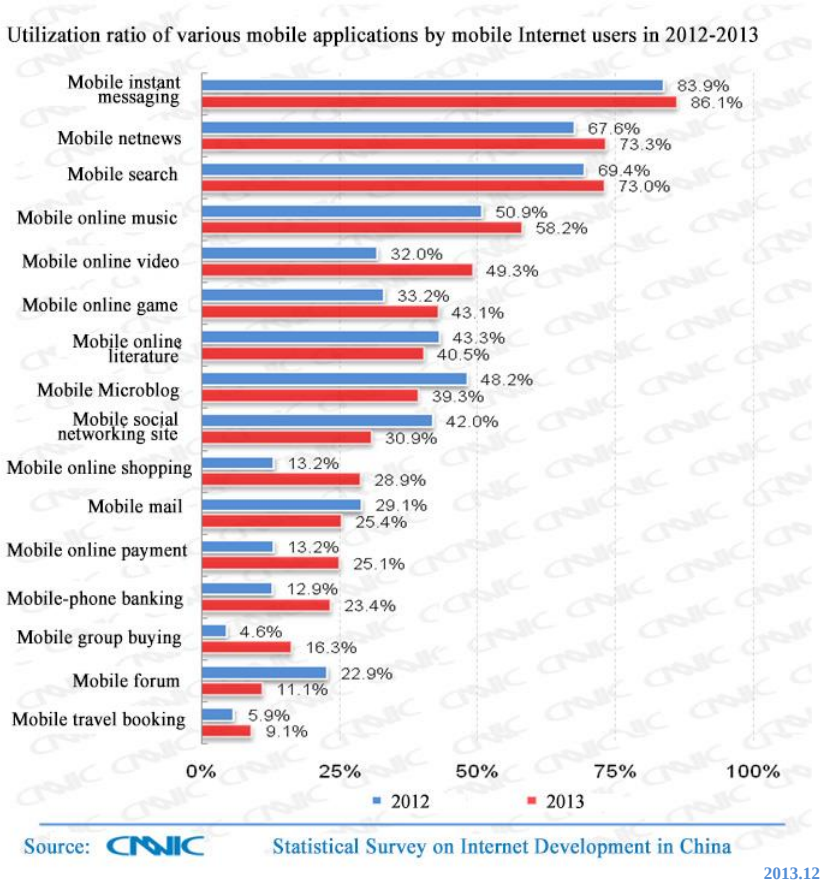


Figure 36 Applications of Mobile Phone Internet Users from December 2012 to 2013[8]

Mobile instant messaging maintained rapid development, with fiercer competition among manufacturers

The number of users of mobile instant messaging had reached 431 million by the end of December 2013, representing a growth of 78.64 million, or 22.3%, over the end of 2012. The utilization ratio of mobile instant messaging was 86.1%, up by 2.2 percentage points over the end of 2012.

With its service features closely combined with the mobile phone features, mobile instant messaging developed rapidly. Internal analysis shows that compared with the PC end, it is more difficult to develop small and medium-sized mobile instant messaging tools. This is because on the one hand, the limited mobile phone features have resulted in limited development of value-added services, on the other hand, those instant messaging tools ranking the top have greatly increased the user stickiness through combination of online and offline services and

[8]No survey was conducted on the users of mobile online news in December 2012. The data here are from the survey conducted in June 2013.

applications, and the platform competition barrier has been created.

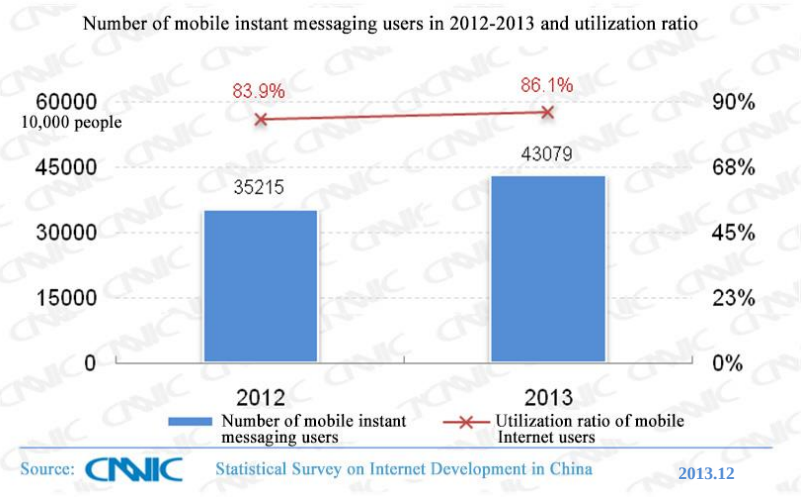


Figure 37 Number of users and utilization ratio of mobile phone instant messaging from 2012 to 2013

Mobile search grew rapidly, becoming the focus of competition among enterprises

The number of mobile search users in China had reached 365 million by the end of December 2013, representing a growth of 73.65 million, or 25.3%, over the end of 2012. The utilization ratio was 73.0%, up by 3.6 percentage points over the end of 2012. With the rapid growth of mobile internet, some search behaviors of Internet users have shifted from the PC end to the mobile end.

The mobile-end search behaviors of Internet users differ from the PC-end ones. In terms of the search pattern, mobile search has more diversified input modes, such as voice and two-dimension code scanning in addition to text input, and its utilization ratio increases rapidly. In terms of the search content, users have greater demands for searching local information related to living, services and applications at the mobile end, and mobile search has become one of the important channels of application distribution.

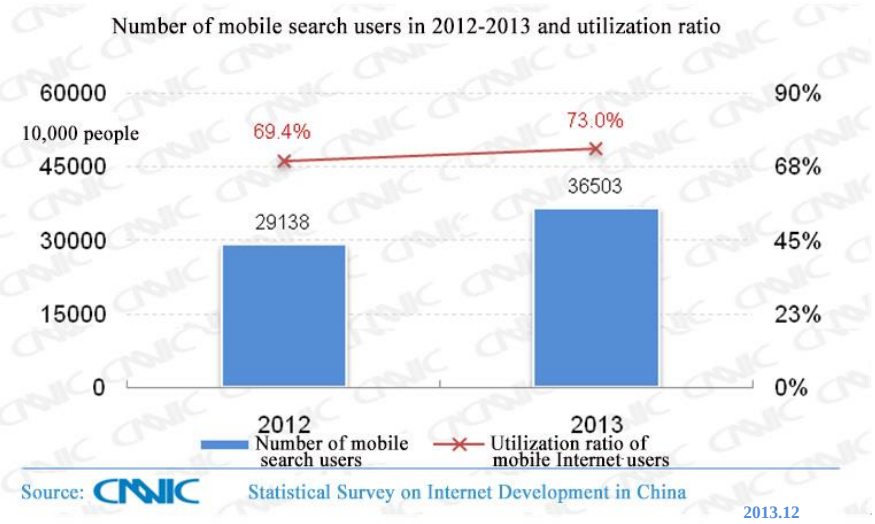


Figure 38 Number of users and utilization ratio of mobile phone search from 2012 to 2013

Mobile Microblog users decreased, and users' enthusiasm dropped

At the end of December 2013, the number of Microblog users was 196 million, representing a decrease of 5.96 million, or 2.9%, from the end of 2012. The utilization ratio of mobile Microblog was 39.3%, down by 8.9 percentage points from the end of 2012.Because mobile-end applications have strong exclusivity of use, the rapid development of similar platform-based mobile instant messaging and the highly overlapped functions of Microblog have diverted some of the mobile Microblog users.

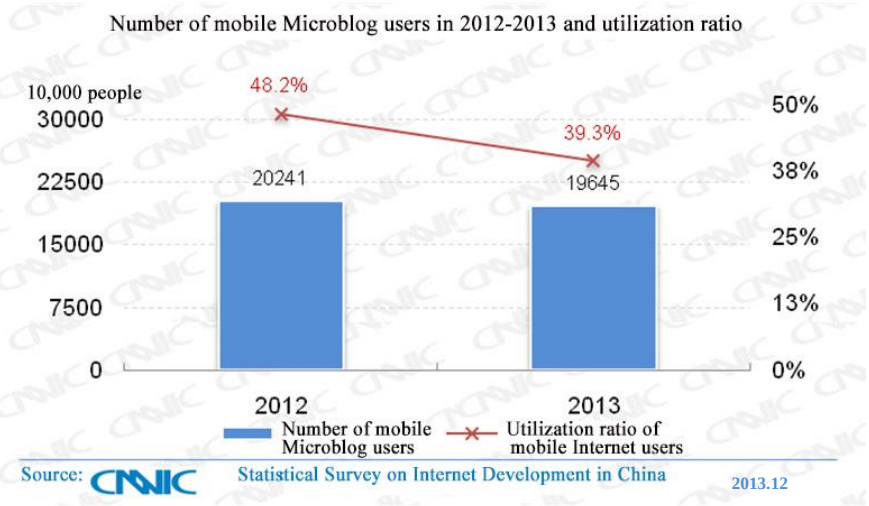


Figure 39 Number of users and utilization ratio of mobile phone Microblog from 2012 to 2013

Mobile video grew rapidly, becoming the fifth biggest application of mobile internet

The mobile video users reached 247 million in China by the end of December 2013, an

increase of 112 million, or 83.8%, over the end of 2012. The utilization ratio by Internet users reached 49.3%, up by 17.3 percentage points over the end of 2012.

The rapid growth of mobile video is attributed to three factors. Firstly, the overall Internet use behavior of Internet users is shifting towards the mobile end, and the huge size of mobile Internet users has laid a user foundation for the use of mobile video. Secondly, the use environment of mobile video is improving. For example, the development of smart phones, increase of the Wi-Fi utilization ratio and launch of the 4G network in the future are all the stimulators of the mobile video growth. Finally, the great promotion efforts by video manufacturers at the client side have increased Internet users' awareness of mobile video, attracting more Internet users to use mobile video.

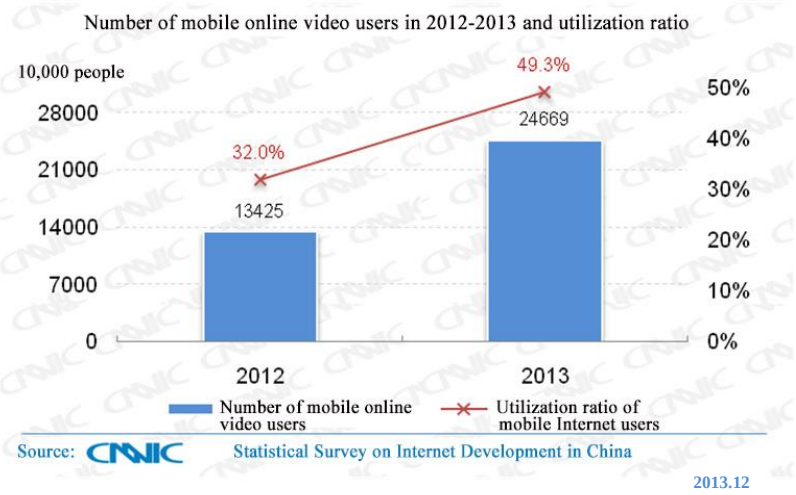


Figure 40 Number of users and utilization ratio of mobile phone online video from 2012 to 2013

Mobile online games achieved an eruptive growth, with user transfer speeding up

The number of mobile online game users in China had reached 215 million by the end of December 2013, representing a growth of 75.94 million, or 54.5%, over the end of 2012. The utilization ratio of mobile online games was 43.1%, up by 9.9 percentage points over the end of 2012.

In 2013, the mobile online game users achieved an eruptive growth, thanks to a number of factors. Firstly, games are one of the primary needs in people's daily life. With the rapid popularization of smart phones and speedy construction of networks, game demands are shifting from the PC end to the mobile end. Secondly, mobile online games have the strongest cashability. Therefore, games are promoted in the mobile instant messaging, social applications, and

distribution channels, etc., which has boosted the growth of mobile online game users. Finally, mobile online games are featured by low threshold of use and playtime fragmentation, supplementing PC-end games and satisfying users' needs.

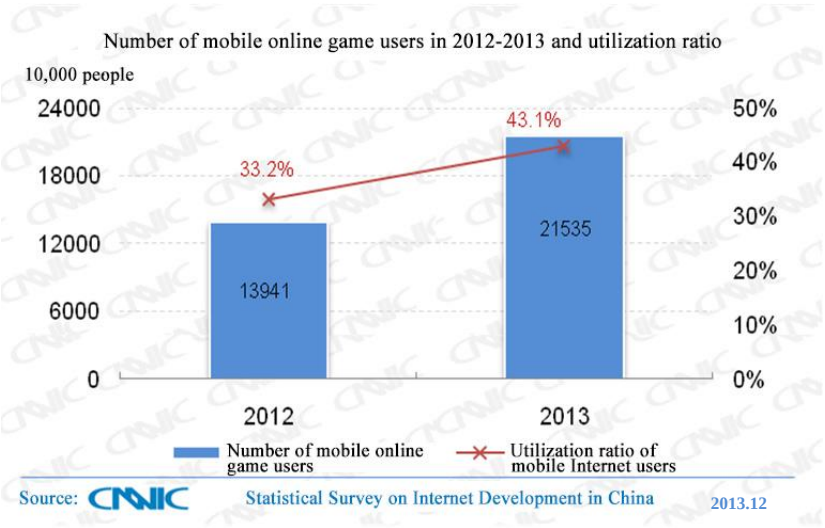


Figure 41 Number of users and utilization ratio of mobile phone online games from 2012 to 2013

Mobile business manifests huge potential, with rapidly increasing utilization

In 2013, the huge market potential broke out in the mobile business market. Mobile online shopping developed rapidly in the mobile-end business market, with a user size reaching 144 million. As a supplement to the PC-end online shopping channel, mobile online shopping had a rapidly increasing user size, which is attributed to the following three factors: Firstly, mobile phones' unique function (code scanning, photo scanning, etc.) and convenience of use have increased the decision-making efficiency of users during shopping. Secondly, the great promotion efforts by E-business enterprises at the mobile end have boosted online shopping by mobile phone users to some extent. Thirdly, mobile phones' unique localized e-business has expanded the mobile-end shopping channels for users.

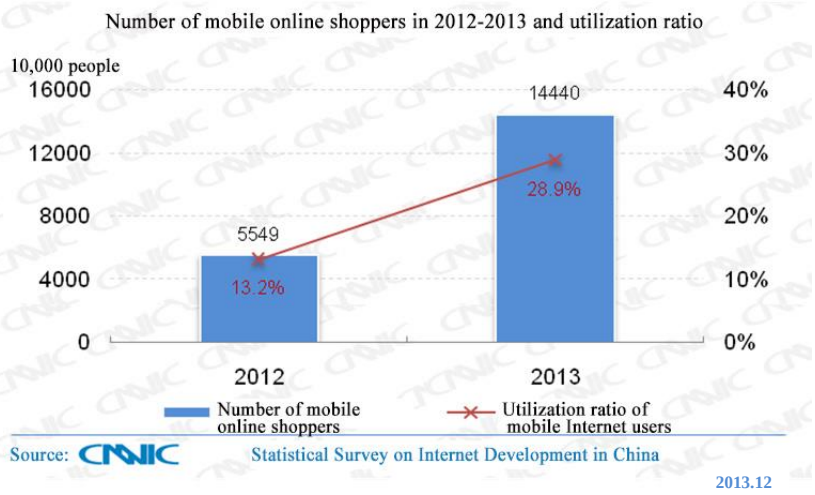


Figure 42 Number of users and utilization ratio of mobile phone online shopping from 2012 to 2013

In 2013, mobile online payment grew rapidly, with a user size of 125 million and a utilization ratio of 25.1%, up by 11.9 percentage points over the end of last year.

The rapid development of mobile online payment is mainly attributed to the following three factors: the rapid growth of mobile Internet users has laid a user foundation for mobile online payment; the development of mobile electronic business has boosted the growth of mobile-end payment; it is a combined promotion effect of the rapid development of mobile internet and mobile business applications, and the active deployment by each industry chain party related to mobile payment. New technologies such as NFC and bluetooth Key will further boost the development of payment applications with the mobile phone as the carrier.

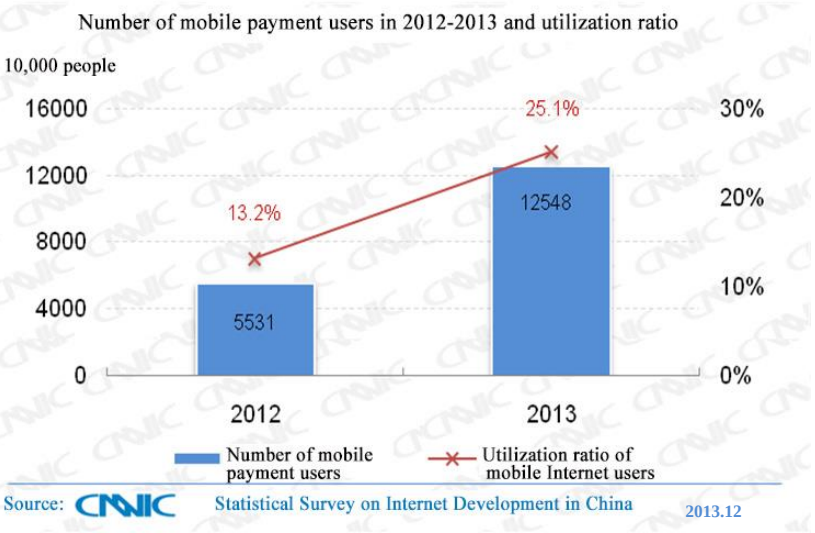


Figure 43 Number of users and utilization ratio of mobile phone payment from 2012 to 2013

Chapter V Interpretation of Internet Behaviors of Internet Users

I. Search Engine: Searched Products, Segment Markets and Terminal Devices Change Users' Search Habits

In 2013, the search industry in China showed a trend of diversified development. New search engine enterprises and existing search engine enterprises competed fiercely with each other, while the increasingly segmented search market and the terminal devices with improving performance were changing users' search habits. The *Research Report on Search Behaviors of Internet Users in China in 2013* by CNNIC shows that in 2013, the comprehensive search engine was still the most fundamental search tool of Internet users, and 98.0% of the Internet users used the comprehensive search websites in the past six months.

1. A semi-closed loop is taking shape in the search engine industry in China

The semi-closed loop status in the search engine industry means that some of the search results of the search engine point to the self-related content instead of the resources of external websites. With fiercer competition in the search engine industry, search engine websites are speeding up development of relevant content. Meanwhile, they utilize the advantages of their search engines to import flow in order to expand their business scale, increase the entry barrier and achieved competitive advantages.

The semi-closed loop status in the search engine industry has the following features. Firstly, search engine enterprises utilize their own advantages to develop search-result-based products. At present, search engine enterprises have launched such products as Encyclopedia, I Know, Library, Experience, Q&A, and Mapping Knowledge Domain, which transfer users directly to these products after search to find what they need. Secondly, search engine enterprises develop vertical

products, and utilize search engines to import flow. Of the major search engine enterprises, many have launched such products as Music Channel, Map Channel, Reading Channel, Travel Channel, Application Channel, Game Channel, Post Bar, Space, Software, Shopping, and Material, and got a high market share by relying on their diversion advantages of the search engines. Thirdly, enterprises expand the coverage of their closed loop business through merger, acquisition or holding shares of other vertical industries. Major search engines have merged a number of websites in succession, covering such industries as website navigation, online travel, application distribution, music, video and literature, and relied on their own search force to import flow and to achieve win-win.

The semi-closed loop status in the search engine industry is attributed to three factors. Firstly, expanding the scope of business so as to increase the business size is the leading cause. Search engines have strong flow cashability, but limited scale. For further development, enterprises should extend to other vertical industries properly to deploy new business if their conditions allow, which is quite necessary. Secondly, demands of searching users are also an important cause. The main purpose of a search engine is to help users find the information they need. The search results relying on grabbing the webpage content of other websites can hardly meet the needs of Internet users. Therefore, manual sorting and edition are required so that searching users can find what they need more quickly. Finally, industrial competition is also an important cause. Perfecting products, preventing products from being grabbed by other search engines and increasing the industrial entry barrier are one of the important impetuses for search engines to develop their own products.

2. Mobile search has increasingly diversified input modes, with two-dimension code scanning as important search entries

According to Market Research Report on Search Engine in China in 2013 issued by CNNIC, the input modes used by Internet users for mobile search in 2013 had obvious changes compared with 2012, which is reflected in the great increase of the Internet users who used two-dimension code scanning and voice input for search. Specifically, the mobile Internet users who used two-dimension code scanning for search rose from 7.9% to 25.1%, up by 17.2 percentage points,

and the mobile Internet users who used voice input for search rose from 12.7% to 22.1%, up by 9.4 percentage points. In 2013, some input methods integrated voice and two-dimension code scanning, and many APP such as instant messaging and Microblog also integrated these input functions. All these have driven Internet users to use these new input modes, and use them for search as well.

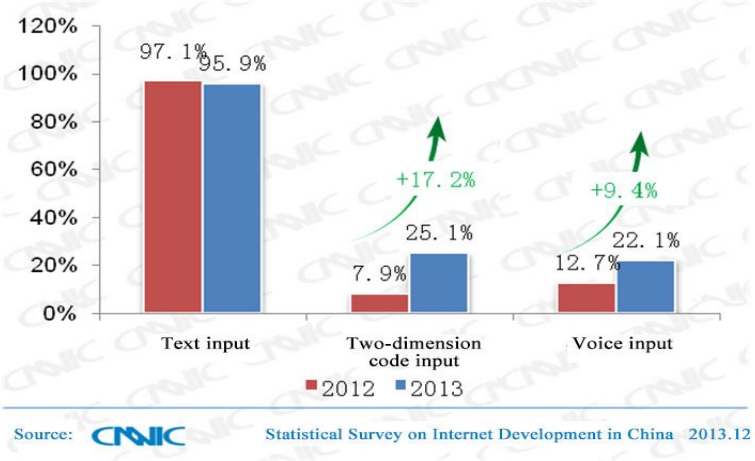


Figure 45 Input modes for mobile search

3. Differences in the way of search between mobile-end and PC-end Internet users

a) **Search scenario difference:**

According to Research Report on Search Behaviors of Internet Users in China in 2013 by CNNIC and by comparing the computer search and mobile search, the first reason of using computers for search is "to get information related to work and study", and the second reason is "to get information that I am interested in". For mobile search, however, the first reason is "to get the information I am interested in". Users mainly use their fragmented time for mobile search. Therefore, compared to computer search, mobile search is relatively less related to work and study, but more related to living and entertainment.

In addition, users use more mobile search than computer search while they are looking for people/friends around them, mainly because of the unique positioning function of mobile search. Some users often use such function on mobile phones to view their friends around them, resulting in a higher proportion of use of this function.

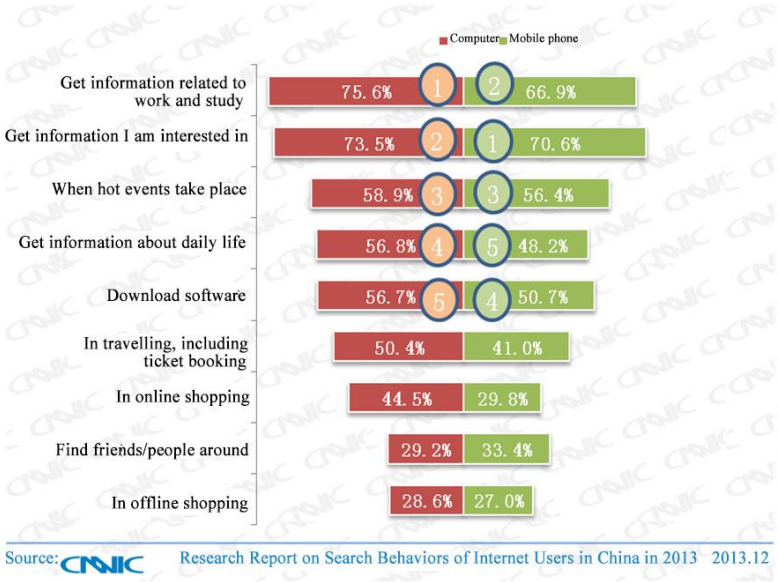


Figure 45 Comparison of search scenarios between PC-end and mobile-end Internet users in 2013

b) **Search content difference:**

According to Research Report on Search Behaviors of Internet Users in China in 2013 by CNNIC, news search ranks the first on both computers and mobile phones, and news is still the most frequently searched content. However, Internet users search more music and video on computers than on mobile phones, mainly because online listening or watching of the searched music and video require much flow and high internet speed.

Internet users search more literary works such as novels on mobile phones than on computers. Literary works can be read on the mobile phones with small screens in the fragmented time, and therefore are popular among mobile Internet users.

It is worth mentioning that though Internet users search more mobile applications on mobile phones than on computers, 28.0% of Internet users still search mobile applications via computers, and directly install such mobile applications from computers with the help of software such as Mobile Phone Assistant.

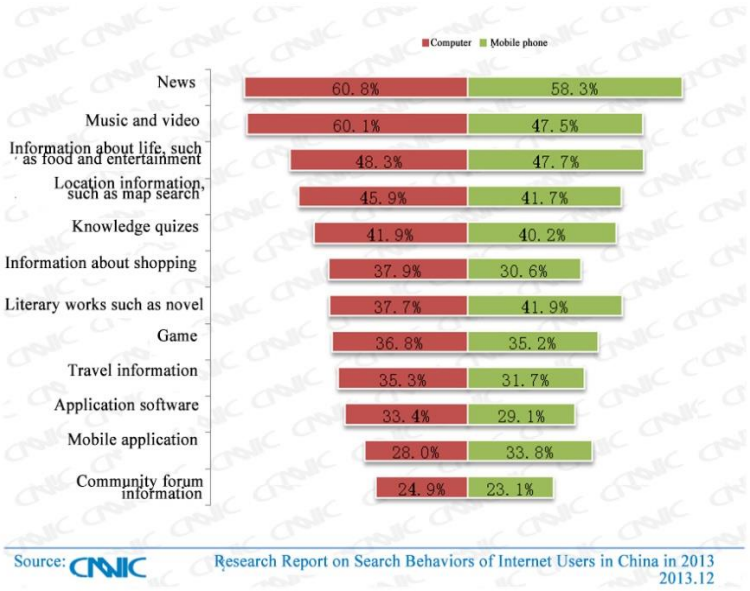


Figure 46 Comparison of searched content between PC-end end and mobile-end Internet users in 2013

4. Reason for mobile Internet users' preference for using a certain search engine

Compared with computer-end search, mobile search has more determining factors for its market share, and more complicated search accesses and channels, making the mobile search competition more open.

On the whole, there are five factors for a certain search engine to become the first choice of users. 1. Habituation. That is, if users use a certain search engine most on computers, they will use the same search engine on mobile phones. 2. Tool diversion. Tools guide users to use a certain search engine. For example, browsers and navigation pages are preinstalled on mobile phones, and some websites have default search engines. 3. Search experience. It refers to the feeling and evaluation of Internet users during use of a search engine in terms of accuracy, safety and convenience. 4. Brand and emotion: It refers to the perception and other emotions related to a certain search engine, such as brand awareness, good reputation, and national sentiments. 5. Knowledge of Internet users and other factors. It includes the network knowledge possessed by Internet users, the frequency of use of search engines by Internet users, etc. Main determinant factors are shown in the following figure:

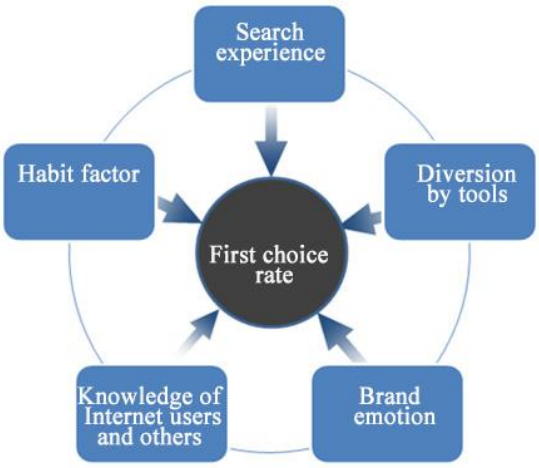


Figure 3 General factors of being rated as first-choice websites by mobile Internet users

According to Market Research Report on Search Engine in China in 2013 by CNNIC, the decisive factors for a search engine to become the first choice of Internet users on mobile phones are as follows. Firstly, the computer-end brand selection has the biggest impact on the mobile-end selection, and 74.3% of mobile Internet users gave the answer "It is the extension of my habits on computers, and I have got used to it". The second factor is the search experience, including high search matching rate, good operation experience, quick search speed, high security, and few advertisements, with a selection ratio of above 44%. The third factor is tool diversion, including browsers, pre-installation on mobile phones, search boxes provided by navigation websites, with a selection ratio of above 40%. Finally, corporate image and brand awareness, national sentiments and other factors also have certain impact on the selection of mobile Internet users.

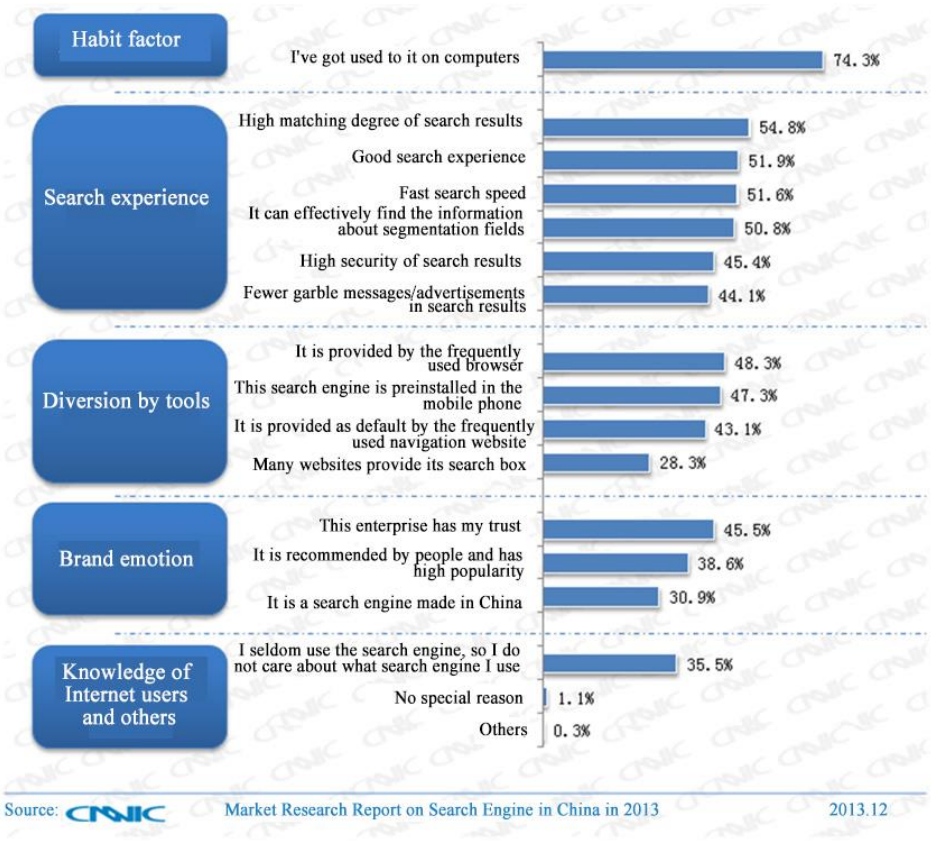


Figure 4 Specific factors of being rated as first-choice websites by mobile Internet users

Therefore, search engine enterprises should take the following measures to gain a market share at mobile ends: strengthening development of users' use habits on computers, developing front-end tools for search diversion, improving the quality of search engine products, increasing brand influence, and guiding new searching users to use their search engines.

II. Social Networking Sites: User Activeness Declined, and Users Shifted to Other Applications

Social-type applications refer to the Internet applications with social elements, including social networking site (SNS), Microblog and other vertical applications. Social-type applications changed obviously in 2013 in the following aspects: 1. Users' enthusiasm in some traditional social applications declined. 2. New applications with social elements kept coming out, and diverted some Internet users from social networking sites and Microblogs.

1. Numerical interpretation of the structural change of users of social networking sites

The user growth of social networking sites (including social networking sites in a narrow sense and Microblog） has slowed down in recent years. Under the impact of alternative applications and behavior changes of Internet users, many social networking sites are faced with user loss and user structure change. On the whole, there have been more users with declined activeness than users with rising activeness for social networking sites and Microblog over the past year. Social networking sites are losing high-end users, while Microblog's high-end users change very drastically, as detailed below:

User change: more than 1/5 of users have declined activeness, while only 1/10 of users have rising activeness

According to the Behavior Study Report on Users of Social-type Applications in China in 2013 by CNNIC, 23.5% of Internet users have reduced use of social networking sites (including significantly reduced and slightly reduced), while only 12.7% of Internet users have increased use (including significantly increased and slightly increased) over the past one year, with the Internet users with rising activeness less than those with declined activeness. Likewise, 22.8% of Internet users have reduced use of Microblog, while 12.7% of Internet users have increased use of Microblog, with more decreasing users than increasing users. There have been more applications with social elements in recent years. Some Internet users have shifted their social activities to other applications. Furthermore, some Internet users have declined feeling of freshness with the increased hours of use, resulting in the gradual drop of use activeness.

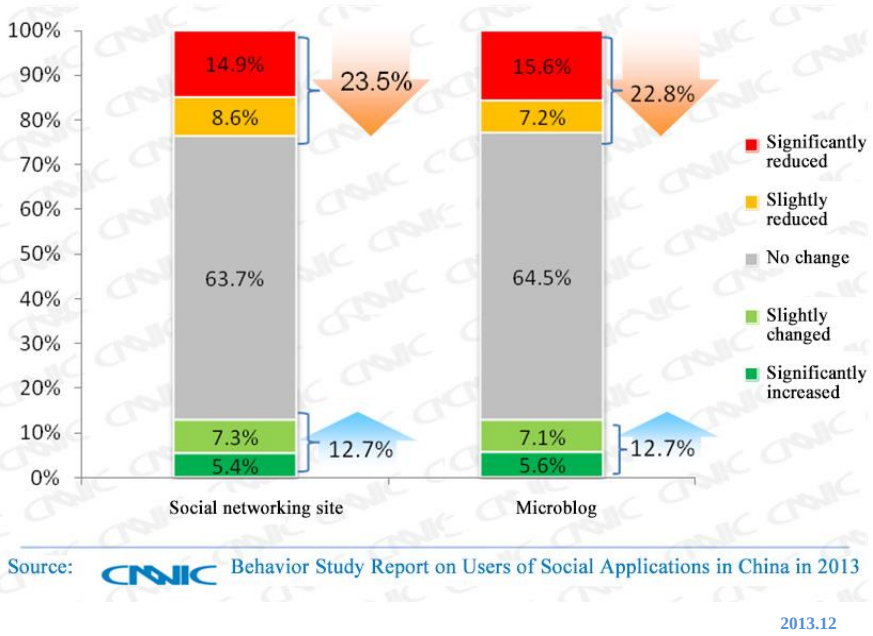


Figure 5 Use change of Internet users of social applications in the past year

Social networking sites: high-level (high-education, high-income）users with declined activeness account for the largest proportion

Judging by the structure of Internet users, the education and income levels of the Internet users of social networking sites tend to decline. The higher the income and education of Internet users are, the less they use social networking sites over the past one year. On the contrary, the lower the income and education of Internet users are, the more they use social networking sites over the past one year. According to the Behavior Study Report on Users of Social-type Applications in China in 2013 by CNNIC, of the Internet users who reduced their use of social networking sites over the past one year, those with a monthly income of above 5000 yuan account for 26.0%, while those with a monthly income of below 3000 yuan account for the smallest proportion (22.0%).

Of the Internet users who reduced their use of social networking sites over the past one year, those with a junior college degree or above account for 25.7%, while those with a senior high school/technical secondary school education background or below account for 21.1%, a relatively low percentage.

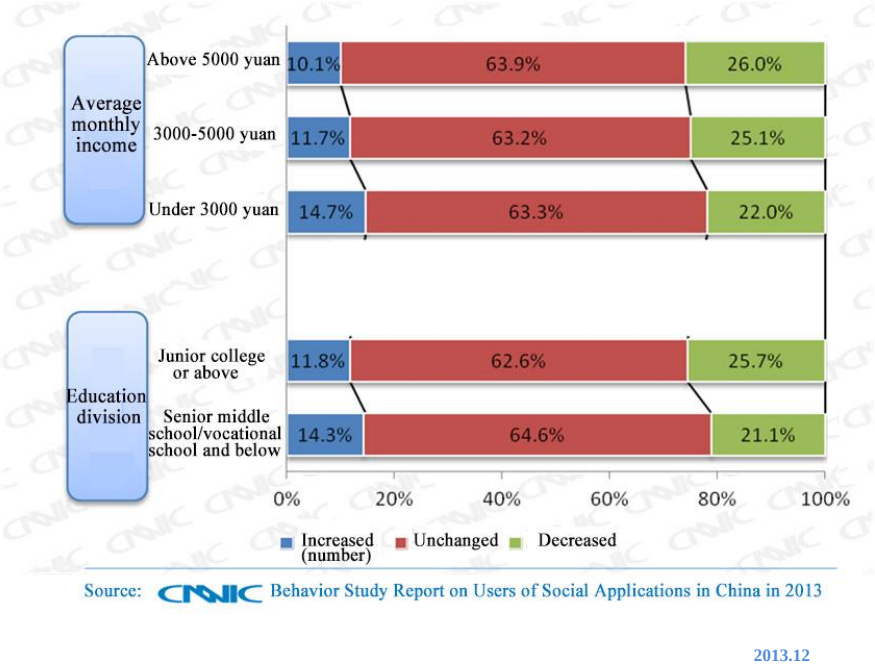


Figure 6 Features of Internet users who changed their use of social networking sites in 2013

Microblog: high-level users have the most drastic change in activeness, with both activeness decrease and activeness increase higher than other population groups

Of all Microblog users, high-level users have a drastic change in use time. These users account for the highest proportion of increased use of Microblog, as well as the highest proportion of decreased use. While attracting some high-education/high-income users to increase their use, Microblog is also losing a big proportion of high-education/high-income users.

According to the Behavior Study Report on Users of Social-type Applications in China in 2013 by CNNIC, of the users with a monthly income above 5000 yuan, 26.1% have reduced use of Microblog while 14.3% have increased use over the past one year, with both percentages higher than those of the Microblog users with other levels of income. In terms of education, of the users with a junior college degree or above, 23.7% have reduced use of Microblog while 13.2% have increased use over the past one year, with both percentages higher than those of the Microblog users with lower levels of education.

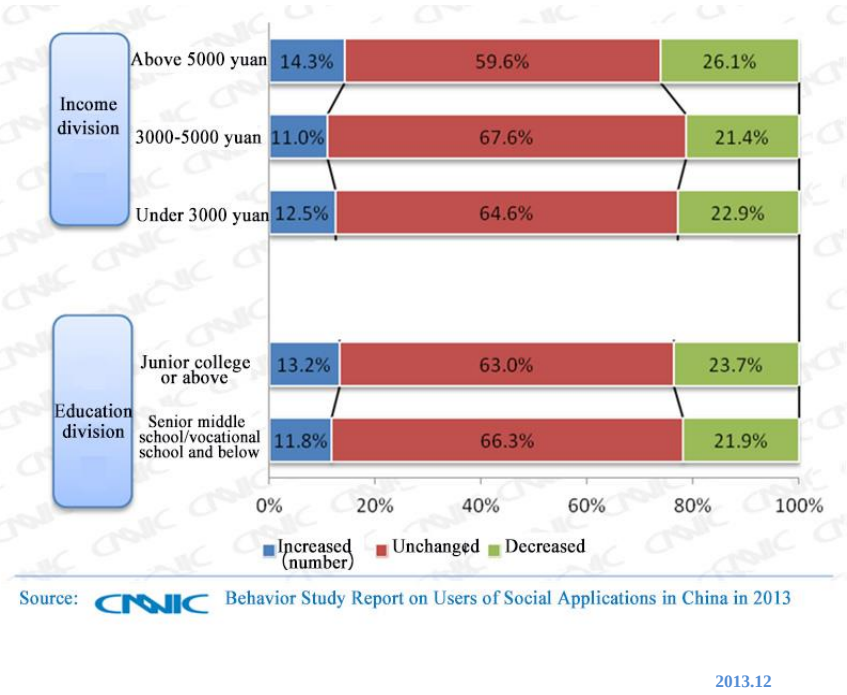


Figure 49 Features of Internet users who changed their use of Microblog in the past year

The user structure change of social networking sites has had certain impact on the operation of the websites themselves and on the selection of media placement by advertisers.

2. Reasons for decreased user activeness of social networking sites

Social networking sites (including those social networking sites in a narrow sense and Microblog） satisfy part of the social needs of modern people, and have become one of the most important platforms on which people socialize and conduct other activities online. However, they are also losing users, with the user activeness declining greatly in recent years. According to the Behavior Study Report on Users of Social Applications in China in 2013 by CNNIC, the following factors have led to the decreased user activeness of social networking sites:

Firstly, "social networking sites are a waste of time" is the leading cause of the decreased activeness of Internet users. For social networking sites, 43.1% of the people with decreased activeness believe that they reduce use because it wastes too much time. This percentage is 40.1% for Microblog. Some users do not consider such applications as necessities, so they reduce use, resulting in decreased activeness.

Secondly, other alternative applications have reduced the hours of use of social networking sites by some Internet users. Of the Internet users who reduce use of social networking sites, 32.6% shift to Wechat, and 20.3% shift to Microblog. Of those who reduce use of Microblog,

37.4% shift to Wechat. In addition, other similar applications are substituting for social applications.

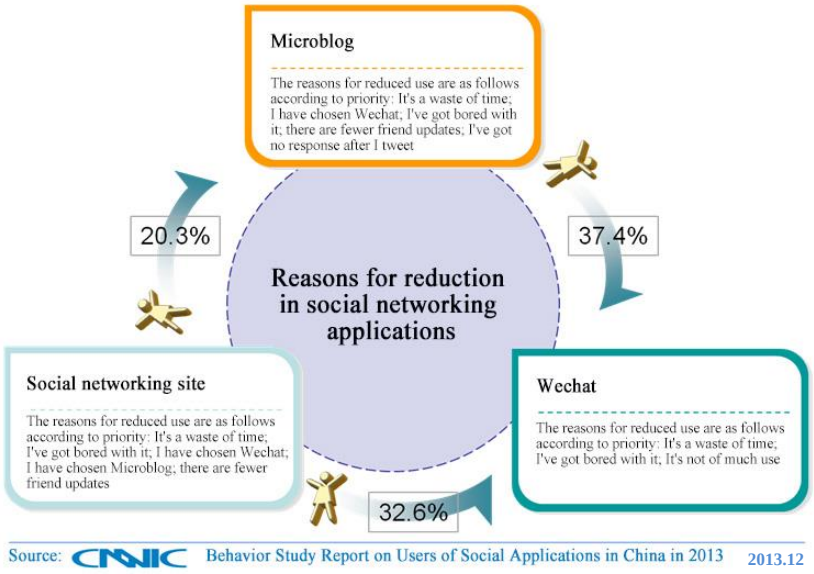


Figure 50 Diversion of Internet users who reduce the use of certain social applications

Thirdly, Internet users lose the feeling of freshness after long use of social networking sites, and therefore reduce use. Of those Internet users who reduce use of social networking sites, 35.2% are attributed to this reason. This percentage is 33.2% for Microblog. For individuals, they are likely to lose the feeling of freshness and have decreased enthusiasm after long use of any application.

Fourthly, less interaction with friends is also an important factor. Few updates of friends or receiving no response after sending messages reduced the enthusiasm of Internet users for using social networking sites and Microblog.

III. E-business Application: Multiple Factors Drive Rapid Development of E-business Market

1. Age and generation gaps influence online shoppers' purchase decisions, and promotion by group and classification has better effects

According to the Market Research Report on Online Shopping in China in 2013 by CNNIC,

the horizontal comparison among people of different ages and generations shows that in buying unfamiliar products, the post-60s generation focus on the brand of a shopping website, the post-70s generation pursue the cost performance of a brand and focus on the brand and price of a shopping website, the post-80s generation focus on user evaluation and website popularity/reputation, while the post-90s generation focus on user evaluation. This is related to the life attitude and shopping habits of people of different ages and generations. Therefore, shopping websites should adopt different promotion strategies for the object users in different age groups while making promotions.

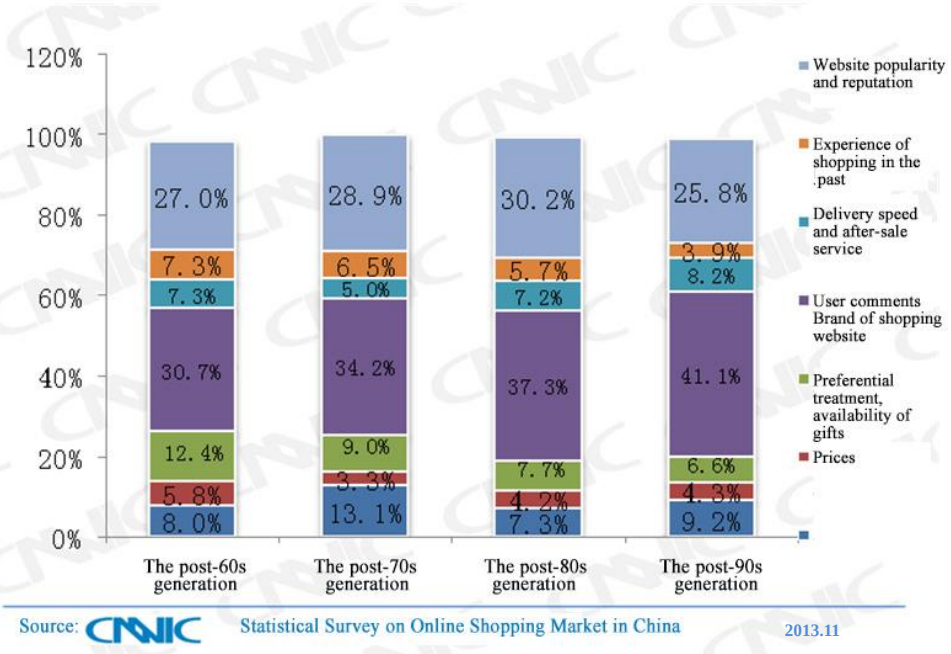


Figure 51 Main considerations of online shoppers of different ages and generations in buying unfamiliar commodities in 2013

Users of different ages and generations share the same basic considerations while deciding to buy familiar commodities and unfamiliar commodities. The post-60s generation is cautious, and values the website's popularity, reputation and brand. The post-70s generation is thrifty and focuses on prices. The post-80s generation values user evaluation and cost performance, and the post-90s generation places stress on user evaluation.

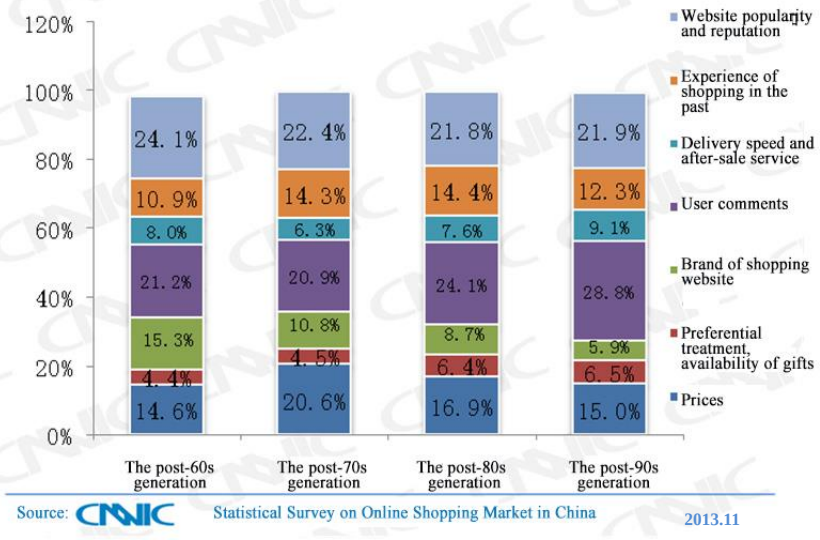


Figure 52 Main considerations of online shoppers of different ages and generations in buying familiar commodities in 2013

2. Mobile online shopping becomes an important consumption pattern, with big growth potential

With the improvement of mobile networks and popularization of smart phones in China, e-commerce applications are developing rapidly at the mobile end. The number of mobile online shoppers reached 144 million in 2013, with an annual growth rate of 160.2% and a utilization ratio of 28.9%. In addition, the Market Research Report on Online Shopping in China in 2013 by CNNIC shows that the users who use mobile phones for browsing and searching during online shopping account for 58.2%, while the mobile online shoppers only account for 47.8% of all online shoppers. This shows that mobile online shopping has become an important supplement to the online shopping market, and its user size will grow rapidly in the future.

According to data, 81.8% of the mobile online shoppers use the general-purpose search engines, such as Baidu, to view merchandise information, while 78.8% of the mobile online shoppers browse websites by inputting web addresses on mobile phones. The users who visit such websites as Etao for shopping, searching and browsing via mobile phones and the users who log into the client-end software of shopping websites both account for 54.5%. Compared with 2012, the number of ways for users to view merchandise information on mobile phone increases to some extent, and consumers gradually deepen their acceptance of mobile online shopping.

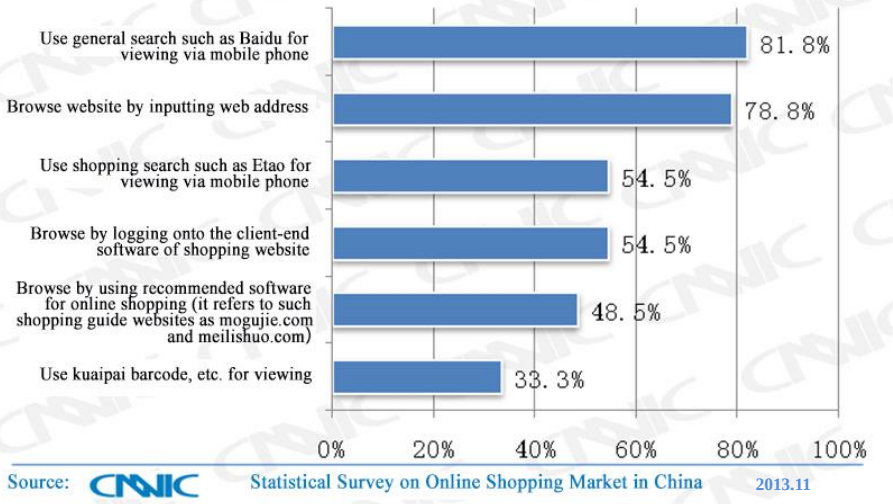


Figure 53 How online shoppers view commodity information on mobile phones in 2013

There are various scenarios where users use mobile network for shopping. 86.7% of users use mobile phones for online shopping while they are at home. For some users, mobile phones are replacing family computers in terms of online shopping. 60.0% of users use mobile phones for online shopping while they have no access to computers. 20% of users use mobile phones for online shopping while they are on their way to work or school. 40.0% and 13.3% of users use mobile phones for online shopping while they are taking public transport means and queuing.

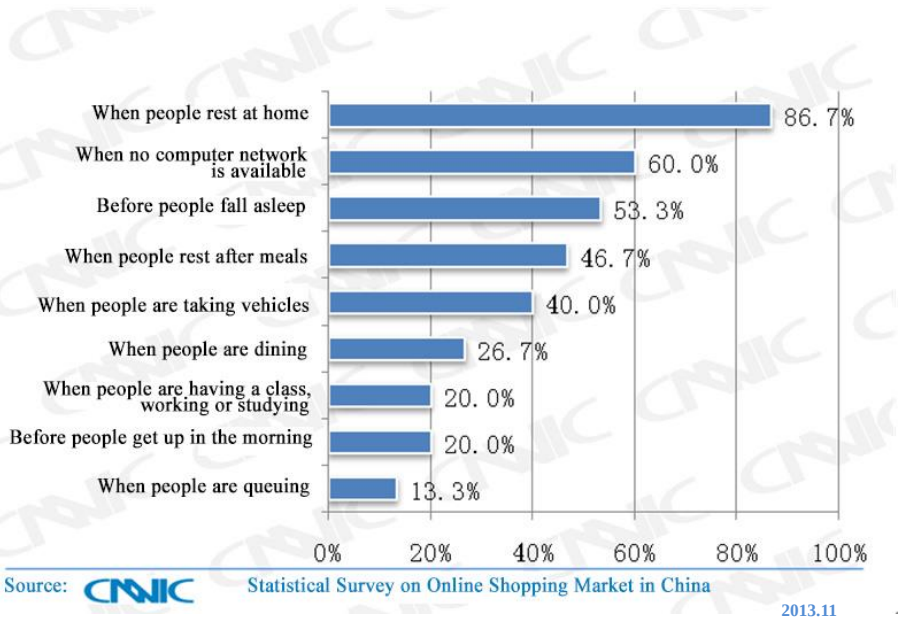


Figure 54 Mobile shopping scenarios of online shoppers in 2013

Mobile online shopping will become an important force that boosts the growth of online shopping. Firstly, devices are combined with the change of consumption pattern towards online shopping. Portability of mobile phones and development of the Wi-Fi environment have enabled transactions to take place anytime and anywhere, broken the site restriction of the traditional shopping mode, and stimulated more impulsive buying. Secondly, functions are combined with the use attribute of mobile phones. The development of such functions as two-dimensional code, bar code, and shopping comparison have tallied with the interface and application scenario of mobile phones, and driven more consumers to try the mobile network shopping. Thirdly, applications are combined with the latest demands of users. The development of APPs based on socialized shopping guide and shopping share and the improvement of mobile payment have gradually improved the operation experience of mobile-end shopping, satisfied the diversified needs of users, and will continue to boost the growth of the online shopping market.

With richer applications of smart phones and improvement of the mobile shopping experience, mobile phones have had certain impact on the PC-end online shopping. Data show that compared with the PC end, 21.2% of online shoppers are more willing to use mobile phones to browse shopping websites, 20.5% of Internet users use mobile phones to browse shopping websites for a longer time, 18.5% of online shoppers place orders more quickly while using mobile phones to browse shopping websites, and 18.2% of online shoppers prefer mobile shopping experience.

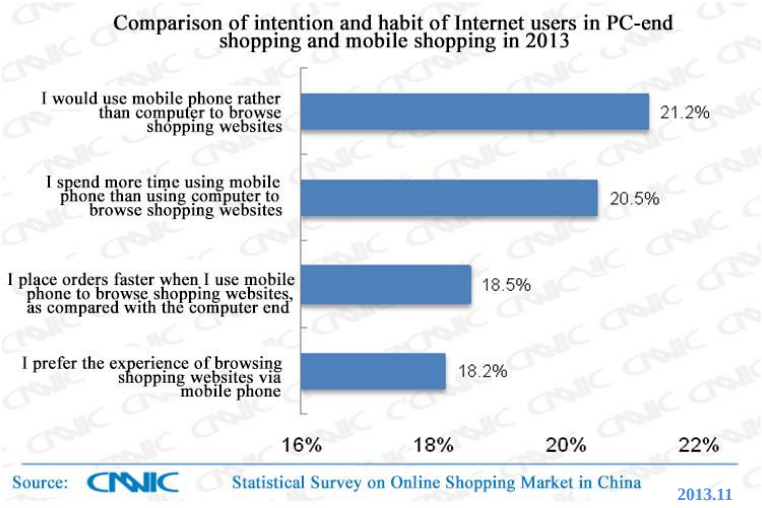


Figure 55 Comparison of intention and habit of Internet users in PC-end shopping and mobile shopping in 2013

3. Shopping websites are the main locations for shopping search; and search better tallies with online buying

Shopping websites have become the most commonly used shopping search platforms. With the rise of large-scale shopping platforms in recent years, there have been more and more commodities and information on the platforms, and Internet users are more willing to directly search on these shopping platforms. Of the frequently-used shopping search website on the computers of Internet users, shopping websites account for 75.8%, far more than the comprehensive search engines (23.7%) and vertical search engines (0.5%). With popularization of e-commerce and increased service quality of logistics and online payment, Internet users have increased willingness of shopping online, and have increasing tendency of buying online after shopping search. 62.2% of Internet users will buy online in most cases after searching the shopping information. 13.4% of the Internet users "buy online almost as much as offline". Only 22.6% of Internet users prefer to buy offline, and 1.6% of Internet users do not buy. Compared with 2012, the proportion of the Internet users who buy online after shopping search increased by a large margin of 22 % in 2013, and the Internet users who buy online almost as much as offline in 2012 have gradually tended to buy online. Internet users' increased willingness of buying online has provided more opportunities for search enterprises and merchants to achieve better profits.

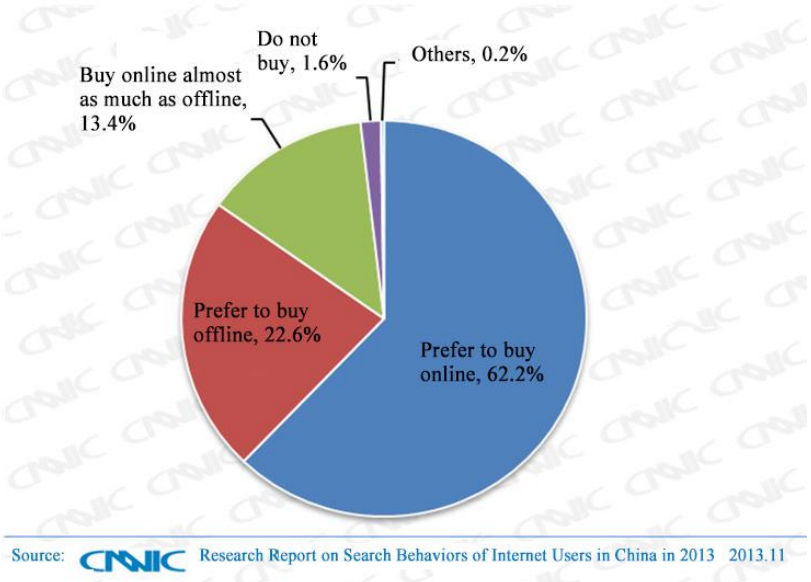


Figure 56 Purchase channels of PC-end Internet users after shopping search in 2013

Compared with 2012, the proportion of the Internet users who buy online after shopping search increased by a large margin of 22.5 percentage points in 2013, and the Internet users who buy online almost as much as offline in 2012 have gradually tended to buy online. Internet users' willingness of buying online increases rapidly. Meanwhile, the proportion of Internet users who do not buy after shopping search decreases by a large margin from 8.3% in 2012 to 1.6% in 2013, and online shopping has an increasing penetration among users of online search systems.

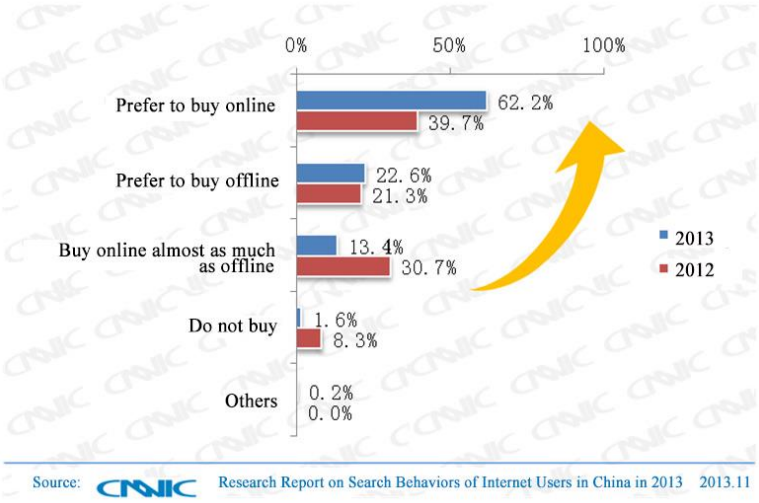


Figure 57 Changes in purchase channels of PC-end Internet users after shopping search in the past two years

4. Development of mobile smart terminals expands the channels of online travel-booking, and interactive applications stimulate consumption

According to the Development Report on Online Travel Booking Industry in China from 2012 to 2013 by CNNIC, 20.3% of the users of online-booking services have the experience of booking via mobile phones. For those who have installed the APP for online travel booking, the vast majority of them are using such APP. Mobile phones are used throughout people's trip. They are used for more than just communication with loved ones and friends during the trip. Mobile phones have been equipped with new functions, such as search for information about the destination before the trip, navigation during the trip (LBS and other functions), and information sharing during the trip. The users of online-booking services have accounted for 60.6%, 59.8% and 45.3% respectively, outnumbering the offline booking users. The development and application of mobile smart terminals have expanded the channels of online travel booking, and

the interaction among friends has greatly stimulated the travel demand and tourist consumption. With popularization of smart phones and improvement of travel booking APPs in the future, offline users and potential travel users may be directly turned into mobile-end online travel booking users.

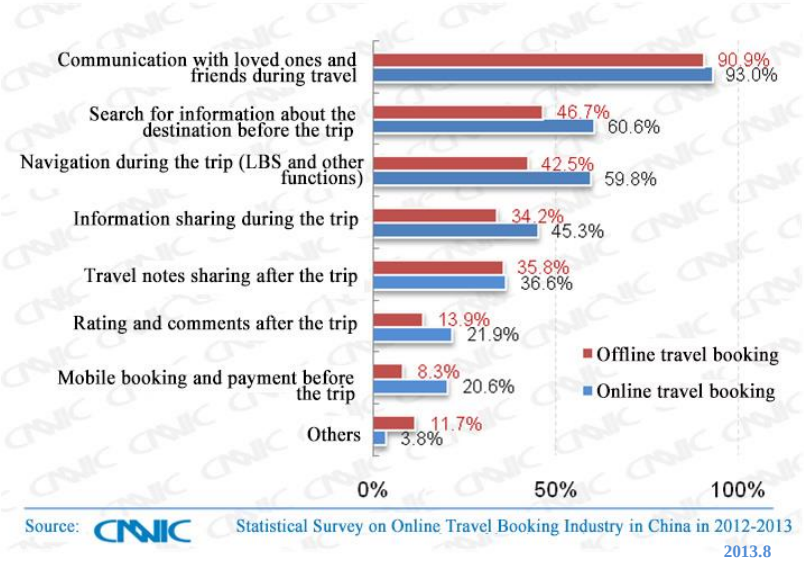


Figure 58 Performance of interactive application of mobile smart terminal in travel booking

5. Rigid index comparison facilitates online air-ticket booking, and soft services facilitate offline booking

According to Development Report on Online Travel Booking Industry in China from 2012 to 2013 by CNNIC, the core competitiveness of attracting users to make air ticket booking online and offline focuses on different aspects. Compared with offline users, online users mainly focus on the air ticket discount and flight time while making air ticket booking, accounting for 84.0% and 78.4% respectively and apparently outnumbering offline travel booking users[9]. Offline users focus on the flight safety of airline companies, plane punctuality, services of flight attendants, and quality of meals offered on the plane, accounting for 65.0%, 63.3%, 35.0% and 23.3% respectively. This is related to the different environment provided for users while they book air tickets online and offline. In online booking, users may compare information of a number of airline companies and consider the rigid indexes. In offline booking, users mainly rely on the reputation of the airline companies, and consider soft services more.

[9] Offline travel booking user: A user who makes travel booking mainly via telephone and physical stores.

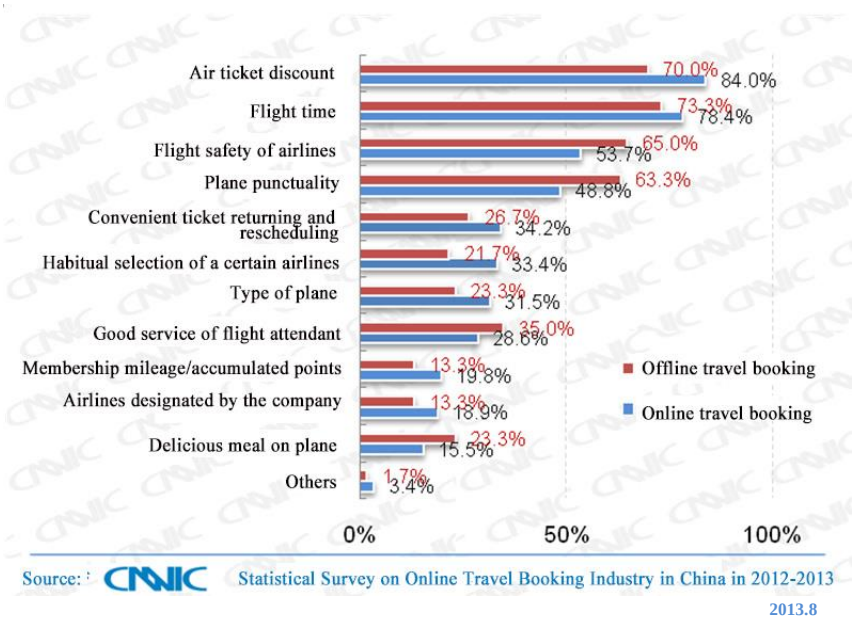


Figure 59 Main considerations in selecting online or offline air-ticket booking services

Users select offline booking instead of online booking mainly because they stick to their consumption habits and have not been led to the online mode. Compared with the online air ticket booking, the reasons of choosing offline air ticket booking are as follows: offline "prices are lower" and "I have been booking this way and got used to it". These users account for 46.7% and 40% respectively. 33.3% of the users think that offline "location/contact is convenient" and "I don't trust network security", and choose to book air tickets offline. 28.3% of the users think that offline "manual services are better" and there are more "preferential treatments and promotion activities".

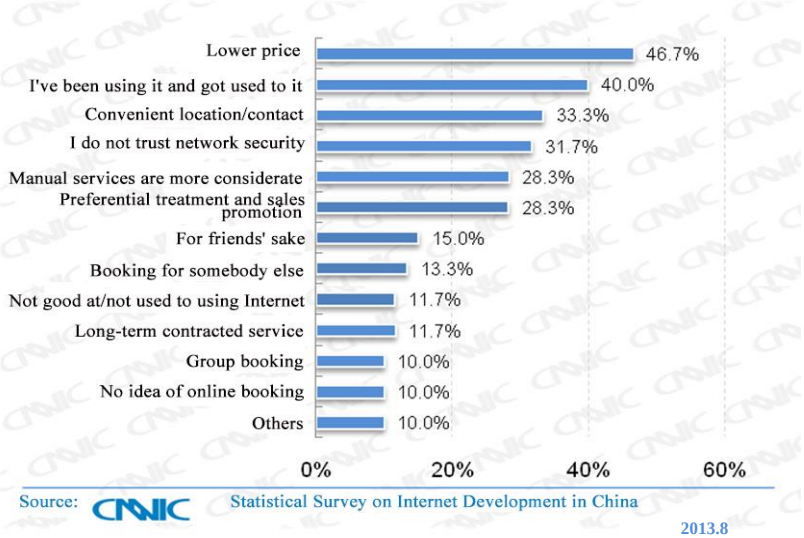


Figure 60 Main considerations in selecting offline instead of online air ticket booking

IV. Online Video: Hardware Technology, Network Environment and Offline Programs Promote Development of the Online Video Industry

Big changes took place in the online video industry in China in 2013, as reflected in the basic environment, Internet user behavior, enterprise competition, etc. Enterprise competition developed in depth and breadth. In addition to horizontal merger and acquisition, enterprises also worked with the upstream content makers and downstream hardware manufacturers, achieving more diversified development.

1. Living room competition centering on Internet TV was fiercer

The TV screen is the third online video screen after computers and mobile phones, and is another big focus of the competition for video display output among online video enterprises. Many online video enterprises have launched set-top boxes, routers, smart TVs and accessories derived from Internet TV in order to make deployment in the Internet TV industry.

The online video will benefit from its entry into the TV channel in the following aspects: Firstly, it can solve the small scale problem for online video advertisements at present. TV screens are big with good expression, and have very good advertising effects in brand construction and promotion. Therefore, television advertising will have a huge scale. The online video can get more advertising income by its entry into the TV end. Secondly, by entry into the TV end, the online video can expand its online video users, and enable some non-Internet users to access to the online video. TV screens are big, and a number of audiences may watch videos together, as compared to computers and mobile devices which have small screens and allow much fewer audiences to watch simultaneously. Even those TV viewers who do not know how to surf the Internet may also watch online videos.

2. Big-screen mobile phones and 4G network push online video users to shift to mobile end

Due to the restriction of mobile phone performance and network environment in the past, online video users had low enthusiasm to watch videos in the non-Wi-Fi mobile environment, and needed better playing devices and network environment for playing of mobile videos. In 2013, the progress achieved in a number of aspects satisfied the needs of playing online videos in the

mobile environment. Firstly, big-screen mobile phones came into the market one after another. With their prices further popularized, they began to penetrate into the low-and-middle-income population. Secondly, issuance of the 4G license beginning from 4 December 2013 indicated the arrival of the 4G era in China. If the 4G network expands its coverage and lowers its service fee, more people will be driven to watch videos online in the non-Wi-Fi environment. Finally, video websites sped up their development steps at the mobile end, and launched the video playing services with better experience in order to adapt to the improved hardware and network technologies. A number of the above factors have caused users to change their habits of watching videos online, and shift to the mobile end.

3. Hot variety shows on TV boosted growth of the online video market and their copyrights became focus of competition again

The variety shows such as talent shows, parent-child shows, and love and marriage shows have been hot on TV in recent years, and have increasing influences. The online playing copyright has also become one of the competition focuses of online video enterprises. The hot variety shows on TV boosted the growth of online videos in the following aspects: Firstly, the hot variety shows on TV increased the ordered programs as well as advertising income of online video enterprises. Secondly, they boosted user growth for online video enterprises, and increased the user coverage of video websites. Finally, the hot programs can increase a website's influence and boost ordering of other relevant videos. Hot programs were not only broadcast on the video websites, but also rebroadcast on social networking sites such as Microblog by means of sharing, forwarding, reediting and uploading, which increased the influence of video websites.

The competition for the right of online broadcasting of variety shows became fierce again in the end of 2013, and the hot programs changed hands frequently, because stronger video enterprises took them away at higher prices. The copyright payment has always been one of the major costs of online video enterprises, and enterprises were trying to reduce the copyright cost through expansion of resource sharing and making more self-made plays. However, hot offline programs can bring many benefits to online video businesses, and the resource competition among online video enterprises was again focused on the right of broadcasting of hot variety shows.

V. Online Game: The Overall Industry Continuously Slowed Down, while Mobile-end Games Were Hot

1. Game development slowed down on the whole and web games almost reached the peak

Research Report on Game Behavior of Internet Users in China in 2013 by CNNIC shows that judging by the playtime change of users, the users with a longer "game age" spent increasingly shorter time in playing in the past six months. The old game users had decreased stickiness and enthusiasm.

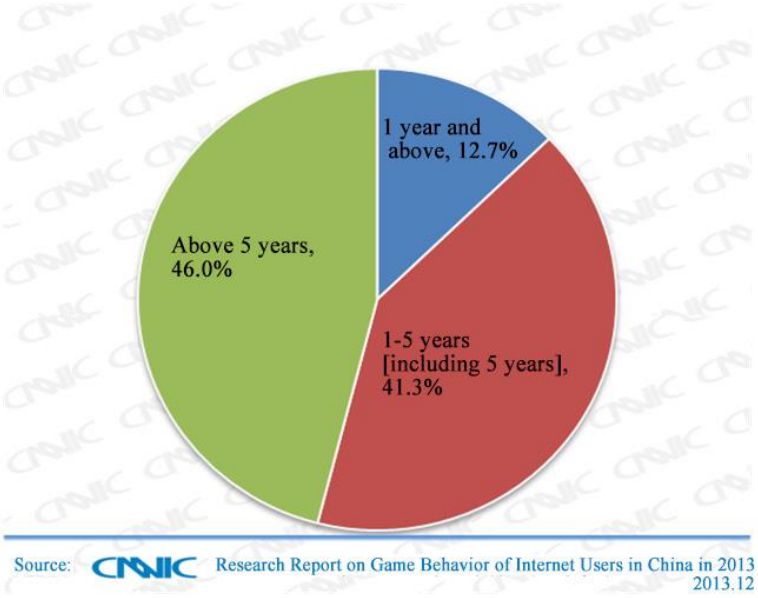


Figure 61 Proportion of users of different game ages

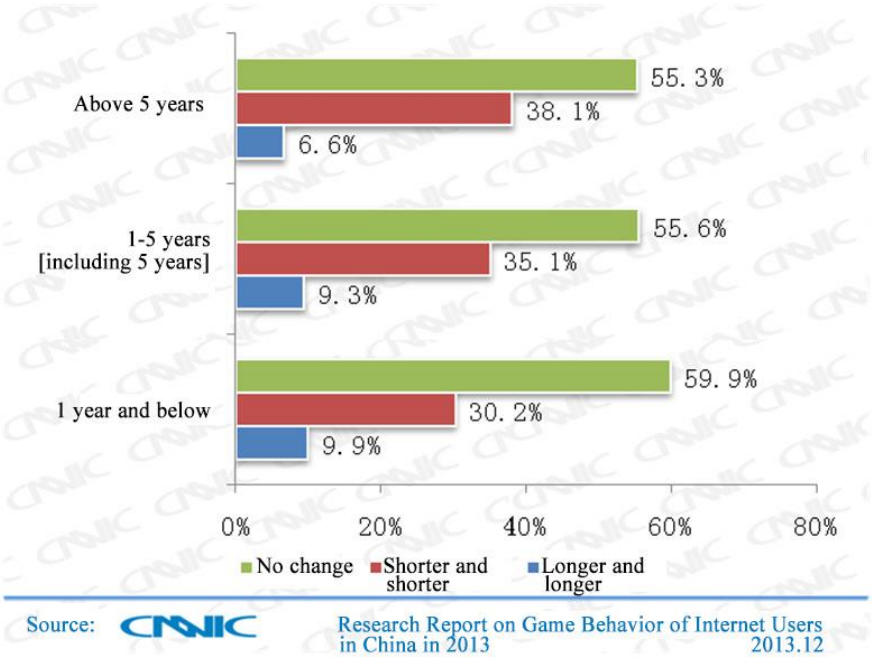


Figure 62 Change in playtime of users of different game ages

According to Research Report on Game Behavior of Internet Users in China in 2013 by CNNIC, of all the multi-end games, web games have the lowest user percentage of 40.6%. The survey on the non-web game users shows that the possibility for such users to use web games in the future was relatively small and lower than that of other games. The future development of web games is not optimistic.

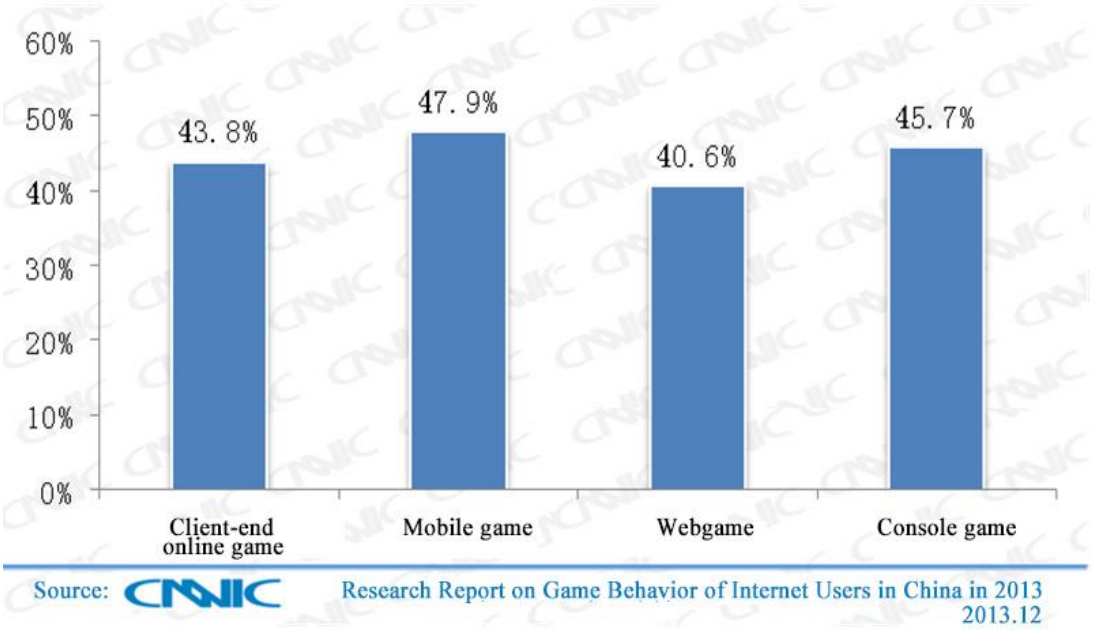


Figure 63 Proportion of various game users

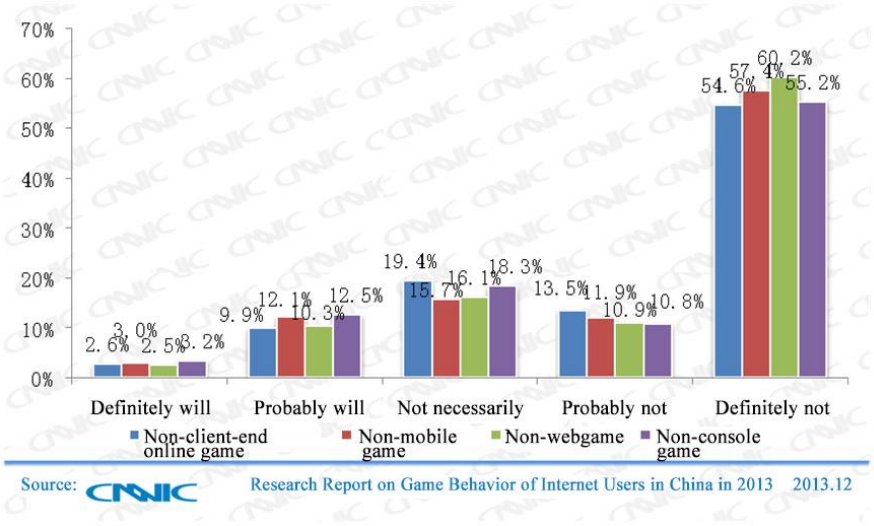


Figure 64 Intention of users of other games to play such games

Web games developed rapidly from 2011, and more and more business starters have joined this market. With the development of mobile games, however, web games begin to show their disadvantages: they are no match of the client end games in terms of game experience, and their accessibility is also replaced by mobile games. Web games have almost reached the peak, with limited development space in the future.

2. Client-side game users had declined stickiness, but were still irreplaceable

The features of client end online games have determined that most of their users are super players with high stickiness, but such games have encountered bottlenecks in winning new users. The Research Report on Game Behavior of Internet Users in China in 2013 by CNNIC shows that of the client-end online game users with a longer "game age", the percentage of those who spent increasingly longer time in playing was smaller in the past six months, indicating declined user stickiness.

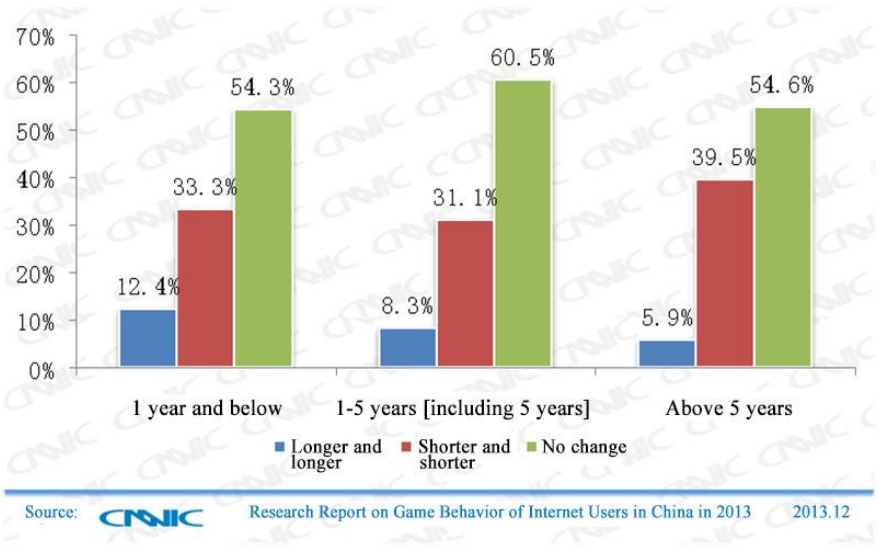


Figure 65 Playtime of client-end online game users

The intention of client-end online game users to continue such games in the future was apparently higher than that of other types of game users. With diversification of game types and the multi-end development, client-end online games have been affected by mobile games and web games, but so far, client-end online games are still irreplaceable for most of the client end game users. According to the Research Report on Game Behavior of Internet Users in China in 2013 by CNNIC, 54.3% of the client-end game users said they would definitely continue such games in the future. Client-side online games are still one of the mainstream games in the market at present, and are still producing the largest revenue value in the game field.

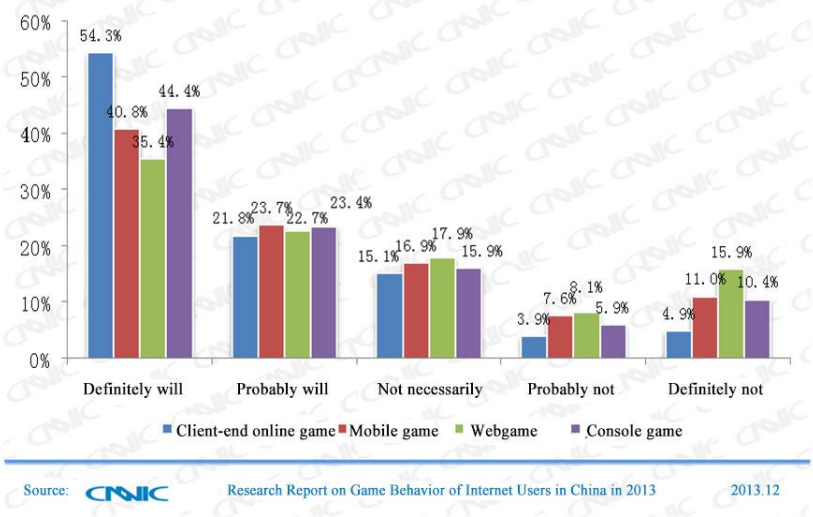


Figure 66 Intention of various game users to continue such games

For games, innovation is the key, because it can guarantee the retention rate of users. The existing popular games in the market are definitely innovative. The development cost is high for client-end games, which also guarantees the game quality. Beautiful images and wonderful experience are the advantages of client-end games. These advantages have extended the life cycle of client-end games, increased the game play, retained the game users, and attracted high-stickiness users. These advantages are absolutely superior to web games and mobile games.

3. Mobile-end games were hot and social elements enhanced game stickiness

According to the Research Report on Game Behavior of Internet Users in China in 2013 by CNNIC, 15.1% of the non-mobile game users had relatively high intention to shift to mobile games in the future.

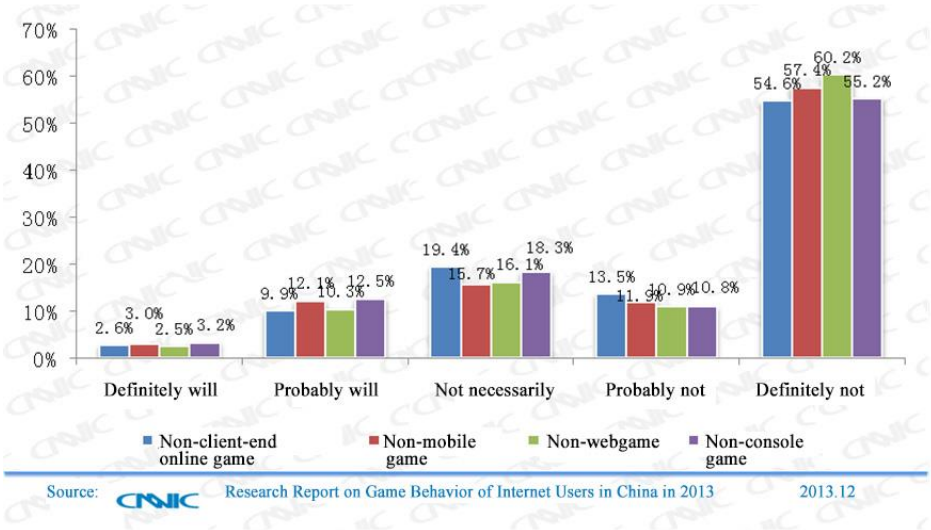


Figure 67 Intention of users of other games to play such games

Boosted by the overall mobile internet development, mobile games still have a big growth potential in the future. On the one hand, the hardware environment has facilitated the mobile game development. With the improvement of the network environment (including development of Wi-Fi, 3G and 4G networks) and improvement of the mobile phone performance, people will spend increasingly longer time on the mobile end. On the other hand, social elements have enhanced the stickiness to mobile games. Introduction of social relations into the mobile games has made up for their lack of sociability and interactivity in the past, enhanced users' stickiness to the games, and extended the life cycle of the games. Finally, mobile phones' own features have

determined the high frequency of use of mobile games. Being portable and real-time, mobile phones can meet users' needs for games anytime and anywhere, have higher stickiness and are integrated into life. Driven by these factors, mobile games in the future may break away from the fragmented time and shift to the "long" time.

VI. Mobile Internet: The Industry is in All-around Development and Speeding up Penetration into Daily Life

1. The mobile browser is highly fragmented, with reading as the core demand

The mobile browser has become the main access to mobile internet for Internet users. According to the survey, users use mobile browsers very frequently. 75.6% of the users use them everyday, and 63.3% of the users use them for a number of times everyday. The frequency of use of mobile browsers slightly increased compared with that in September 2012. On the one hand, mobile phones' portability and accessibility at any time enable users to use mobile browsers to surf the Internet in their fragmented time, which has increased the frequency of use. On the other hand, mobile browsers' diversified functions and content, such as reading and web games, as well as better reading and video watching experience, have attracted more and more users to use more mobile applications on mobile browsers, and deepened users' reliance on them.

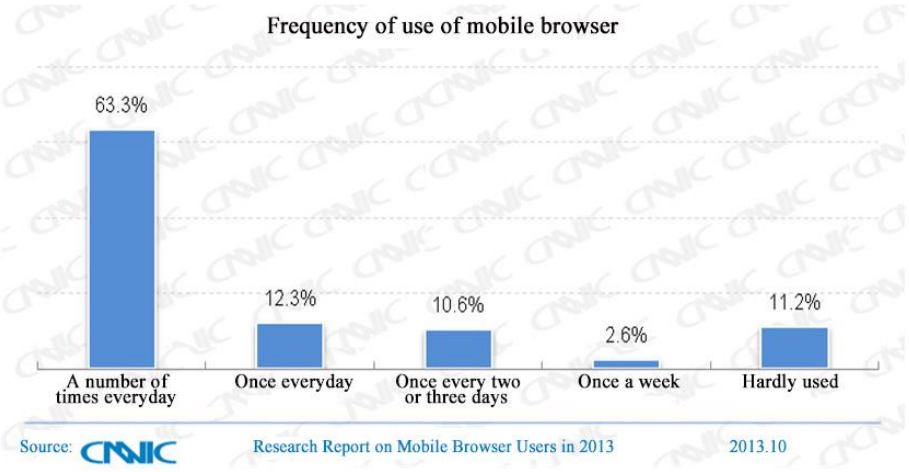


Figure 68 Frequency of use of mobile browsers

Specifically, the mobile browser users spend an average of 10-30 minutes on mobile browsers every time, accounting for 33.1%. This shows that users tend to use mobile browsers for a number of times everyday, and the time of each use is short, a prominent sign of fragmentation. This has something to do with the major functions of mobile browsers currently used by users, i.e. mainly for webpage browsing and news reading.

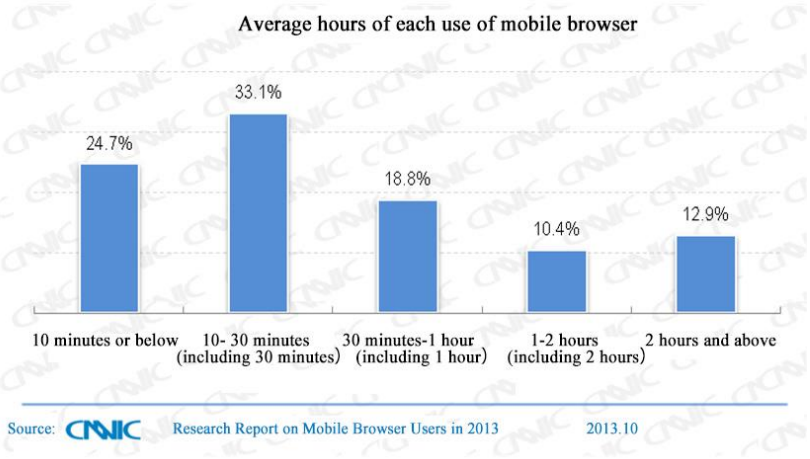


Figure 69 Average hours of each use of mobile browser

The further survey on the websites visited via mobile browsers shows that the most frequently visited websites by mobile browser users are the news information websites which account for 71.8%, and the literary works websites are in the second place which account for 43.1%. Obviously, reading is the core demand of mobile browser users at present.

Shopping websites and video websites have the visit percentages of 39.1% and 36.6%, and are in the second echelon for the mobile browser users' needs. The percentage has increased by 16.7 and 14.8 percentage points respectively compared with that in September, 2012, with a higher margin than other types of websites. This is because on the one hand, the environment for mobile Internet access and the smart-phone performance have improved, on the other hand, the technological development and function improvement of mobile browsers have provided better mobile payment experience and video watching experience. The increased use of shopping websites and video websites helps increase the use hours of mobile browser users, and helps further realize the commercial values of mobile browsers. With the development of webpage applications and the improvement of use experience in videos and e-commerce in the future, mobile browser users' will have increasingly stronger stickiness and increasingly longer hours of

use.

The use and browse of game and social networking sites are relatively less, accounting for 29.8% and 24.0% respectively. This is because on the one hand, mobile browsers still need to be improved in terms of interactivity and game designs, and on the other hand, the good profitability of games has attracted a large number of suppliers who have made good deployment at the mobile end, making it difficult for mobile browsers to enter the mobile game field.

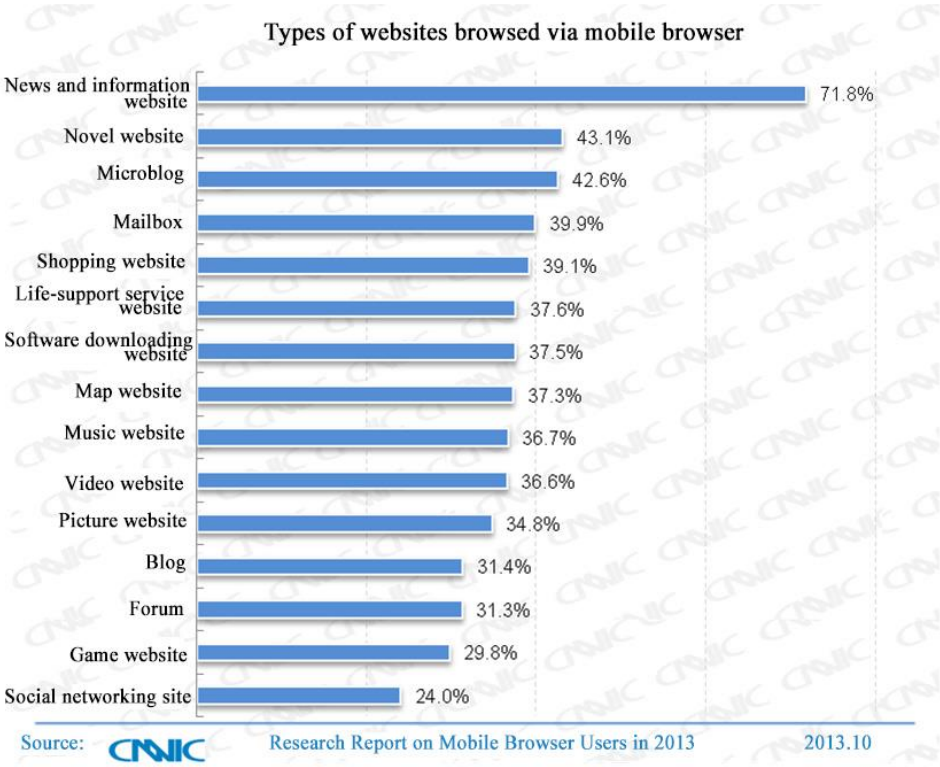


Figure 70 Types of websites browsed via mobile browsers

2. Mobile entertainment develops from "fragmented time" to "long time"

Mobile Internet has been developing rapidly in China in recent years. The industrial system, which is mainly made up of terminals, platforms and services, has changed the overall layout of the Internet in China, and greatly changed the Internet access behavior and life styles of Internet users, developing from fragmentation reading and communication to the applications used longer by users such as videos and games. Entertainment is the principal feature of the mobile Internet in China at present.

According to the Report on Entertainment Behavior of Mobile Internet Users in China in 2013 by CNNIC, entertainment is the major function for mobile phone users, accounting for 60.6% of the total use time of the functions other than short messages and calls. According to

surveys, mobile entertainment users use the functions of mobile phones other than short messages and calls for 179 minutes on average everyday, including 109 minutes for mobile entertainment. In terms of the utilization ratio of users, 97.6% of the mobile phone users used the entertainment applications of mobile phones in the past six months.

Mobile entertainment has been developing rapidly and has become the mainstream application of mobile phone users in China. It has also changed the mobile entertainment behavior of Internet users, developed from "fragmented time" to "long time" and from scenario-driven entertainment to habitual entertainment. Mobile entertainment has become a fixed life style.

In terms of the use scenario, a large proportion of users use it "before sleep" and "while watching TV and resting at home", indicating that mobile entertainment is not just a way of recreation on vehicles, but also a way of home entertainment. According to surveys, 77.8% of the mobile entertainment users use it before sleep at night, and 73.2% use it while resting at home/dormitory. Obviously, mobile entertainment has become a normalized life style of users, with the habit-driven effect becoming increasingly prominent.

Table 8 Locations of mobile entertainment

	Mobile game	Mobile video	Mobile reading
Intervals of work, queuing and other time	52.7%	33.1%	45.4%
Dining, TV watching and other time	38.6%	25.5%	34.4%
Noon breaks, waiting for people, taking means of transport and other time	56.5%	50.3%	61.2%
Before sleep at night	68.5%	66.2%	69.6%
Rest period at home/dormitory	69.2%	60.1%	60.0%
Others	5.6%	2.6%	3.8%

Source: CNNIC· Report on Entertainment Behavior of Mobile Internet Users in China in 2013 2013.9

In terms of hours of use, the proportion of users who use mobile entertainment for above half an hour each time is increasing. For mobile videos and mobile reading, in particular, this proportion is 64.9% and 55.2% respectively. Mobile entertainment users are shifting their locations of use from vehicles to home. Good environment and sufficient time for Internet access, which have increased their hours of use of mobile entertainment, plus improvement of various entertainment applications, have driven Internet users to stick to mobile entertainment.

Table 9 Average hours of each use of each mobile entertainment application

	Mobile game	Mobile video	Mobile reading	Mobile music
10 minutes or below	16.6%	11.7%	10.1%	17.3%
10 - 30 minutes	47.6%	23.3%	34.7%	41.6%
30 minutes-1 hour	24.3%	29.1%	28.0%	23.8%
1-2 hours	7.9%	26.7%	15.6%	10.1%
2 hours and above	3.7%	9.1%	11.6%	7.2%

Source: CNNIC Report on Entertainment Behavior of Mobile Internet Users in China in 2013 2013.9

3. Mobile phone maps will become an important access to life-related information services

With popularization of smart phones, the penetration of mobile phone maps will keep rising. The population of mobile phone users in China has reached 420 million by the end of December 2012. Specifically, mobile phone maps, with the number of users reaching about 1.5 million, have had a penetration rate of 35.4% among mobile phone users.

The Statistical Report on Mobile Internet Development in China in 2012 by CNNIC shows that of the mobile phone map users, 62.7% used route navigation and 45.3% used location search. According to the present situation, such traditional functions as route navigation and location search still account for the highest proportions among the users. It is noteworthy that the proportion of hot spot search, such as surrounding life-related information, has reached 29.2%. For sign-in or location information sharing, this proportion is 10.4%. As a tool used for navigation and location search, mobile phone maps are a certain rigid demand for users, making them relatively highly penetrated into mobile phone users. When the number of users reaches a certain scale, mobile phone maps will become an important open platform of the mobile Internet.

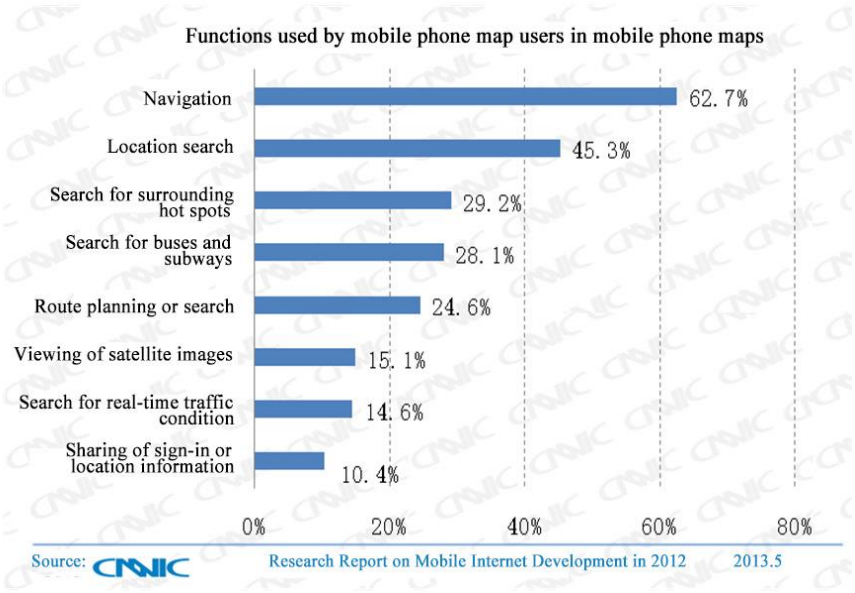


Figure 71 Functions of mobile phone maps used by mobile phone map users.

Mobile phones are closely related to location information. Mobile phone maps can not only become the access to a series of life-support services, but also generate many mobile applications, becoming the platform for O2O applications based on the relationship between user location and offline merchants. As the mobile access and platform, mobile phone maps have had very broad business development prospects.

Location information is the core of the social relations of mobile Internet and will produce new ways of social contact. According to surveys, the proportion of sign-in or location information sharing has reached 10.4% among the mobile phone map users. With the Internet becoming increasingly mobile and socialized, mobile phone maps will have a more obvious trend of integrating social elements. Social relationships will also become more real and diversified because of the geographical location, deepening the relationships among users, between users and offline suppliers, and among Internet enterprises.

In addition, location information of mobile phone maps is the base of precision marketing, individualized recommendation and data mining. For example, based on the location information of users and merchants, offline merchants will be able to understand the distribution of their competitors in the surrounding areas, and merchants will be able to understand users' distribution, as well as how to acquire users and launch the precision marketing for users. In conclusion, the user location data contain huge values, and mobile phone maps are just an easy way to get the

user location data.

Chapter VI Internet Application of SMEs

I. Condition of Internet Applications by Enterprises

1. Use of Computer

The enterprises that used computers [10] to handle official business have accounted for 93.1% in China by the end of December 2013.

In terms of the number of employees, micro-enterprises with 7 employees or below had the lowest computer utilization ratio, accounting for only 83.5% and lagging far behind the enterprises of other sizes. Enterprises with 100 employees or above had a computer utilization ratio of about 98%.

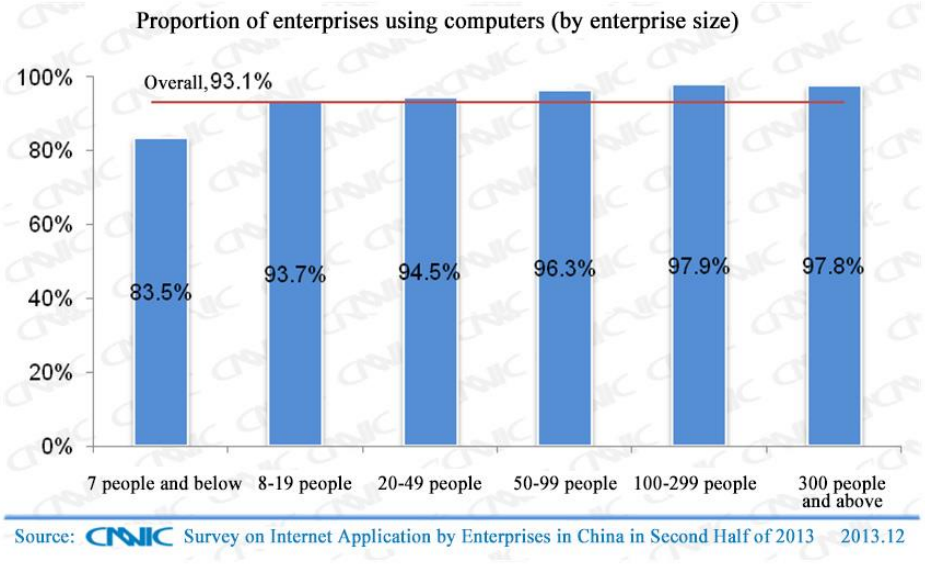


Figure 72 Proportion of enterprises using computers (by enterprise size)

The computer utilization ratios vary among enterprises in different regions due to different economic development levels and industrial structures. Eastern China has the highest ratio, then Western China. Central China has the lowest computer utilization ratio, accounting for only

[10] Computers refer to desktop computers or notebook computers, excluding those devices with certain embedded computing function, such as cellular mobile phones, Personal Digital Assistant (PDA) or TV sets.

84.8%. Use of computers is an important aspect of the information-based basic application for enterprises, and plays the boosting role that helps eliminate interregional digital gaps and information level differences. Therefore, efforts are still needed to push forward computer application in backward regions.

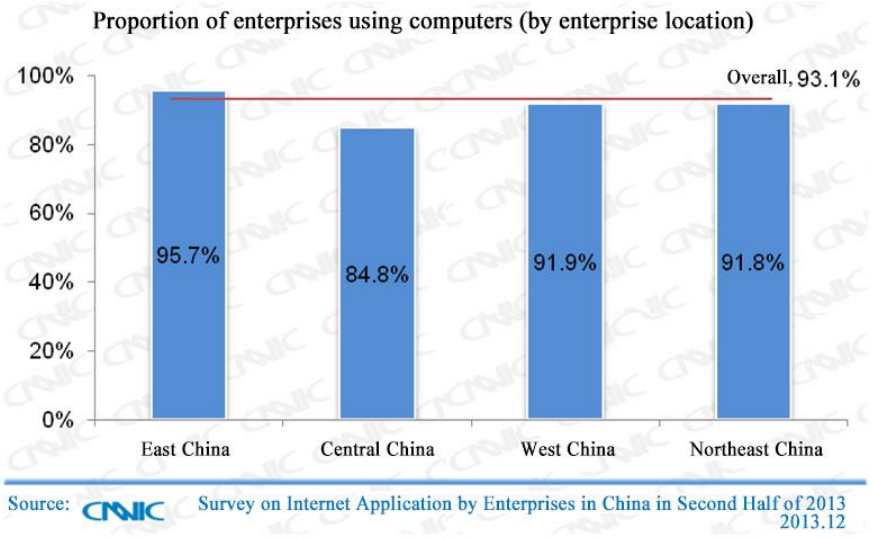


Figure 73 Proportion of enterprises using computers (by enterprise location)

2. Use of the Internet

The enterprises that used Internet [11] to handle office affairs have accounted for 83.2% in China by the end of December 2013.

In terms of the size of employees, micro-enterprises with 7 employees or below still had the lowest Internet utilization ratio, which was lower than the national average level by 14.4%. Enterprises with 100 employees or above had an Internet utilization ratio of above 90%.

[11] It means that the Internet is directly used in all activities of the enterprises. Some enterprises use the Internet for advertisements/promotion, but do not directly use it for work, and therefore are not included. All devices (more than just computers) equipped with the Internet access function may be used as the tools to access the Internet. These include mobile telephones, PDAs, game machines and digital televisions which may be used on the fixed or mobile network.

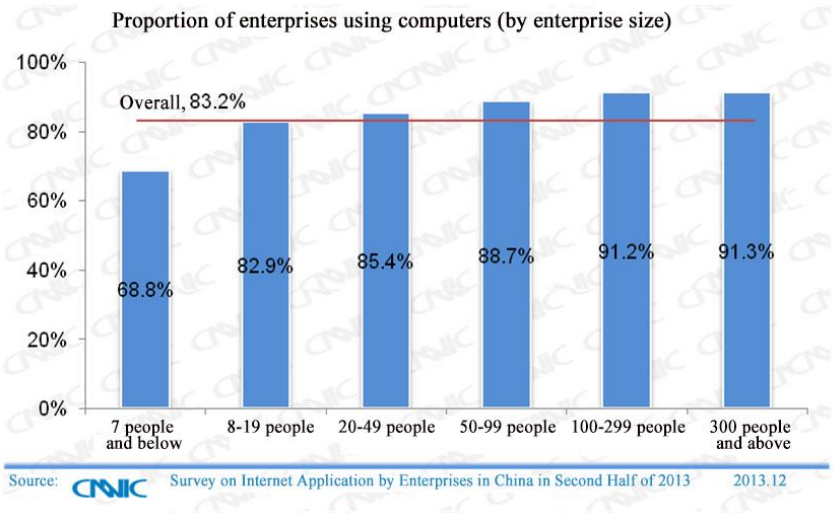


Figure 74 Proportion of enterprises using Internet (by enterprise size)

Similar to the different computer utilization ratios, enterprises in Eastern China have the highest Internet utilization ratio of 87.7%, while enterprises in Central China have the relatively lower ratio of only 70.5%. Western China has substantially caught up with Eastern China in terms of the computer utilization ratio, with a gap of less than 4%, but the enterprises in the two regions still have a considerable gap in terms of the Internet utilization ratio.

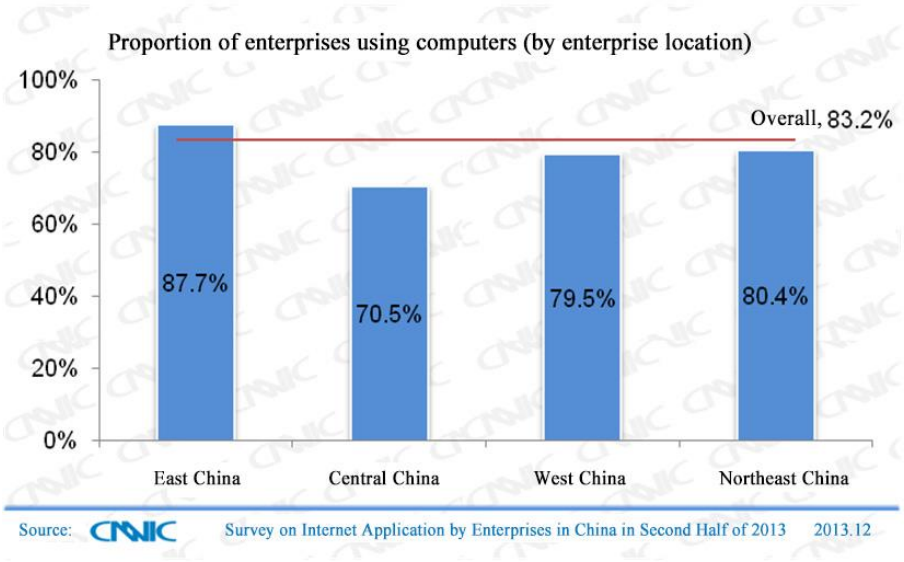


Figure 75 Proportion of enterprises using Internet (by enterprise location)

3. Use of Broadband

Fixed broadband has had a utilization ratio of 79.6% [12] among enterprises in China by the

[12] The utilization ratios of the Internet access ways released in this survey refer to the proportion of enterprises which access the Internet in various ways among all the interviewed enterprises.

end of December 2013, and is the most important way for enterprises to access the Internet.

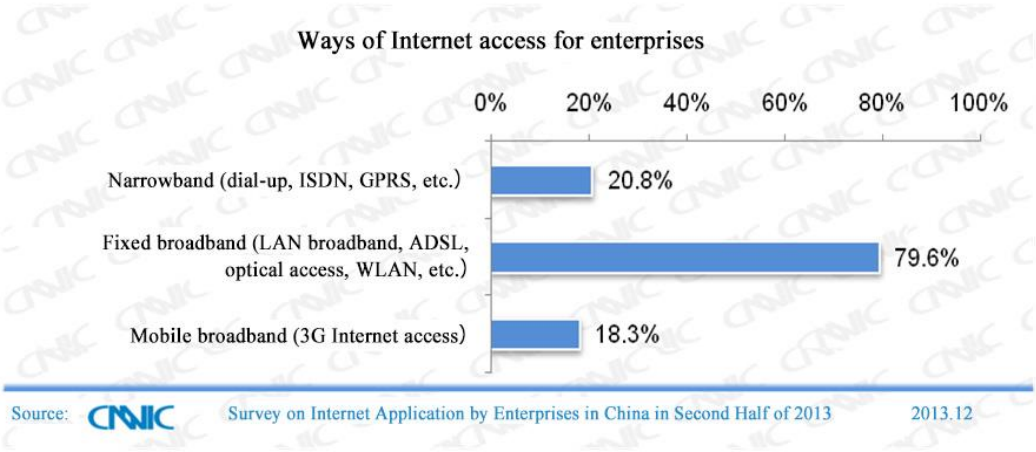


Figure 76 Ways of Internet access for enterprises

2013 is a year of great-leap-forward development for broadband construction in China when the Ministry of Industry and Information Technology officially launched the "Broadband China 2013 Special Action" and issued Comments on Implementation of Broadband China 2013 Special Action. Following that, the State Council issued "Broadband China" Strategy and Implementation Plan, stating that broadband network has become the strategic public infrastructure for the economic and social development in China in the new era, and putting forward specific development goals and development schedule[13].

Table 10 Development goals and development schedule of "Broadband China"

Indicator	Unit	2013	2015	2020
1. Size of broadband user				
User of fixed broadband access	100 million	2.1	2.7	4
Including: Fiber to The Home (FTTH） users	100 million	0.3	0.7	——
Including: urban broadband users	100 million	1.6	2	——
Rural broadband users	100 million	0.5	0.7	——
3G/LTE users	100 million	3.3	4.5	12
2. Popularization of broadband				
Penetration in fixed	%	40	50	70

[13] http://www.gov.cn/zwgk/2013-08/17/content_2468348.htm

Indicator	Unit	2013	2015	2020
broadband families				
Including: penetration in urban families	%	55	65	——
Penetration in rural families	%	20	30	——
Penetration in 3G/LTE users	%	25	32.5	85
3. Broadband network capability				
Broadband access capability of urban areas	Mbps	20 (80% of users）	20	50
Including: developed cities	Mbps		100 (some cities）	1000 (some users）
Broadband access capability of rural areas	Mbps	4 (85% of users）	4	12
Access bandwidth of large-scale enterprises and public institutions	Mbps		More than 100	More than 1000
International Internet gateway bandwidth	Gbps	2500	6500	——
Families covered by FTTH	100 million	1.3	2	3
Size of 3G/LTE base station	10,000	95	120	——
Broadband penetration in administrative villages	%	90	95	＞98
Proportion of users covered by interconnection platform of cable TV network nationwide	%	60	80	＞95
4. Application of broadband information				
Number of Internet users	100 million people	7	8.5	11
Including: rural Internet users	100 million people	1.8	2	——
Data volume of Internet (total bytes of web pages）	Terabyte	7800	15000	
E-commerce transactions	Trillion yuan	10	18	——

Continuous and deep-going broadband construction can boost the development of Internet applications not only among Internet users, but also among enterprises to a great extent. On the one hand, the broadband infrastructure plays a boosting role for the Internet in optimizing the industrial structure and increasing the operation efficiency of enterprises. Notice on "Broadband China" Strategy and Implementation Plan specifically points that we should keep expanding and deepening the applications of broadband in the production and management, speed up broadband networking for enterprises and the network-based process reengineering and business innovation, utilize information technologies to reconstruct and improve traditional industries, achieve network-based, smart, intensive and green development, and facilitate industrial optimization and upgrade. On the other hand, the broadband infrastructure boosts the development of high and new technology industries. Specifically, we should keep innovating the broadband application mode, cultivate new markets and new commercial activities, speed up development of modern service industries such as e-commerce, modern logistics and network finance, and develop the new-generation information technology industries such as cloud computing, The Internet of Things, mobile Internet and smart terminal.

The Ministry of Industry and Information Technology officially issued the mobile service licenses of the fourth generation to China Unicom, China Telecom and China Mobile on 4 December 2013, marking that the telecommunication industry in China has officially entered the 4G era. With its higher communication speed, lower service fee and its carrying capacity for transmission of big volumes of data, the 4G network will have broad application prospects in mobile working (such as mobile video conference and mobile OA system), mobile e-commerce (such as mobile storage and logistics management, supply chain management and mobile customer relations management), and greatly facilitate mobile information construction of enterprises.

II. Development of E-commerce and Internet Marketing of SMEs

1. Use of E-commerce

The enterprises that carried out online sales [14] have accounted for 23.5% in China by the end of December 2013. Of some key industries, the manufacturing industry and the wholesale & retail industry have relatively high proportions, 27.6% and 25.3% respectively. Due to their product features, the industries of real estate, resident service and other service industries have low proportions of online sales.

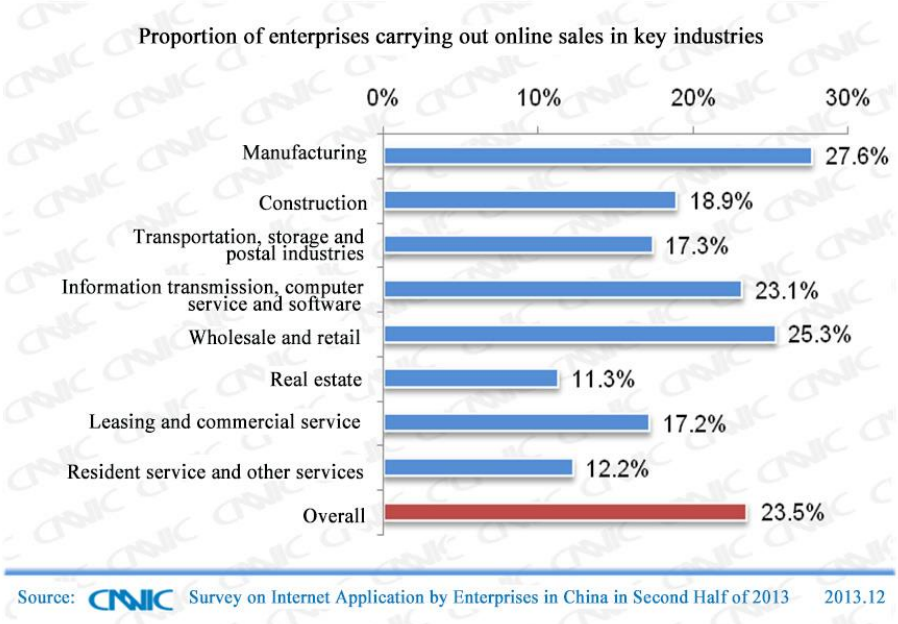


Figure 77 Proportion of enterprises carrying out online sales in key industries

The enterprises that carried out online procurement [15] have accounted for 26.8% in China by the end of December 2013. Of some key industries, the manufacturing industry and wholesale & retail industry still have relatively high proportions of online procurement, reaching 30.6% and 28.8% respectively. The utilization ratio in the industries of real estate, resident service and other service industries is still on the low side. On the whole, all the enterprises in the key industries had more online procurement than online sales in the past year.

[14] The online sales surveyed in this report refer to the behavior of receiving orders via Internet, such as via websites or emails.
[15] The online procurement surveyed in this report refers to the behavior of sending orders via Internet, such as via websites or emails.

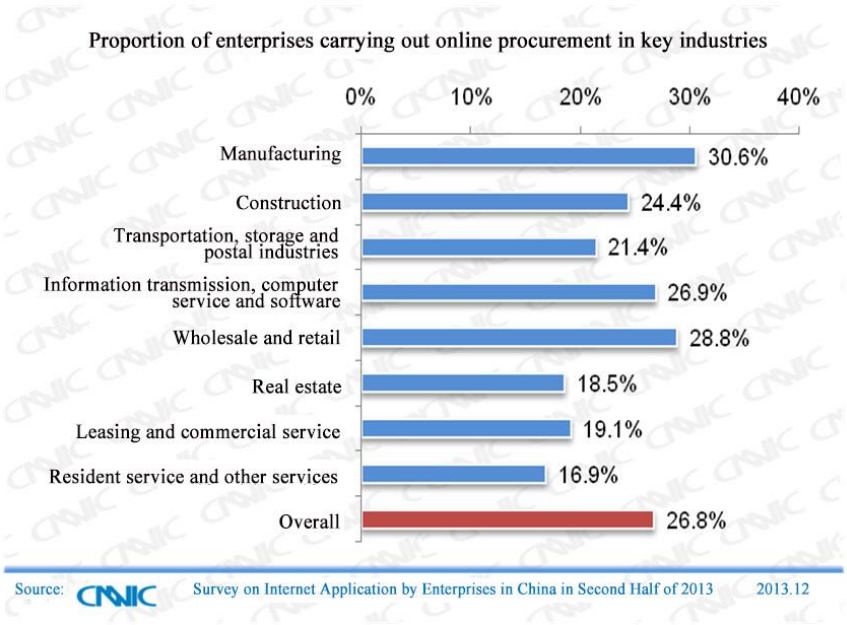


Figure 78 Proportion of enterprises carrying out online procurement in key industries

2. Use of online marketing [16]

The enterprises that utilized Internet to carry out marketing [17] have accounted for 20.9% in China by the end of December 2013.

The survey result shows that instant messaging tools are the most frequently used by those interviewed enterprises which have utilized Internet to carry out marketing activities, with a utilization ratio of up to 63.1%. For these enterprises, instant messaging tools not only can be used for communication, but also play an important role in e-commerce and online marketing. With their huge user base, strong user stickiness and diversified management tools, instant messaging tools have become important tools of marketing for enterprises.

In addition, search engine marketing and e-commerce platform promotion also have high utilization ratios, 56.0% and 47.6% respectively. In terms of the consumer behavior mode, the search behavior directly points to buying, and e-commerce platforms are just the locations for such purchasing behavior. With limited marketing and promotion costs, SMEs are apt to select a way with controllable investment and high cost performance.

[16] It means that marketing activities are carried out through Internet
[17] They include the advertisements put or promotions carried out by enterprises themselves or via their agents/ advertisement companies, including paid promotions and free promotions.

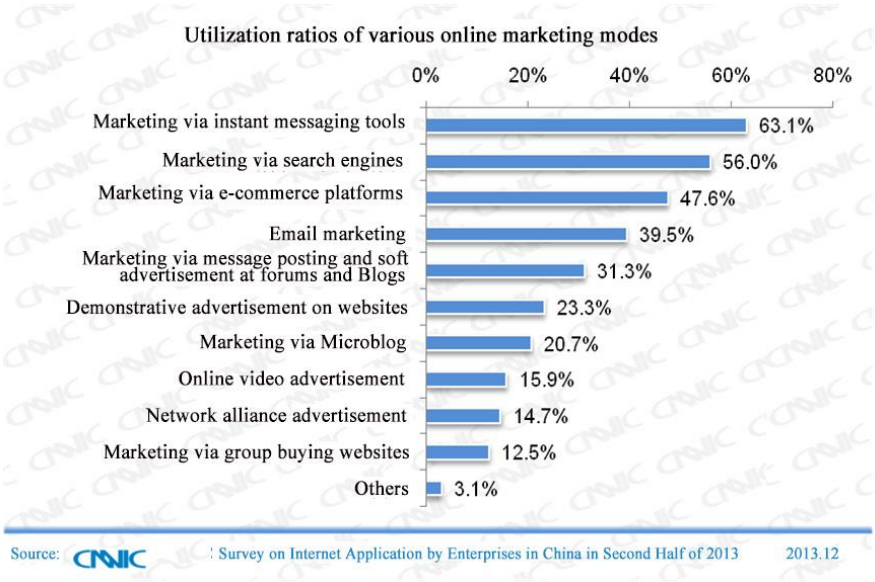


Figure 79 Utilization ratios of various online marketing modes

III. Features and Trends of Internet Application of SMEs

◇ **Basic Internet applications are in steady progress, and emphasis should be laid on micro-enterprises**

The indicators of basic Internet applications in China, such as computer utilization ratio, Internet utilization ratio and broadband utilization ratio of enterprises, slightly increased compared with the previous year. Broadband construction, in particular, achieved great-leap-forward development in 2013. On the whole, basic information-based applications have achieved good penetration among the enterprises in China, but differences still exist among enterprises of difference sizes. The computer utilization ratio and Internet utilization ratio of micro-enterprises with 7 employees or below are far lower than the national average level.

◇ **E-commerce utilization ratio needs to be improved, but some industries develop relatively fast in E-commerce**

Chinese enterprises have had stable performance in terms of e-commerce utilization ratio in recent years, with both online procurement and online sales maintaining at about 25%. The survey shows that business owners have had enhanced awareness of e-commerce, but most of them are still concerned about some problems, such as lack of effectiveness of online marketing, difficulty

in collaboration between network marketing channels and traditional channels, and lack of e-commerce talents, which has restricted the e-commerce development of e-commerce to a large extent. Specifically, the industries of manufacturing, wholesale, retail, information transmission, computer services and software have far higher proportions of online procurement and online sales than other industries. For the industries of real estate, construction, transport and the service sector, e-commerce focuses on acquisition of online information and promotion of brands and products, and procurement and sales are still accomplished offline.

◇ **Ways of online marketing tend to be centralized**

Judging by the trend in the past two years, the instant messaging tools, search engines and e-commerce platforms are the top three ways used by SMEs. Except for forums/BBS which have significantly increased utilization ratios, other ways of online marketing, such as email marketing, website demonstration advertisement, online video advertisement, network alliance advertisement and group buying, have decreased utilization ratios. This indicates that SMEs are more focused on those online marketing ways with specific sales orientations instead of the demonstration advertisements. Certainly this is also closely related to the features of SMEs, such as relatively weak capital base, and higher demands for product sales than for brand demonstration.

Appendix 1 Attached Tables of Fundamental Internet resources

Table 1 Number of IPv4 Addresses in the Regions of China

Region	Number of Addresses	Equivalence
Mainland China	330,308,096	19A+176B+26C
Taiwan	35,404,544	2A+28B+59C
Hong Kong SAR	11,717,376	178B+203C
Macau SAR	324,864	4B+245C

Table 2 Allocation of IPv4 addresses among organizations in Mainland China

Organization name	Number of Addresses	Total number of IPv4 addresses
China Telecom	125761280	7A+126B+247C
China United Network Communications Corporation	69835008	4A+41B+153C
Members of CNNIC IP Address Allocation Alliance	52081664	3A+26B+180C
China Mobile Communications Corporation	51088384	3A+11B+132C
China Education and Research Network	16649728	254B+14C
Others	14892032	227B+60C
Total	330308096	19A+176B+26C

Data source: APNIC and CNNIC

Note 1: The addresses of China United Network Communication Limited include the addresses of former China Unicom and former China Netcom. Specifically, the IPv4 address 6316032 (96B+96C) of former China Unicom is assigned by CNNIC;

Note 2: As a national Internet registry (NIR) approved by APNIC and national competent authorities in China, CNNIC has organized ISPs, enterprises and public institutions of certain size in China to set up IP Address Assignment Alliance of China. So far, the total number of IPv4 addresses held by the members of CNNICIP IP Address Assignment Alliance is 74192896, equivalent to 4A+108B+24C. The IPv4 addresses of the members of IP Address Assignment Alliance of China listed in the above table do not include those IPv4 addresses already assigned to former China Unicom and Tietong.

Note 3: The addresses of China Mobile Communications Corporation include the addresses of former China Mobile and China Tietong. Specifically, the IPv4 address 15795200 (241B+4C) of China Tietong is assigned by CNNIC;

Note 4: The deadline for the above statistical data is 31 December 2013.

Table 3 Number of IPv6 addresses in China

Region	Number of Addresses
Mainland China	16670 /32
Taiwan	2345 /32
Hong Kong SAR	135 /32
Macau SAR	3 /32

Table 4 IPv6 address allocation in Mainland China

Organization name	Number of IPv6 addresses (/32)
China Telecom	4099
China United Network Communications Corporation	4097
China Mobile Communications Corporation	4097
Members of CNNIC IP Address Allocation Alliance	2261
China Tietong Telecommunications Corporation.	2049
China Science and Technology Network	17
China Education and Research Network	16
Others	34

Data source: APNIC and CNNIC

Note 1: /32 as shown in the IPv6 address allocation table is a method to present IPv6 addresses, and the corresponding number of addresses is $2^{(128-32)}=2^{96}$.

Note 2: At present, the total IPv6 addresses held by the members of IP Address Assignment Alliance of CNNICIP are 4327/32. The IPv6 addresses held by the members of IP Address Assignment Alliance listed in the above table do not include those IPv6 addresses already assigned to China Tietong and CSTNET.

Note 3: The IPv6 addresses of China Tietong Telecommunications Corporation are assigned by CNNIC;

Note 4: The IPv6 addresses of CSTNET are assigned by CNNIC;

Note 5: The deadline for the above statistical data is 31 December 2013.

Table 5 Proportion of IPv4 address in each province

Province	Proportion
Beijing	25.65%
Guangdong	9.62%
Zhejiang	5.31%
Jiangsu	4.81%
Shanghai	4.48%
Shandong	4.94%
Hebei	2.89%
Liaoning	3.39%
Henan	2.67%
Hubei	2.43%
Sichuan	2.82%
Fujian	1.96%
Hunan	2.41%
Shaanxi	1.66%
Anhui	1.68%
Heilongjiang	1.23%
Guangxi	1.41%
Chongqing	1.71%
Jilin	1.24%
Tianjin	1.05%
Jiangxi	1.77%
Shanxi	1.30%
Yunnan	0.99%
Inner Mongolia	0.79%
Xinjiang	0.62%
Hainan	0.48%
Guizhou	0.44%
Gansu	0.48%
Ningxia	0.24%
Qinghai	0.18%
Tibet	0.13%
Others	9.22%
Total	100.00%

Data source: APNIC and CNNIC

Note 1: The above IP address statistics are for the provinces where the IP address owners are located.

Note 2: The deadline for the above statistical data is 31 December 2013.

Table 6 Number of domain names, .CN domain names and .中国 domain names by province

Province	Domain name		Including: .CN Domain name		.中国 domain names	
	Number	Proportion in total domain names domain names	Number	Proportion in total CN domain names	Number	Proportion in total .中国 domain names
Shandong	4323922	23.5%	3441396	31.8%	16177	5.9%
Guangdong	3553649	19.3%	2330704	21.5%	47759	17.4%
Beijing	1857328	10.1%	808940	7.5%	31477	11.5%
Heilongjiang	857496	4.7%	675489	6.2%	15518	5.7%
Shanghai	782976	4.2%	289583	2.7%	14777	5.4%
Zhejiang	691006	3.7%	285142	2.6%	17774	6.5%
Fujian	661253	3.6%	257664	2.4%	12937	4.7%
Jiangsu	648607	3.5%	210254	1.9%	21627	7.9%
Henan	367511	2.0%	80321	0.7%	4793	1.7%
Sichuan	340263	1.8%	92170	0.9%	10793	3.9%
Hebei	253335	1.4%	73055	0.7%	6998	2.5%
Liaoning	223388	1.2%	68041	0.6%	11209	4.1%
Anhui	211612	1.1%	65066	0.6%	3560	1.3%
Hubei	210035	1.1%	68767	0.6%	5050	1.8%
Hunan	179771	1.0%	64236	0.6%	4035	1.5%
Chongqing	140436	0.8%	44906	0.4%	6132	2.2%
Hainan	136061	0.7%	13652	0.1%	538	0.2%
Shaanxi	132080	0.7%	38738	0.4%	3953	1.4%
Tianjin	115133	0.6%	32963	0.3%	2951	1.1%
Jiangxi	96139	0.5%	34072	0.3%	2405	0.9%
Guangxi	92273	0.5%	34807	0.3%	2899	1.1%
Yunnan	83572	0.5%	33417	0.3%	4992	1.8%
Shanxi	81775	0.4%	23840	0.2%	2982	1.1%
Jilin	76449	0.4%	21322	0.2%	3023	1.1%
Inner Mongolia	45576	0.2%	14763	0.1%	1696	0.6%
Guizhou	42906	0.2%	17835	0.2%	1425	0.5%
Xinjiang	40747	0.2%	15918	0.1%	868	0.3%
Gansu	29295	0.2%	10663	0.1%	627	0.2%
Ningxia	16049	0.1%	4479	0.0%	339	0.1%
Qinghai	11134	0.1%	2452	0.0%	212	0.1%

Tibet	4989	0.0%	1307	0.0%	222	0.1%
Others	2129695	11.6%	1669368	15.4%	14805	5.4%
Total	18436461	100.0%	10825330	100.0%	274553	100.0%

Note: The total number of domain names by province does not cover .EDU.CN.

Table 7 Number of websites by province

	Number of Websites	Proportion in total number of websites
Guangdong	535960	16.7%
Beijing	439432	13.7%
Shanghai	316862	9.9%
Fujian	220671	6.9%
Zhejiang	219693	6.9%
Jiangsu	166267	5.2%
Shandong	145757	4.6%
Henan	111152	3.5%
Sichuan	110127	3.4%
Hebei	89634	2.8%
Liaoning	86480	2.7%
Hubei	63882	2.0%
Hunan	49592	1.5%
Anhui	37903	1.2%
Shaanxi	37467	1.2%
Tianjin	36617	1.1%
Shanxi	34628	1.1%
Chongqing	31347	1.0%
Heilongjiang	27141	0.8%
Guangxi	24966	0.8%
Jiangxi	22404	0.7%
Jilin	20783	0.6%
Yunnan	14475	0.5%
Inner Mongolia	12289	0.4%
Hainan	12105	0.4%
Guizhou	9642	0.3%
Xinjiang	7595	0.2%
Gansu	7137	0.2%
Ningxia	3840	0.1%
Qinghai	2216	0.1%
Tibet	912	0.0%
Others	302649	9.5%
Total	3201625	100.0%

Note: The total number of websites by province does not cover the websites under EDU.CN.

Table 8 Web pages classified by updating cycle

Web page updating cycle	Proportion
Update weekly	4.8%
Update monthly	50.8%
Update every three months	25.0%
Update every six months	10.0%
Update every more than six months	9.4%
Total	100.0%

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Table 9 Web pages classified by suffix form

Web page suffix forms	**Proportion**
html	32.44%
htm	5.42%
/	25.37%
shtml	2.44%
asp	1.96%
php	8.50%
txt	0.00%
nsf	0.00%
xml	0.05%
jsp	1.97%
cgi	0.01%
pl	0.00%
aspx	2.62%
do	0.70%
dll	0.01%
jhtml	0.01%
cfm	0.01%
php3	0.00%
phtml	0.01%
Other suffixes	18.48%
Total	100.0%

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Table 10 Web pages classified by multimedia form

Web page multimedia forms	Proportion (in multimedia web pages)
jpg	42.3%
gif	6.5%
zip	0.5%
swf	0.9%
doc	17.5%
pdf	23.0%
rm	0.0%
mid	0.0%
ram	0.0%
mp3	0.7%
ppt	1.4%
mpg	0.0%
Other multimedia	7.2%
Total	100%

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Table 11 Number of web pages by province

	Total of web pages after duplicated ones are removed	Static	Dynamic	Proportions of static to dynamic
Anhui	1,296,827,492	808,440,988	488,386,504	1.66
Beijing	37,731,520,746	24,358,388,919	13,373,131,827	1.82
Fujian	908,482,916	460,498,350	447,984,566	1.03
Gansu	39,334,416	10,106,572	29,227,844	0.35
Guangdong	25,439,061,672	14,094,996,198	11,344,065,474	1.24
Guangxi	1,129,958,542	170,425,727	959,532,815	0.18
Guizhou	4,170,822	2,315,179	1,855,643	1.25
Hainan	1,447,383,006	387,993,721	1,059,389,285	0.37
Hebei	5,430,799,641	3,239,244,919	2,191,554,722	1.48
Henan	4,457,411,381	2,238,687,392	2,218,723,989	1.01
Heilongjiang	64,820,672	37,805,162	27,015,510	1.40
Hubei	1,672,995,067	1,011,319,440	661,675,627	1.53
Hunan	530,449,942	406,483,794	123,966,148	3.28
Jilin	1,050,909,426	577,295,491	473,613,935	1.22
Jiangsu	12,594,798,710	9,685,070,937	2,909,727,773	3.33
Jiangxi	2,651,682,372	1,931,114,266	720,568,106	2.68
Liaoning	2,282,109,954	1,115,718,168	1,166,391,786	0.96
Inner Mongolia	227,096,393	129,546,952	97,549,441	1.33
Ningxia	9,485,476	84,060	9,401,416	0.01
Qinghai	96,186	40,902	55,284	0.74
Shandong	5,352,628,473	3,935,914,070	1,416,714,403	2.78
Shanxi	4,125,077,932	2,445,687,655	1,679,390,277	1.46
Shaanxi	411,750,959	265,831,551	145,919,408	1.82
Shanghai	9,212,228,038	4,956,079,177	4,256,148,861	1.16
Sichuan	392,957,967	196,335,199	196,622,768	1.00
Tianjin	7,251,084,350	3,636,308,174	3,614,776,176	1.01
Tibet	1,403,745	1,360,107	43,638	31.17
Xinjiang	61,330,381	35,166,012	26,164,369	1.34
Yunnan	2,755,275,416	1,876,820,982	878,454,434	2.14
Zhejiang	21,266,044,955	11,521,785,497	9,744,259,458	1.18
Chongqing	241,585,637	159,880,578	81,705,059	1.96
The whole country	150,040,762,685	89,696,746,139	60,344,016,546	1.49

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Table 12 Number of web page bytes by province

	Total page size	Average page size (KB)
Anhui	81,473,267,241	63
Beijing	2,348,203,884,711	62
Fujian	39,991,384,009	44
Gansu	1,248,817,846	32
Guangdong	1,069,236,839,502	42
Guangxi	28,317,638,744	25
Guizhou	106,458,885	26
Hainan	59,185,230,822	41
Hebei	277,681,464,291	51
Henan	184,932,782,956	41
Heilongjiang	1,512,592,031	23
Hubei	67,214,318,386	40
Hunan	24,038,437,686	45
Jilin	20,514,576,209	20
Jiangsu	546,288,566,198	43
Jiangxi	86,375,132,135	33
Liaoning	205,973,383,156	90
Inner Mongolia	9,908,819,601	44
Ningxia	583,523,096	62
Qinghai	11,265,579	117
Shandong	299,135,082,556	56
Shanxi	254,380,441,195	62
Shaanxi	20,721,478,423	50
Shanghai	462,592,581,183	50
Sichuan	19,641,461,923	50
Tianjin	323,611,733,428	45
Tibet	46,676,289	33
Xinjiang	1,707,016,061	28
Yunnan	158,100,884,575	57
Zhejiang	879,255,374,681	41
Chongqing	7,882,090,209	33
The whole country	7,479,873,203,607	50

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Table 13 Proportion of web page classified by updating cycle in each province

	Update weekly	Update monthly	Update every three months	Update every six months	Update every more than six months
Anhui	7.4%	65.1%	19.7%	4.5%	3.3%
Beijing	4.0%	49.4%	26.3%	10.9%	9.4%
Fujian	3.7%	39.5%	25.5%	13.8%	17.5%
Gansu	3.4%	60.5%	21.7%	8.0%	6.4%
Guangdong	5.9%	50.2%	24.2%	10.5%	9.1%
Guangxi	6.2%	66.8%	18.7%	4.4%	3.9%
Guizhou	4.0%	63.1%	12.5%	14.7%	5.7%
Hainan	5.8%	49.1%	24.0%	9.6%	11.5%
Hebei	5.9%	46.9%	29.9%	9.1%	8.3%
Henan	5.2%	56.5%	21.9%	8.4%	8.0%
Heilongjiang	5.1%	48.3%	22.5%	14.8%	9.3%
Hubei	3.8%	52.9%	25.7%	9.2%	8.4%
Hunan	4.7%	53.8%	24.8%	9.7%	7.0%
Jilin	2.1%	53.7%	28.0%	8.4%	7.8%
Jiangsu	4.9%	50.7%	23.1%	11.5%	9.9%
Jiangxi	4.4%	44.5%	31.0%	10.1%	10.0%
Liaoning	5.3%	55.2%	22.6%	7.3%	9.6%
Inner Mongolia	3.8%	55.2%	24.9%	10.8%	5.3%
Ningxia	0.7%	41.0%	29.1%	6.0%	23.1%
Qinghai	5.9%	67.2%	16.8%	4.2%	5.9%
Shandong	6.8%	56.2%	24.3%	7.6%	5.2%
Shanxi	5.8%	49.7%	27.1%	9.9%	7.5%
Shaanxi	1.8%	43.5%	30.3%	8.9%	15.5%
Shanghai	5.6%	54.4%	24.3%	9.5%	6.3%
Sichuan	3.5%	55.3%	26.6%	7.2%	7.4%
Tianjin	4.1%	44.4%	20.1%	7.5%	23.9%
Tibet	1.4%	23.2%	42.0%	7.2%	26.1%
Xinjiang	4.7%	39.1%	40.2%	13.0%	3.0%
Yunnan	4.1%	60.1%	25.5%	7.4%	3.0%
Zhejiang	4.1%	50.9%	25.6%	10.5%	8.9%
Chongqing	5.6%	49.4%	22.9%	9.7%	12.3%
The whole country	4.8%	50.8%	25.0%	10.0%	9.4%

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Table 14 Proportion of web page classified by coding type in each province

	Chinese	Traditional Chinese	English	Others
Anhui	99.8%	0.1%	0.1%	0.0%
Beijing	98.1%	0.7%	1.2%	0.0%
Fujian	99.6%	0.2%	0.2%	0.0%
Gansu	99.5%	0.4%	0.1%	0.0%
Guangdong	98.6%	0.9%	0.6%	0.0%
Guangxi	99.7%	0.0%	0.3%	0.0%
Guizhou	99.3%	0.5%	0.2%	0.0%
Hainan	93.5%	5.3%	0.8%	0.4%
Hebei	85.4%	11.5%	1.1%	2.0%
Henan	98.7%	0.5%	0.8%	0.0%
Heilongjiang	96.9%	2.8%	0.2%	0.1%
Hubei	98.6%	1.0%	0.4%	0.0%
Hunan	98.9%	0.9%	0.2%	0.0%
Jilin	99.7%	0.1%	0.2%	0.0%
Jiangsu	98.4%	1.2%	0.4%	0.0%
Jiangxi	98.7%	0.1%	1.2%	0.0%
Liaoning	99.2%	0.4%	0.4%	0.0%
Inner Mongolia	96.6%	3.2%	0.1%	0.1%
Ningxia	89.3%	4.2%	6.0%	0.5%
Qinghai	75.0%	12.5%	8.3%	4.2%
Shandong	98.3%	0.7%	1.0%	0.0%
Shanxi	99.4%	0.4%	0.2%	0.0%
Shaanxi	99.4%	0.1%	0.5%	0.0%
Shanghai	99.0%	0.3%	0.7%	0.0%
Sichuan	99.8%	0.0%	0.2%	0.0%
Tianjin	99.4%	0.2%	0.3%	0.0%
Tibet	95.6%	2.8%	1.5%	0.1%
Xinjiang	91.4%	5.4%	2.7%	0.5%
Yunnan	97.1%	2.7%	0.1%	0.1%
Zhejiang	99.1%	0.5%	0.4%	0.0%
Chongqing	99.7%	0.0%	0.3%	0.0%
The whole country	98.1%	1.1%	0.7%	0.1%

Data source: Baidu Online Network Technology (Beijing) Co., Ltd.

Appendix 2 Organizations Supporting the Survey

We would like to express our heartfelt thanks to the following organizations that have provided strong support for the availability of online questionnaires for this survey and the collection of basic resources data.

Ⅰ. Portal websites for survey (listed according to the time when the survey links are provided)

NetEase.com	moobuu.com	b2b.cn
Iqiyi.com	iimedia.cn	

Ⅱ. Organizations supporting the survey (not listed in any particular order)

China Telecom

China International Electronic Commerce Center

China Education and Research Network Center

Network Center of CSTNet

China United Network Communications Limited

China Mobile Communications Corporation

Baidu Online Network Technology (Beijing) Co., Ltd

SanFront Information Technology Company

Beijing East Netscape Information Technology Co., Ltd

Beijing SinoNets Xinye Network and Telecommunication Co., Ltd

Beijing Innovative Linkage Technology Ltd

Beijing Xinnet Digital Information Technology Co., Ltd

Guangdong Eranet International Limited

Xiamen Longtop On-line Technology Co., Ltd (its brand Bizcn)

Xiamen Jingtong Technology Industry Co., Ltd.

Xiamen ZZY Network Service Co., Ltd

NET.cn

Zhongqi Power S&T Co., Ltd

Appendix 3 Introduction to CNIDP

China Internet Data Platform (cnidp.cn) – open and shared Internet statistical data and services

◆Launched and run by CNNIC

◆ Providing Internet statistical data and services free of charge

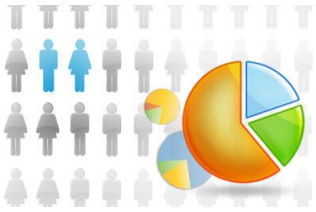
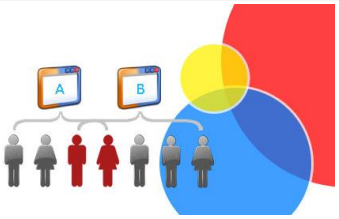
◆Reflecting the situation of Internet development in China objectively and timely

Website of the platform: www.cnidp.cn

Introduction to the platform

Chinese Internet Data Platform, launched and run by CNNIC, adopts the research method of fixed sample panel to reflect multiple facets (macro and micro) of Internet development situation in China and provide multifaceted decision-making support for the participants of the Internet industry through the Internet using behavior data of Chinese Internet users samples collected by the survey clients continuously in real time and by analyzing those data statistically.

Function Demonstration

Statistical data Provide weekly, monthly, quarterly and half-year statistical data including the covered users, visiting times, page views, visiting duration and other indicators for domestic	
	**User feature** Provide multidimensional structure distribution data including sex, age, education, occupation, income, region, and city level for domestic mainstream
Superposition analysis Count the superposition of user groups, and the structure distribution of different user groups for different websites/software.	
	**Trend comparison** Provide detailed historical statistics data on a "daily" basis for domestic mainstream websites/software, so as to reflect the historical change trend.