The 54th Statistical Report on China's Internet Development

China Internet Network Information Center (CNNIC)

August 2024

CONTENTS

CORE DATA1
CHAPTER I DEVELOPMENT AND APPLICATION STATUS
OF INTERNET BASIC RESOURCES
I. DEVELOPMENT OF BASIC INTERNET RESOURCES
(I) IP Addresses
(II) Domain Name
(III) Number of Mobile Phone Base Stations7
(IV) Number of Internet Broadband Access Ports
(V) Total Length of Fiber Optic Cable Lines9
II. APPLICATION OF BASIC INTERNET RESOURCES9
(I) Websites
(II) Mobile Internet Access Traffic10
(III) Online Duration11

CHAPTER II SIZE AND STRUCTURE OF INTERNET USERS 13

APPLICATIO	DNS			23
CHAPTER	III	DEVELOPMENT	OF	INTERNET
(III) Internet	Accessing	Devices		
(II) Age Stru	cture			21
(I) Gender S	tructure			20
II. STRUCTURE	of Intern	ET USERS AND INTERNET ACCESSIN	NG DEVICES	20
(III) Size of	Non-Intern	et Users		
(II) Size of I	nternet Use	ers in Urban and Rural Areas		
(I) Overall S	ize of Inter	net Users		13
I. SIZE OF INTER	RNET USER	5		



I

CNNIC 中国互联网络信息中心 CHIMA INTERNET NETWORK INFORMATION CENTER

I. OVERVIEW OF INTERNET APPLICATIONS	23
II. BASIC APPLICATIONS	24
(I) Instant Messaging	24
(II) Search Engines	26
(III) Online Office	27
III. BUSINESS TRANSACTION APPLICATIONS	28
(I) Online Payment	28
(II) Online Shopping	29
(III) Online Meal Ordering	31
(IV) Online Travel Booking	33
IV. ONLINE ENTERTAINMENT APPLICATIONS	34
(I) Online Video	34
(II) Live Streaming	37
(III) Online Music	38
(IV) Online Literature	39
V. PUBLIC SERVICE APPLICATIONS	41
(I) Online car-hailing	41
(II) Online Medical Services	42
APPENDIX 1 SURVEY METHODOLOGY4	15
APPENDIX 2 ATTACHED TABLES OF BASIC INTERNET	I
RESOURCES	50
APPENDIX 3 SUPPORTING ORGANIZATIONS	55



Core Data

- Sy June 2024, the number of Internet users in China had reached nearly 1.1 billion (1.09967 billion), an increase of 7.42 million compared to December 2023. The Internet penetration rate reached 78.0%, an increase of 0.5 percentage points since December 2023.
- By June 2024, the number of mobile Internet users in China had reached 1.096 billion, with
 99.7% of Internet users accessing the Internet via mobile phones.
- Sy June 2024, the number of rural Internet users in China had reached 304 million, accounting for 27.7% of the total Internet users. The number of urban Internet users had reached 795 million, accounting for 72.3% of the total Internet users.
- ♦ By June 2024, the proportion of Internet users in China accessing the Internet via mobile phones had reached 99.7%; the proportions of users accessing the Internet via desktop computers, laptops, televisions, and tablets were 34.2%, 32.4%, 25.2%, and 30.5%, respectively; the proportions of users accessing the Internet via smart connected vehicles, smart home devices, and personal wearable devices were 10.4%, 21.9%, and 24.2%, respectively.
- By June 2024, the number of IPv6 addresses in China was 69,080 blocks /32, representing a 1.5% increase from December 2023.
- Sy June 2024, the total number of domain names in China was 31.87 million, of which the number of .CN domain names was 19.56 million.
- Sy June 2024, the number of instant messaging users in China had reached 1.078 billion, an increase of 18.24 million from December 2023, accounting for 98.0% of the total Internet users.
- Sy June 2024, the number of online video users in China had reached 1.068 billion, an increase of 1.25 million from December 2023, accounting for 97.1% of the total Internet users. Among them, the number of short video users had reached 1.050 billion, accounting for 95.5% of the total Internet users, while the number of micro-drama users had reached 576 million, accounting for 52.4% of the total Internet users.
- ♦ By June 2024, the number of online payment users in China had reached 969 million, an increase of 14.98 million from December 2023, accounting for 88.1% of the total Internet



users.

- ♦ By June 2024, the number of online shopping users in China had reached 905 million, accounting for 82.3% of the total Internet users.
- Sy June 2024, the number of search engine users in China had reached 824 million, accounting for 75.0% of the total Internet users.
- Sy June 2024, the number of online live streaming users in China had reached 777 million, accounting for 70.6% of the total Internet users.
- Sy June 2024, the number of online music users in China had reached 729 million, an increase of 14.5 million from December 2023, accounting for 66.3% of the total Internet users.
- ♦ By June 2024, the number of online meal ordering users in China had reached 553 million, an increase of 8.5 million from December 2023, accounting for 50.3% of the total Internet users.
- ♦ By June 2024, the number of online literature users in China had reached 516 million, accounting for 46.9% of the total Internet users.
- Sy June 2024, the number of car-hailing users in China had reached 503 million, accounting for 45.7% of the total Internet users.
- ♦ By June 2024, the number of online travel booking users in China had reached 497 million, accounting for 45.2% of the total Internet users.
- ♦ By June 2024, the number of Internet healthcare users in China had reached 365 million, accounting for 33.2% of the total Internet users.



2

Chapter I Development and Application Status of Internet Basic Resources

In the first half of 2024, the supply of Internet resources in China continued to grow, network infrastructure was continuously strengthened, and mobile Internet traffic maintained a rapid growth trend, providing solid support for the high-quality development of the digital economy. **First, the supply of Internet resources continued to expand.** By June, the registration of national top-level domain names in China had approached 20 million. The large-scale deployment and application of IPv6 was steadily advancing. By the end of May, the number of active users had reached 794 million, with IPv6 traffic accounting for 64.56%¹ of mobile networks. **Second, the foundation of network infrastructure was being continuously strengthened.** By June, the total number of 5G base stations for mobile phones in China had reached 3.917 million². **Third, mobile Internet traffic continues to grow rapidly.** By June, the cumulative mobile Internet traffic had reached 160.4 billion GB, an increase of 12.6% year-on-year; the average per household Dataflow of Usage (DOU) of the mobile Internet in June reached 18.15 GB, a year-on-year increase of 8.1%³. This indicated that mobile Internet applications continued to thrive and increasingly penetrated the daily learning, work, and life of Internet users, providing convenient services.

I. Development of Basic Internet Resources

By June 2024, the number of IPv4 addresses in China had reached 392.35 million, and the number of IPv6 addresses had reached 69,080 blocks/32, with 794 million⁴ active IPv6 users. The



¹Source: China's government website, https://www.gov.cn/yaowen/liebiao/202407/content_6962022.htm, July 9, 2024.

²Source: Ministry of Industry and Information Technology, https://www.miit.gov.cn/jgsj/yxj/xxfb/art/2024/art_df19d637e3644b468c04e028d4b05651.html, July 23, 2024.

³Source: Ministry of Industry and Information Technology, https://www.miit.gov.cn/jgsj/yxj/xxfb/art/2024/art_____df19d637e3644b468c04e028d4b05651.html, July 23, 2024.

⁴The number for active IPv6 users here is based on data available by the end of May 2024.

total number of domain names in China was 31.87 million⁵, of which the number of .CN domain names was 19.56 million. The total number of mobile phone base stations in China had reached 11.88 million, the number of broadband Internet access ports had reached 1.17 billion, and the total length of optical cable lines had reached 67.12 million kilometers⁶.

Category	Unit	Jun. 2024
IPv4	1	392,347,136
IPv6	block/32	69,080
Number of active IPv6 users ⁷	100 million	7.94
Domain names	1	31,871,959
Among them, .CN	1	19,562,007
Mobile phone base stations	10,000	1,188
Internet broadband access ports	100 million	11.69
Length of fiber optic cable lines	10,000 km	6,712

Table 1 Development of Basic Internet Resources by June 2024

(I) IP Addresses

By June 2024, the number of IPv6 addresses in China was 69,080 blocks/32, a 1.5% increase from December 2023. An analysis of the IPv6 support status for 23 key public recursive services worldwide showed that 14 recursive services provided IPv6 public recursive services, accounting for approximately 60.9%.

4

⁵Source: the numbers of generic top-level domain names (gTLD) and new generic top-level domain name s (New gTLD) were provided with assistance from domestic domain name registration organizations. The numbers of .CN and . $\oplus \blacksquare$ domain names reflect the global registration figures.

⁶Source: Ministry of Industry and Information Technology, https://www.miit.gov.cn/jgsj/yxj/xxfb/art/2024/art_df19d637e3644b468c04e028d4b05651.html, July 23, 2024.

 $[\]overline{}^{7}$ The number for active IPv6 users here is based on data available by the end of May 2024.



Figure 1 Number of IPv6 addresses⁸

By May 2024, the number of active IPv6 users in the country had reached 794 million.



Figure 2 Number of Active IPv6 Users

By June 2024, the number of IPv4 addresses in the country had reached 392.35 million.



⁸Figures here include Hong Kong, Macao and Taiwan.



Figure 3 Number of IPv4 Addresses⁹

(II) Domain Names

By June 2024, the total number of domain names in China had reached 31.87 million. Among them, the number of .CN domain names was 19.56 million; the number of .COM domain names was 7.44 million; the number of .中国 domain names was 170 thousand; and the number of new generic top-level domains (New gTLDs) was 2.56 million.

Category	Number
.CN	19,562,007
.COM	7,443,375
.NET	608,325
.中国	171,090
.INFO	72,765
.ORG	26,041
New gTLD	2,557,935
Others ¹⁰	1,430,421

Table 2 Number of Domain Names by Category

6

⁹Figures here include Hong Kong, Macao and Taiwan.

¹⁰Others include .BIZ, .CO, .TV, .CC, .ME, .HK, .PW, etc.

Total	31,871,959
-------	------------

Category	Number
$.CN^{11}$	11,502,204
.COM.CN	3,090,128
.ADM.CN ¹²	3,144,000
.NET.CN	892,622
.ORG.CN	778,744
.AC.CN	134,230
.GOV.CN	13,015
.EDU.CN	6,839
Others	225
Total	19,562,007

Table 3Number of .CN Domain Names

(III) Number of Mobile Phone Base Stations

By June 2024, the total number of mobile phone base stations in China had reached 11.88 million, with a net increase of 265,000 from December 2023. Among them, the total number of 5G base stations had reached 3.917 million, accounting for 33% of the total number of mobile base stations, and an increase of 2.4 percentage points compared to the first quarter.



¹¹Here .CN refers to the second-level domain names registered directly under .CN. ¹².ADM.CN refers to a collection of virtual second-level domain names, which are the domain names of administrative regions (second-level domain names) under .CN.



Figure 4 Number of Mobile Phone Base Stations

(IV) Number of Internet Broadband Access Ports

By June 2024, the number of Internet broadband access ports in China had reached 1.169 billion, a net increase of 33.54 million compared to December 2023. Among them, the number of FTTH/O ports had reached 1.13 billion, a net increase of 35.42 million compared to December 2023, and accounting for 96.6% of the total Internet broadband access ports; the number of 10G PON ports capable of providing gigabit network services had reached 25.97 million, with a net increase of 2.951 million compared to December 2023.





Figure 5 Number of Internet Broadband Access Ports

(V) Total Length of Fiber Optic Cable Lines

By June 2024, the total length of optical fiber lines in China had reached 67.12 million kilometers, a net increase of 2.799 million kilometers compared to December 2023. Among them, the proportions of access network optical fiber line, local network relay optical fiber line, and long-distance optical fiber line were 62.7%, 35.6%, and 1.7%, respectively.



Figure 6 Total Length of Fiber Optic Cable Lines

II. Application of Basic Internet Resources

(I) Websites

By June 2024, the number of websites¹³ in China had reached 3.91 million.



¹³Websites refer to the websites registered by domain name registrants within China.



Figure 7 Number of Websites

By June 2024, the number of global websites with .CN domain names had reached 2.32 million.



Figure 8 Number of Websites with .CN Domain Names

(II) Mobile Internet Access Traffic

In the first half of 2024, the mobile Internet access traffic in China reached 160.4 billion GB, a year-on-year increase of 12.6%.





Figure 9 Mobile Internet Access Traffic

(III) Online Duration

1. Average Weekly Internet Usage Time per Internet User

By June 2024, the average weekly Internet usage time¹⁴ per Internet user in China was 29.0 hours, an increase of 2.9 hours compared to December 2023.



Figure 10 Average Weekly Internet Usage Time per Internet User



¹⁴Average weekly Internet usage time refers to the average number of hours that Internet users go online per day over the past six months, multiplied by 7 days.

2. Distribution of Usage Time for Various Applications

In June 2024, among the five types of apps most commonly used by mobile Internet users, instant messaging apps had a relatively even distribution of user usage time between 9 AM and 8 PM, with each segment accounting for over 5%. Online video apps experience two peaks of usage at 12 PM and 8 PM, aligning with the leisure and entertainment time of most Internet users. The usage time distribution trends for online shopping and online payment apps were relatively similar, with the total usage time between 7 AM and 10 PM accounting for over 80%. Online meal ordering apps showed a significant peak in usage time, closely related to users' meal times, peaking at 11 AM and 6 PM.



Figure 9 Distribution of Usage Time for Five Applications¹⁵

¹⁵Distribution of usage time refers to the time period distribution of the use of various types of apps. Fo r example, if the length of time that users use instant messaging apps between 6:00 and 7:00 is 15 min utes or 0.25 hours and the length of time they use instant messaging apps throughout the day is 4 hour s, the distribution of instant messaging usage time is calculated as 0.25/4.



Chapter II Size and Structure of Internet Users

In the first half of 2024, the number of Internet users in China reached nearly 1.1 billion (1.09967 billion), with an increase of 7.42 million new users, resulting in an Internet penetration rate of 78.0%. As the online environment in China was improving, initiatives such as digital agriculture, digital assistance for the elderly, and digital benefits for citizens have promoted broader access to the Internet, allowing more people to share in the convenience and benefits of the digital age.

I. Size of Internet Users

(I) Overall Size of Internet Users

By June 2024, the number of Internet users in China had reached nearly 1.1 billion (1.09967 billion), an increase of 7.42 million compared to December 2023, with an Internet penetration rate of 78.0%, up by 0.5 percentage points since December 2023.



Distribution of usage time refers to the time period distribution of the use of various types of apps. For example, if the length of time that users use instant messaging apps between 6:00 and 7:00 is 15 minut es or 0.25 hours and the length of time they use instant messaging apps throughout the day is 4 hours, the distribution of instant messaging usage time is calculated as 0.25/4.



Figure 12 Netizen Size and Internet Penetration from Jun. 2022 to Jun. 2024

By June 2024, the number of mobile Internet users in China had reached 1.096 billion, an increase of 5.28 million since December 2023, with 99.7% of Internet users accessing the Internet via mobile devices.



Figure 13 Size of Mobile Internet Users and Their Proportion in All Netizens from Jun. 2022 to Jun. 2024

In the first half of 2024, China's digital information infrastructure continued to strengthen, and extensive digital services benefiting the public were widely developed, significantly driving the



growth of the Internet user base.

First, the construction of digital information infrastructure was ongoing, meeting the Internet access needs of more people. The steady advancement of digital information infrastructure has significantly improved Internet speeds and expanded high-speed network coverage, satisfying the Internet access needs of more people and promoting the growth of Internet users. By the end of June, a total of 3.917 million 5G base stations had been built in China, an increase of 2.4 percentage points compared to the first quarter¹⁶. A total of 26 Internet backbone direct connection points had been opened, with inter-network bandwidth expanded by 6.17T, bringing the total bandwidth to 58.9T¹⁷. The three major telecommunication companies have achieved mobile data traffic business revenue of CNY328 billion, with rapid growth in revenues from emerging services such as IPTV¹⁸.

Second, digital benefits have enhanced network service levels, allowing more people to share in digital dividends. Digital accessibility for the elderly and disabled groups helps them bridge the digital divide. By the end of June, 2,792 websites and apps closely related to the lives of the elderly and people with disabilities had completed modifications for accessibility. The "one-click access to human customer service" hotline dedicated to respecting the elderly had served a cumulative total of 490 million users¹⁹. Among the new Internet users in the first half of the year, those aged 60 and above accounted for 20.8%.

Third, the expansion of Internet applications has enhanced user capabilities, continuously encouraging more people to go online. In the first half of the year, 7.42 million new Internet users were added in China. Among the new users, the demand for entertainment and socializing most stimulated online activity, with 2.77 million new short video users and 930,000 new instant messaging users. As technology advances and services improve, the accelerated popularization of Internet applications will continue to promote people's online engagement.



¹⁶Source: Ministry of Industry and Information Technology, https://www.miit.gov.cn/jgsj/yxj/xxfb/art/2024/art___df19d637e3644b468c04e028d4b05651.html, July 23, 2024.

¹⁷Source: Ministry of Industry and Information Technology.

¹⁸Source: Ministry of Industry and Information Technology, https://www.miit.gov.cn/jgsj/yxj/xxfb/art/2024/art _df19d637e3644b468c04e028d4b05651.html, July 23, 2024.

¹⁹Source: Notice from the Ministry of Industry and Information Technology on the Quality of Telecommu nications Services in the Second Quarter of 2024, https://wap.miit.gov.cn/jgsj/xgj/fwjd/art/2024/art_f46c68f8 7285418aa187b5838bd1e859.html, August 1, 2024.

(II) Size of Internet Users in Urban and Rural Areas

By June 2024, the number of urban Internet users in China had reached 795 million, accounting for 72.3% of all Internet users; rural Internet users had reached 304 million²⁰, accounting for 27.7% of the total.



Figure 14 Urban-Rural Structure of Internet Users

By June 2024, the Internet penetration rate in urban areas of China had reached 85.3%, an increase of 1.9 percentage points from December 2023; the Internet penetration rate in rural areas had reached 63.8%, a decrease of 2.7 percentage points from December 2023.

²⁰The urban Internet user scale was 795.22 million, while the rural Internet user scale was 304.45 millio



n.



Figure 15 Internet Penetration in Rural and Urban Areas

First, the digital information infrastructure in rural areas has continuously been optimized and upgraded. With policy support, rural areas across the country were continuously advancing 4G base stations, extending 5G networks, and building gigabit optical fiber networks. By 2024, universal telecommunication services had covered 204 cities and districts, with support for 4,647 4G base stations and 3,680 5G base stations²¹. With the assistance of policies, small villages in remote mountainous areas have gradually eliminated signal blind spots, and strong signal have brought more happiness to rural residents.

Second, the efficiency of public services in rural areas has continually improved. In terms of Internet + Education, according to the latest data released by the Ministry of Education, the Internet access rate for primary and secondary schools (including teaching buildings) nationwide has reached 100%. 99.9% of schools have an export bandwidth of over 100M, more than 75% of schools have achieved wireless network coverage, and 99.5% of schools have multimedia classrooms, effectively eliminating the urban-rural gap. In terms of Internet + Healthcare, online remote services have enabled rural residents to enjoy good medical and health services. Take Jiashan County in Jiaxing City, Zhejiang Province as an example. It focuses on the medical and care needs of elderly individuals at home, providing 91 service items, such as medical care, life



²¹Source: Ministry of Industry and Information Technology, https://wap.miit.gov.cn/zwgk/wjgs/art/2024/art_2 1f60a921d51462faf5a5e2f6032c3d7.html, January 9, 2024.

assistance, and meal reservations through online ordering and voice interaction, with annual service times exceeding 1 million²².

(III) Size of Non-Internet Users

By June 2024, the number of non-Internet users in China had reached 310 million, a decrease of 7.42 million compared to December 2023. By region, non-Internet users were primarily found in rural areas. They accounted for 55.7% of the total non-Internet user population, which was 21.8 percentage points higher than the proportion of the rural population nationwide. By age, the main group of non-Internet users was individuals aged 60 and above. By June 2024, this group constituted 62.0% of the total non-Internet user population.

Not accessing the Internet can be inconvenient. Major inconveniences included inconvenience to buy things and difficulty to do errands and pay bills, accounting for 9.8% and 9.4% respectively. Difficulty to register with the hospital and buy medicine, lacking leisure and recreational activities, and difficulty to contact family and friends were also significant, with proportions ranging between 7% and 8%. Inconveniences caused by specific needs, such as difficulty to buy train and airplane tickets and difficulty to hail a taxi, accounted for less than 5%, respectively.



²²Source: National Health Commission, http://www.nhc.gov.cn/xcs/s3574/202405/f113e9f9f6c3496d97f12c90f a5927b6.shtml, May 16, 2024.



Figure 16 Non-netizens' Inconvenience in Life Due to Not Being Able to Access the Internet

The main reasons that non-Internet users do not go online were a lack of skills, educational limitations, insufficient devices, and age. 49.0% of non-Internet users did not go online, because they did not know how to use computers/networks; 27.6% of them due to not mastering Pinyin or other literacy limitations; 19.0% of them due to not having the necessary devices, like a computer; and 15.3% of them due to being too young/old.



Figure 10 Reasons Why No

n-netizens Don't Use the Internet

The primary factor encouraging non-Internet users to go online was facilitating communication with family or relatives, accounting for 22.9%. Availability of barrier-free Internet access devices was the second-largest factor, making up 22.3%. Free training in Internet use was the third-largest factor, accounting for 20.1%.

19



Figure 11 Primacy Factors to Drive Non-netizens to Use the Internet

II. Structure of Internet Users and Internet Accessing Devices

(I) Gender Structure

By June 2024, the ratio of male to female Internet users in China had reached 50.8:49.2, which was basically consistent with the overall male to female ratio in the population.



Figure 19 Gender Structure of Internet Users



(II) Age Structure

By June 2024, Internet users aged 10-19, 20-29, 30-39, and 40-49 had accounted for 13.6%, 13.5%, 19.3%, and 16.7%, respectively. The proportion of Internet users aged 50 and above increased from 32.5% in December 2023 to 33.3%, indicating further penetration of the Internet into middle-aged and elderly groups.



Figure 20 Age Structure of Internet Users

(III) Internet Accessing Devices

By June 2024, the proportion of Internet users in China accessing the Internet via mobile phones had reached 99.7%; the proportions of users accessing the Internet via desktop computers, laptops, televisions, and tablets were 34.2%, 32.4%, 25.2%, and 30.5%, respectively; the proportions of users accessing the Internet through smart connected vehicles, smart home devices, and personal wearable devices had reached 10.4%, 21.9%, and 24.2%, respectively. Among these, the number of Internet users accessing the Internet via smart connected vehicles had reached 115



million.





Chapter III Development of Internet Applications

In the first half of 2024, China made solid progress in deepening the integration of digital technology and the real economy, accelerating the development of the digital economy, and supporting a stable and positive long-term growth in the national economy. The application of the Internet in various fields, such as business transactions, entertainment and tourism, has been continuously deepened, better meeting the growing needs of people for a better life.

I. Overview of Internet Applications

In the first half of 2024, various Internet applications in China continuously deepened, and their user bases continued to grow. Among them, the user bases of instant messaging, online payment, online music, and online meal ordering services had increased by 18.24 million, 14.98 million, 14.50 million, and 8.50 million, respectively, compared to December 2023, with growth rates of 1.7%, 1.6%, 2.0%, and 1.6%.

Table 4 User Size and Utilization Ratio of Each Internet Application between Dec. 2023 and

Jun. 2024

	User Size	Utilization	User Size	Utilization	
Application	Dec. 2023	Ratio	Jun. 2024	Ratio	Growth Rate
	(10,000)	Dec. 2023	(10,000)	Jun. 2024	
Instant Messaging	105,963	97.0%	107,787	98.0%	1.7%
Online video ²³	106,671	97.7%	106,796	97.1%	0.1%
Short Video	105,330	96.4%	105,037	95.5%	-0.3%
Online Payment	95,386	87.3%	96,885	88.1%	1.6%
Online Shopping	91,496	83.8%	90,460	82.3%	-1.1%
Search Engine	82,670	75.7%	82,440	75.0%	-0.3%
Online News	77,191	70.7%	76,441	69.5%	-1.0%

²³The size of online video users in June 2024 includes short video users.



CNNIC 中国互联网络信息中心

Live Streaming	81,566	74.7%	77,654	70.6%	-4.8%
Online Music	71,464	65.4%	72,914	66.3%	2.0%
Online Meal Ordering	54,454	49.9%	55,304	50.3%	1.6%
Online Literature	52,017	47.6%	51,602	46.9%	-0.8%
Online Car-hailing	52,765	48.3%	50,270	45.7%	-4.7%
Online Travel Booking	50,901	46.6%	49,721	45.2%	-2.3%
Online Medical Service	41,393	37.9%	36,532	33.2%	-11.7%
Online Audio	33,189	30.4%	31,976	29.1%	-3.7%

II. Basic Applications

(I) Instant Messaging

By June 2024, the number of instant messaging users in China had reached 1.078 billion, an increase of 18.24 million from December 2023, accounting for 98.0% of the total Internet users.



Figure 12 User Size and Utilization Ratio of Instant Messaging from Jun. 2022 to Jun. 2024 In the first half of 2024, the video accounts and mini-programs of instant messaging products had further developed, continuously enhancing commercial capabilities and public service capabilities.

Firstly, user habits for video accounts have gradually formed, showing



commercialization potential. Instant messaging companies have been focusing on cultivating short videos as a key business direction over the past few years. Through long-term support for traffic and creator incentives, the habit of users watching short videos through instant messaging software has gradually formed. Data shows that the total user watch time for WeChat video accounts has increased by over 80% year-on-year²⁴. With the increase in user watch time, instant messaging companies have further expanded the types of products sold through live streaming and utilized incentive policies to stimulate the vitality of video creators and their enthusiasm for promoting products, thereby exploring the commercialization potential of video accounts.

Secondly, mini programs have further strengthened the public service attribute of instant messaging, enhancing user stickiness. Instant messaging companies have viewed mini programs as a key function to expand their product service ecosystem, and have continuously improved the penetration of mini programs in areas such as government services, public welfare, agricultural assistance, and support for people with disabilities, leading to significant growth in the frequency and duration of mini program usage. The State Administration for Market Regulation has launched the Individual Business Annual Report function via WeChat mini programs, achieving a unified national entry point, official certification from the administration, and quick reporting for merchants, effectively enabling data to be more accessible while reducing the need for people to run errands²⁵. The Beijing Municipal Taxation Bureau has launched 21 tax-related services in the Jingtong mini program, covering social security payments, vehicle and vessel tax declarations, vehicle purchase tax declarations and others. In the first half of the year, 330 thousand transactions²⁶ were processed through the mini program. Data shows that the total usage time of WeChat mini programs increased by over 20% year-on-year, with non-gaming mini programs achieving double-digit year-on-year growth in average daily usage²⁷.



²⁴Source: Tencent's Q1 2024 Financial Report, https://static.www.tencent.com/uploads/2024/05/14/6c813f619 346ebb2634fc0693a8f6b81.pdf, May 14, 2024.

²⁵Source: China's government website, https://www.gov.cn/lianbo/bumen/202402/content_6934394.htm, Febru ary 27, 2024.

²⁶Source: Information Office of the People's Government of Beijing Municipality, https://mp.weixin.qq.com /s? __biz=MzA4NTIyMjMyMw==&mid=2653331496&idx=4&sn=a61a9628c65f4a8c88400fee7e1c3f3d&chks m=85bb1355fc8916e805ef95122759efc8386bf27b52a3d9f8c65208a94a0d514f9f651312f702&scene=27, July 2 6, 2024.

²⁷Tencent's Q1 2024 Financial Report, https://static.www.tencent.com/uploads/2024/05/14/6c813f619346ebb26 34fc0693a8f6b81.pdf, May 14, 2024.

(II) Search Engines

By June 2024, the number of search engine users in China had reached 824 million, accounting for 75.0% of the total Internet users.



Figure 13 User Size and Utilization Ratio of Search Engines from Jun. 2022 to Jun. 2024 In the first half of 2024, search engines continued to integrate with artificial intelligence (AI) technologies, driving continuous improvement in search service efficiency.

First, the accuracy of search engines has continuously improved with the help of AI. 11% of Baidu search results were generated by AI, and the proportion of the first result meeting enquiry needs reached 70%²⁸. As more precise search results have further driven user demand, over 50 million new enquiry requests were added on Baidu search per day on average²⁹. 360 AI search has helped users obtain and understand multilingual information, realizing multilingual searches. It has broken limits on document formats, achieving multi-modal searches. In addition, it utilizes AI assistants to accomplish multitasking searches. The application of AI technology has turned search results from being vague to precise, significantly enhancing user experience.

Second, search engines have expanded the boundaries of application scenarios and enriched the types of generated content. In the vertical field, NetEase Youdao has launched an

 ²⁸Source: NetEase, https://www.163.com/dy/article/J2BFIKRR0519D4UH.html, May 16, 2024.
 ²⁹Source: the same as above.

AI tutor that provides personalized, round-the-clock online learning support for students through deep learning and large model technology. In terms of processing format, Baidu's Wenxin Yige generates corresponding high-quality images based on descriptive content, achieving a transformation from text to visual format, thereby meeting users' diverse needs. The expansion from general search to vertical fields and the shift from text generation to visual content generation represent a leap forward for search engines.

(III) Online Office

By June 2024, the number of online office users in China had reached 500 million, accounting for 45.4% of the total Internet users.



Figure 14 User Size and Utilization Ratio of Online Office from Jun. 2022 to Jun. 2024

In the first half of 2024, online office products in China had accelerated the application of AI. It had also created a more complete and convenient office environment for users by breaking down ecological barriers.

First, online office products have applied AI to enhance work efficiency. Tencent Meeting and Tencent Docs have integrated AI features to help users quickly generate meeting minutes, edit office documents, and provide personalized customization services, among other functions. 360 has launched 360 AI Office, which covers five major scenarios, including image processing, writing assistance, and document editing, offering users hundreds of tools to facilitate efficient work. The



deep application of AI in work scenarios has led to a more efficient and intelligent way of working.

Second, online office products have broken down ecological barriers, creating a more convenient environment. DingTalk Meeting has been integrated with WeChat, allowing users to directly use DingTalk Meeting within WeChat, effectively enhancing the immediacy and convenience of meetings. Kingsoft Office has integrated Baidu's ERNIE Bot, Alibaba Cloud's Tongyi Qianwen and other large models, enabling users to access multiple large models on a single platform, thereby better adapting to the usage needs in different office scenarios. The integration and unification of office products may create a more convenient and comprehensive office ecosystem for users.

III. Business Transaction Applications

(I) Online Payment

By June 2024, the number of online payment users in China had reached 969 million, an increase of 14.98 million from December 2023, accounting for 88.1% of the total Internet users.



Figure 26 User Size and Utilization Ratio of Online Payment from Jun. 2022 to Jun. 2024 **Platforms have focused on improving payment convenience for the elderly. First, they have continually optimized mobile payment services.** Currently, major mobile payment apps have been upgraded to accommodate the elderly, enhancing user experience through various



methods such as simplifying processes, adding helpful prompts, increasing voice announcements, enlarging font images, and providing dedicated customer service. **Second, ongoing efforts have been made to strengthen payment accessibility for the elderly.** By employing various promotional channels and deeply engaging with communities and nursing homes, platforms enhanced the elderly's awareness of online payments, boosted their sense of security, and ensured that they could use and understand online payments effectively. By June, the usage rate of online payments among individuals aged 60 and above in China had reached 75.4%, with a user base of 117 million people.

Foreigners in China have become more and more willing to use mobile payments. The People's Bank of China has expanded the business scope of Foreign Card Binding³⁰ and Foreign E-wallet for Domestic Use³¹, and improved the mobile payment experience of foreigners in China by guiding payment institutions to optimize business processes, significantly increasing transaction upper limits, and carrying out pilot programs for multi-level user authentication. Foreigners in China have been allowed to use their overseas mobile phone numbers to register Alipay, WeChat Pay, etc., and bind their overseas bank cards for payment. International travelers from 9 countries/regions, including Singapore and Thailand, can use overseas e-wallet for payments by scanning codes. In the first half of this year, more than 5 million international travelers used mobile payments in China, a four-fold increase year on year; and there were more than 90 million transactions worth more than CNY14 billion, a seven-fold increase year on year³².

(II) Online Shopping

By June 2024, the number of online shopping users in China had reached 905 million, accounting for 82.3% of the total internet users.



³⁰It refers to the support for foreign residents to bind overseas bank cards issued by major banking card organizations, such as Visa and MasterCard, to their domestic wallets, so as to achieve a seamless conne ction between overseas bank cards and domestic barcode payments.

³¹It refers to the support for foreign residents to use overseas e-wallets to make payments to domestic m erchants directly, without the need to download domestic wallets, so that foreign residents can enjoy con venient mobile payments in China.

³²Source: People's Bank of China, https://mp.weixin.qq.com/s/Ksli_mF9MxqOwz4BOqUhjQ, July 26, 2024.



Figure 27 User Size and Utilization Ratio of Online Shopping from Jun. 2022 to Jun. 2024

In the first half of 2024, the online shopping market maintained steady growth and played an increasingly important role in boosting consumption. Data shows that China's online retail sales in the first half of the year were CNY7,099.1 billion, up 9.8% year on year. In particular, online retail sales of tangible goods increased by 8.8% year on year, accounting for 25.3%³³ of the total retail sales of consumer goods, and the proportion continued to increase this year³⁴.

First, platforms continued the low-price and user-oriented strategy to improve user experience. In the first half of the year, major platforms continued to build on product price advantages. There was a distinct trend that the e-commerce industry had refocused on low prices. For example, Taobao and JD continued to introduce the CNY10 Billion Subsidies. TikTok made Price Force as a priority in 2024. Pinduoduo launched an automatic price tracking system and a policy that encouraged price reduction to attract data traffic. In addition, platforms increased investment to improve user experience. For example, TikTok, Taobao, and JD successively followed Pinduoduo and launched such policies as "refund only". They also attracted users by requiring merchants to provide freight insurance, price insurance and other services. In the future, the industry can achieve a win-win situation among users, merchants and platforms by improving

³³Source: National Bureau of Statistics, https://www.stats.gov.cn/sj/zxfb/202407/t20240715_1955609.html, Jul y 15, 2024.

³⁴Source: National Bureau of Statistics, https://www.stats.gov.cn/sj/sjjd/202407/t20240715_1955601.html, Jul y 15, 2024.

logistics efficiency and innovating business models.

Second, platforms increased promotion to drive the Old for New Initiative for consumer goods. In the first half of the year, actively coordinating with the new round of Old for New Initiative, e-commerce platforms helped its implementation by increasing subsidies, simplifying processes and improving logistics, to drive consumption upgrade. According to the data, e-commerce platforms supported the replacement of more than 400,000 kinds of goods, and the synchronous recycling of more than 300 kinds. On major platforms the Initiative promoted the replacement of refrigerators, washing machines, mobile phones and TVs by 82.1%, 70.4%, 63.9% and 54.3% respectively³⁵. Among the netizens who participated in the Initiative in the past six months, 68.8% bought related products from online platforms. Traditional appliances, such as digital products (including mobile phones) and washing machines, boasted the highest proportions of the Old for New consumption made by participating Internet users, 28.8% and 23.7%, respectively.

(III) Online Meal Ordering

By June 2024, the number of online meal ordering users in China had reached 553 million, an increase of 8.5 million from December 2023, accounting for 50.3% of the total Internet users.



³⁵Source: Ministry of Commerce, https://www.mofcom.gov.cn/xwfb/sjfzrfb/art/2024/art_56db58d4b1d14551b9 40652a8e65d559.html, July 19, 2024.



Figure 28 User Size and Utilization Ratio of Online Meal Ordering from Jun. 2022 to Jun. 2024 In the first half of 2024, online meal ordering was booming, and the revenue of related enterprises increased significantly. At the same time, the development of service models such as instant delivery accelerated, and emerging technologies continued to empower the industry.

First, the online meal ordering market continued to release vitality, and business revenue grew distinctly. In the first half of the year, major platforms such as Meituan and Ele.me continued to see increase of user transactions and purchase frequency thanks to their continuous innovation in consumer experience and high-quality supply sources, which led to significant growth in business revenue. Data shows that in the first quarter, Meituan's revenue of delivery services³⁶ increased by 24.6% year on year 24.6%³⁷; Alibaba's revenue from local lifestyle group rose 19% year on year; and Ele.me's orders grew strongly³⁸.

Second, instant delivery entered the fast lane, and technological innovations empowered development of the industry. With the changes in market demands and technological progress, online meal ordering platforms continued to expand their service scope, extending from traditional food and beverage delivery to instant delivery of fresh food ingredients, medicines, daily necessities, etc., achieving a full coverage of life services. Data shows that in the first quarter, Meituan's instant

³⁸Source: Alibaba's Q1 2024 Financial Report, https://data.alibabagroup.com/ecms-files/1508664153/a36b0f0 2-0c47-406b-bd4a-02445b738810/Mar%2024%20Quarter%20Earnings%20Deck.pdf, May 14, 2024.



³⁶Online meal ordering, as a core business, is included in the category of "delivery services" in Meituan' s financial reports.

³⁷Source: Meituan's performance announcement for the three months ended March 31, 2024, https://mediameituan.todayir.com/202406061816581769886914_sc.pdf, June 6, 2024.

delivery orders reached 5.46 billion, increasing by 28.1% year on year³⁹. At the same time, relying on technological innovation, online meal ordering platforms continued to improve their intelligence level, and the industry was further empowered to innovate and grow. For example, Ele.me launched such functions as personalized recommendation and intelligent scheduling with AI technology, and Meituan tapped into Big Data to provide more personalized service experience.

(IV) Online Travel Booking

By June 2024, the number of online travel booking users in China had reached 497 million, accounting for 45.2% of the total Internet users.



Figure 29 User Size and Utilization Ratio of Online Travel Booking from Jun. 2022 to Jun.

2024

In the first half of 2024, China's online travel booking market continued to heat up, and the related platforms were boosting performance dramatically. At the same time, more new platforms joined in and international markets expanded, which further stimulated innovation vitality of the industry.

First, China's travel booking market steadily expanded in scale, and platforms improved performance significantly. Thanks to powerful momentum of traveling demands, domestic leisure



³⁹Source: Meituan's performance announcement for the three months ended March 31, 2024, https://mediameituan.todayir.com/202406061816581769886914_sc.pdf, June 6, 2024.

trips increased by 7.6% and 6.3%, during the May Day and Dragon Boat Festival holidays respectively in 2024, and the total spending of domestic tourists increased by 12.7% and 8.1% respectively⁴⁰. In this context, enterprise user scale and business performance grew substantially. Data shows that at the end of the first quarter, LY.COM served 57.4% more trips annually year on year, and its annual paying users increased by 14.3%⁴¹. In the first quarter, the net revenue of Ctrip Group increased by 29%. Its revenues from accommodation booking, transport ticket booking and holiday tourism increased by 29%, 20% and 129% respectively⁴².

Second, with more platforms emerging and international markets expanding, market vitality continued to be released. On the one hand, emerging platforms such as Xiaohongshu and TikTok directly linked travel products and services through contents, which became a new channel for travel information sharing and service booking, and further stimulated innovation vitality of the industry. On the other hand, enterprises such as Ctrip Group and LY.COM achieved remarkable results in expanding international markets, contributing to healthy and sustainable development of the industry. For example, in the first quarter, Ctrip Group's services such as booking overseas hotels and air tickets both increased by more than 100% year on year, and its international platform Trip.com increased revenue by about 80% year on year⁴³. LY.COM greeted increase of international air tickets and international hotel nights by more than 260% and 150% respectively⁴⁴.

IV. Online Entertainment Applications

(I) Online Video

By June 2024, the number of online video (including short video and mini-drama) users⁴⁵ had reached 1.068 billion, an increase of 1.25 million from December 2023, and accounting for 97.1%

⁴⁵The number of online video users in June 2024 included mini-drama users.



⁴⁰Source: Ministry of Culture and Tourism, *Dynamics of Culture and Tourism Market During May Day Hol idays in 2024*, https://www.mct.gov.cn/whzx/whyw/202405/t20240506_952682.htm, May 6, 2024, and *Dyna mics of Culture and Tourism Market During Dragon Boat Festival Holidays in 2024*, https://www.mct.gov.cn/whzx/whyw/202406/t20240610_953396.htm, June 10, 2024.

⁴¹Source: LY.COM's Q1 2024 Financial Report, https://stockn.xueqiu.com/00780/20240521560383.pdf, May 21, 2024.

⁴²Source: Ctrip Group's Q1 2024 Financial Report, https://investors.trip.com/static-files/d0ac2045-1d07-43e8b92e-17986dfa622d, May 20, 2024.

⁴³Source: Ctrip Group's Q1 2024 Financial Report, https://investors.trip.com/static-files/d0ac2045-1d07-43e8b92e-17986dfa622d, May 20, 2024.

⁴⁴Source: LY.COM's Q1 2024 Financial Report, https://stockn.xueqiu.com/00780/20240521560383.pdf, May 21, 2024.

of total Internet users. Among them, the number of short video users reached 1.05 billion, accounting for 95.5% of the total Internet users.



Figure 30 User Size and Utilization Ratio of Online Video from Jun. 2022 to Jun. 2024 Divided by length of content products, online video industry falls into the categories of long video, medium video, short video, mini-drama and others. In the first half of 2024, the segments of long and short videos and mini-dramas showed distinctive development trends.

The mini-drama segment was growing rapidly. Characterized by small size, fast pace and low cost, mini-dramas became a new force to drive innovation and development of the industry. First, the user size was growing rapidly. As of June, the user size of mini-dramas reached 576 million, accounting for 52.4% of Internet users. Second, content productivity continued to improve. Mini-dramas boasted strong demand, and by introducing AI technology, creators improved their productivity significantly. Since June, a number of AIGC⁴⁶ mini-dramas have been launched, their production cycles have been greatly shortened, and the effect of finished films has exceeded expectations. The third was that the culture and tourism industry was strongly empowered. In January, the National Radio and Television Administration released the creation plan of Travel with Mini-Dramas, in order to coordinate local culture and tourism resources. New cultural and tourism elements, creative ideas, and plots were added to existing influential mini-



⁴⁶AIGC refers to artificial intelligence generative content.

dramas. By means of self-making, Chinese-foreign co-production and others, a new trend of checkin at tourist attractions⁴⁷ was developed.

The short video segment continued to boom. First, user stickiness improved steadily. The user size and their active duration on short video platforms increased steadily. In March, users' increased online duration on TikTok accounted for more than a half of the addition across the online video industry⁴⁸. In the first quarter, AAuto Quicker's monthly active users and their total using duration increased by 6.6% and 8.6% respectively⁴⁹. Second, profitability continued to improve. The e-commerce business of short video platforms developed steadily, and the commercialization and conversion efficiency continued to rise. In the first quarter, the total transaction volume of AAuto Quicker's e-commerce increased by 28.2% year on year⁵⁰. During the 618 Promotion⁵¹, the orders placed in TikTok Mall increased by 94% year on year, and the transaction amount increased by 85% year on year⁵².

The long video segment continued to improve quality and efficiency. In the first half of the year, major platforms reshaped content standards and focused on creating high-quality content. The number of online episodes decreased by 6.8%, playing times increased by 35.1% year on year, and the trend of improving quality and decreasing quantity continued⁵³. Series, like My Altay and Flowers, earned popularity and reputation, bringing high-quality audio-visual experience to users. In addition, the major platforms empowered the whole industrial chain through scientific and technological innovation, and promoted quality and productivity across the industry. For example, Tencent Video created AIGC content production engine represented by Script Analysis System and ZenRender Engine. iQIYI applied AIGC in all aspects of planning, production and promotion, so as to amplify the value for creators and help produce more wonderful content.

⁴⁷Source: National Radio and Television Administration, https://www.nrta.gov.cn/art/2024/1/12/art_113_6659 9.html, January 12, 2024.

⁴⁸Source: QuestMobile's *Report of China's Mobile Internet for Spring 2024*, https://www.questmobile.com.c n/research/report/1787753953225707522, May 7, 2024.

⁴⁹Source: AAuto Quicker's Q1 2024 Financial Report, https://ir.kuaishou.com/system/files-encrypted/nasdaq_ kms/assets/2024/05/22/5-01-10/HKEX-EPS_20240522_11217161_0.pdf, May 22, 2024.

⁵⁰Source: the same as above.

⁵¹618 Promotion occurred during May 24 to June 18.

⁵²Source: Report on Consumption Data of TikTok Mall's 618 Festival, https://mp.weixin.qq.com/s/a9LVeaU M3CoZpR0QjzjaCQ, June 21, 2024.

⁵³Source: Beacon Pro, https://mp.weixin.qq.com/s/rL-6WAISzKlwDhbvFRb6pg, July 15, 2024.

(II) Live Streaming



As of June 2024, users of online live streaming in China reached 777 million, 39.12 million fewer compared with in December 2023, and accounting for 70.6% of the total Internet users.

Figure 31 User Size and Utilization Ratio of Live Streaming from Jun. 2022 to Jun. 2024

In the first half of 2024, more enterprises entered e-commerce market backed by live streaming to consolidate their advantages and expand business. Emerging technologies deeply empowered the live streaming segment, helping innovate its forms and improve productivity.

More enterprises entered the segment of live streaming. In the first half of 2024, more and more Internet companies used live streaming as an important means to consolidate core business advantages and expand business areas. Meituan launched special live streaming during the holidays, and its official live streaming was extended to more regions with a higher frequency⁵⁴. JD launched entrepreneur digital humans in live streaming to further enrich content ecology and brought to users even better shopping experience through live streaming⁵⁵. Tencent further consolidated the ecology of sales through live streaming at its video channel by expanding product categories and encouraging more content creators to participate in live streaming⁵⁶.



⁵⁴Source: Meituan's Q1 2024 Financial Report, https://media-meituan.todayir.com/2024060618165817698869 14_sc.pdf, June 6, 2024.

⁵⁵Source: JD's Q1 2024 Financial Report, https://staticpacific.blob.core.windows.net/press-releases-attachment s/1670261/HKEX-EPS_20240516_11212220_0.PDF, May 16, 2024.

⁵⁶Source: Tencent's Q1 2024 Financial Report, https://static.www.tencent.com/uploads/2024/05/14/6c813f619 346ebb2634fc0693a8f6b81.pdf, May 14, 2024.

Emerging technologies empowered the industry. In the first half of 2024, emerging technologies further empowered the live streaming segment, promoting more abundant forms and further improving efficiency. In live streaming for e-commerce, virtual digital human technology was used more widely. Baidu Intelligent Cloud Xiling launched the latest version of 2D Digital Human for live streaming services. A user can upload a live video of real people, and reshape it into that of digital humans. After the user enters keywords, product introduction and words for scene control will be automatically generated, and live streaming hosted by a digital human starts. Shiyou Technology launched AI Digital Human Live Streaming System, which can help businesses build AI digital human's live streaming room quickly. In live streaming of sports, AI technology can automatically shoot, produce and distribute videos, and effectively improve productivity by automatically identifying and labeling video content, editing highlights and recommending relevant content, etc.

(III) Online Music

As of June 2024, the size of online music consumers in China had reached 729 million, an increase of 14.5 million from December 2023, and accounting for 66.3% of the total size of Internet users.



Figure 15 User Size and Utilization Ratio of Online Music from Jun.2022 to Jun. 2024 In the first half of 2024, the revenue of China's online music enterprises showed a growth momentum, and with the help of AI technology, music platforms further improved services and brought the entire industry into a new stage.

First, online music business was growing strongly. Both the number of paying subscribers and the revenue from online music services grew significantly. Data shows that in the first half of 2024, Tencent Music Entertainment Group provided online music services to 231 million paying users, an increase of 18.9%, and achieved a revenue of CNY10.431 billion, a year-on-year increase of 34.6%⁵⁷. In 2023, NetEase Cloud Music provided online music service to 44.12 million monthly paying users, an increase of 15.3%, and gained a revenue of CNY4.351 billion, increasing by 17.6% year on year ⁵⁸. As the order and operation ecology of online music copyrights optimized continuously, users have been aware of paying for music and developed paying habits, driving steady growth of China's online music market.

Second, the platforms improved their services significantly. Online music platforms provided personalized services backed by AI technology to effectively improve user experience. On the one hand, personalized song recommendation helped optimize users' listening experience. For example, QQ Music's AI Assistant can meet users' multidimensional needs for song searching and improve their search efficiency. On the other hand, creativity assistance functions delivered personalized experience of music creation. For example, QQ Music launched Venus · AI Song Creation, which can generate exclusive songs based on the inspiring words entered by users. NetEase Cloud Music launched the Tianyin Music platform, which can provide AI assistance across the entire process of music creation, making music creation simpler and more efficient.

(IV) Online Literature

By June 2024, the number of online literature users in China had reached 516 million, accounting for 46.9% of the total Internet users.



⁵⁷Source: Q1 and Q2 2024 Financial Reports of Tencent Music Entertainment Group, https://ir-sc.tencentm usic.com/Financial-Results, August 13, 2024.

⁵⁸Source: 2023 Financial Report of NetEase Cloud Music, https://manager.wisdomir.com/files/627/2024/042 5/20240425171501_89818139_tc.pdf, April 25, 2024.

CNNIC 中国互联网络信息中心



Figure 33 User Size and Utilization Ratio of Online Literature from Jun. 2022 to Jun. 2024

In the first half of 2024, China's online literature industry demonstrated a good development trend, and online art forms represented by literature became an important force that drove innovation and development of the cultural industry. The industry was characterized by expanding IP⁵⁹ development market and younger creator groups.

Firstly, IP conversion was accelerated to provide richer resources for adaptation in the cultural entertainment industry. In the first half of the year, mini-drama segment gained momentum of rapid development, which further expanded IP development across online literature market. Data shows that among the 13 new short dramas ranked top 10 in box office last year, 10 were adapted from online literature⁶⁰. At the same time, China Literature Limited launched its program of Short Drama Galaxy and took three measures, including cultivating 100 dramas with their own IPs, a creativity fund of CNY100 million, and exploratory and interactive short dramas. Several short dramas had generated cash flows of more than CNY10 million⁶¹.

Second, young people became the major force of creativity, while the number of elderly readers increased in the online literature market. In the first half of the year, the age of online literature creators continued to become younger, and young online writers became the major force

⁵⁹IP refers to intellectual property.

⁶⁰Source: People's Daily, http://paper.people.com.cn/rmrbhwb/images/2024-03/13/07/rmrbhwb2024031307.pdf, March 13, 2024.

⁶¹Source: 2023 Annual Report of China Literature Limited, https://ir-1253177085.cos.ap-hongkong.myqclou d.com/investment/20240424/6628d1ba50618.pdf, March 18, 2024.

of creativity. Data shows that 60% of new writers endorsed by China Literature Limited last year were born after 2000; 57% of the authors newly signed by Bytedance's Tomato Novels were born after 1995, 26% after 1985, and only 9% after 1975⁶². At the same time, among online readers, the elderly demonstrated great growth potential in the online literature market. Data shows that the proportion of users aged 60 and above increased from 2.74% in 2022 to 4.20% in 2023⁶³.

V. Public Service Applications

(I) Online car-hailing

By June 2024, the number of car-hailing users in China had reached 503 million, accounting for 45.7% of the total Internet users.



Figure 34 User Size and Utilization Ratio of Online Car-hailing Services from Jun. 2022 to Jun.

2024

In the first half of 2024, compliance level of the car-hailing industry continued to improve, and car-hailing platform enterprises maintained better performance. China launched a pilot program of Vehicle-Road-Cloud Integration for intelligent connected vehicles, and autonomous driving technology was commercialized at a faster pace.



⁶²Source: Institute of Literature, CASS, http://literature.cass.cn/xjdt/202402/t20240227_5735047.shtml, Febru ary 27, 2024.

⁶³Source: GMW.CN, https://news.gmw.cn/2024-04/25/content_37284080.htm, April 25, 2024.

First, the car-hailing industry achieved steady development. Online car-hailing industry continuously improved compliance level. According to the statistics of the Online Car-Hailing Supervision Interactive System, as of June 30, 2024, a total of 354 online car-hailing platform companies in the country obtained business licenses specific to the business; and a total of 7.126 million online car driver licenses and 3.015 million transport licenses were issued⁶⁴. Online car-hailing platform enterprises continued to increase their revenue. In the first quarter, DiDi posted a revenue of CNY49.1 billion, up by 14.9% year on year⁶⁵. DiDi continued to develop its main business, and orders gained in domestic and international markets broke historical quarterly records, respectively.

Second, commercial operations of autonomous driving made progress. In April 2024, DiDi Autonomous Driving and GAC Aion announced that they had jointly established Guangzhou Andi Technology Co., LTD., to promote the development and commercialization of L4 autonomous driving models. In July, Baidu's Apollo Go tested operation services for passengers in more than 10 cities, and carried out fully unmanned autonomous driving tests in Beijing, Wuhan, Chongqing, Shenzhen and Shanghai. Autonomous taxis were expected to further improve service quality and user experience.

(II) Online Medical Services

By June 2024, the number of Internet healthcare users in China had reached 365 million, accounting for 33.2% of the total Internet users.

⁶⁵Source: DiDi's Q1 2024 Financial Report, https://s28.q4cdn.com/896456191/files/doc_financials/2024/DiDi _2024_Q1_Press_Release.pdf.



⁶⁴Source: Ministry of Transport, https://www.mot.gov.cn/jiaotongyaowen/202407/t20240730_4145536.html?fro m=timeline, July 30, 2024.



Figure 35 User Size and Utilization Ratio of Online Medical Services from Jun. 2022 to Jun.

2024

In the first half of 2024, China further drove the expansion and penetration of high-quality medical resources and continued to improve the capacity of primary medical and health services. At the same time, online medical enterprises actively exerted their research and development capabilities to promote innovation and development across the industry. As of February, 30 provinces had established provincial-level online medical supervision platforms, and more than 2,700 Internet hospitals had been approved and founded across the country⁶⁶.

First, telemedicine technology continued to extend to the grassroots. At present, the telemedicine service network has covered all cities and counties, and is extending to urban and rural communities. 70% of the country's health centers have established telemedicine partnership with higher-level hospitals. The standardization of electronic medical records and the quality of diagnosis and treatment services in grassroots institutions have continued to improve. Grassroots institutions in 27 pilot counties have provided more than 26 million diagnostic suggestions⁶⁷ through the assisted diagnosis and treatment system. Resource sharing centers have continued to develop, including county-level medical imaging, medical examination and ECG diagnosis, to



⁶⁶Source: National Health Commission, http://www.nhc.gov.cn/cms-search/xxgk/getManuscriptXxgk.htm?id=3 d2d2cd7720541c0b7ce712f1a06db27, February 28, 2024.

⁶⁷Source: China's government website, https://www.gov.cn/lianbo/bumen/202406/content_6958103.htm, June 19, 2024.

improve grassroots examinations, superior diagnosis and mutual recognition of results. The countylevel medical imaging centers have been extended to 50% of township health centers⁶⁸.

Second, Internet medical enterprises actively adopted new technologies. Data shows that more than 30 generative AI large models⁶⁹ were applied in medical field in China. Medical and health AI large models served from pharmaceutical companies to doctors and patients, and covered diagnosis and treatment, medical scientific research, health management and other scenarios. JDH Internet Hospital invested more than CNY2 billion in technology research and development, quality improvement, operation management and other fields, and obtained more than 800 high-quality patents, covering many cutting-edge topics such as medical large models, medical scientific research, and disease prediction⁷⁰. Tencent Healthcare continued to invest in AI-related medical research, and accumulated more than 1,000 patents. It accelerated the application of cutting-edge technologies to medical scenes⁷¹, and created a multi-scene AI product matrix, including intelligent Q&A, family doctor assistants and digital intelligence medical image platforms, helping promote inclusive Wise Information Technology of Medicine.

⁷¹Source: People's Daily, https://new.qq.com/rain/a/20230909A04YBL00, September 9, 2023.



 ⁶⁸Source: GMW.CN, https://health.gmw.cn/2024-06/19/content_37408255.htm, June 19, 2024.
 ⁶⁹Source: 21st Century Business Herald, https://www.21jingji.com/article/20240110/herald/85273618b33bb444
 3f0a40e3f0868fa1.html, January 10, 2024.
 ⁷⁰Source: IDL https://geographica.com/arcitet/12000770_lanuary_12_2024

⁷⁰Source: JDH, https://cont.jd.com/pccontent/12099779, January 13, 2024.

Appendix 1 Survey Methodology

I. Survey Methodology

(I) Telephone Survey

1.1 Survey Population

Chinese permanent residents at the age of 6 or above who have residence fixed-line telephones (including home phones and dormitory telephones) or mobile phones

 \diamond Sample scale

The samples in the survey cover 31 provinces, autonomous regions and municipalities in Chinese mainland, excluding Chinese Hongkong, Macao and Taiwan.

 \diamond Division of survey population

The survey population can be divided into three categories:

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

Subpopulation B: Survey subpopulation with mobile phones.

Subpopulation C: Survey subpopulation with both residence fixed-line telephones and mobile phones (there is an overlap between subpopulation A and subpopulation B, and the overlapped part is subpopulation C), $C=A\cap B$.

1.2 Sampling Method

CNNIC surveys subpopulation A, B and C. Double sampling is adopted for the survey so as to cover as many Internet users as possible. The first sampling frame is subpopulation A, the people with residence 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 representativeness of samples, the whole country is divided into 31 tiers according to 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 for each district, city and prefecture (including the governed districts and counties) are allocated in accordance with the proportion of the people at the age of 6 or above covered by residence fixed-line telephones in the local area compared to the total covered population in the whole province.

Sampling in subpopulation B is similar to that in subpopulation A. The whole country is divided into 31 tiers according to province, autonomous region and municipality 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, in order to make the sample allocation in each province conform to the self-weighting method.

To ensure the telephones are taken with almost the same probability in each district, city or prefecture, that is, the local bureau number with more telephones will more likely be taken, and to make the phone visit more feasible, the telephone numbers in each district, city and prefecture are taken according to the following procedures:

For mobile phone user groups, all the mobile bureau numbers in each district, city and prefecture are sampled; a certain quantity of 4-digit random numbers are generated according to the valid sample size in each district, city or prefecture, and then combined with the mobile bureau numbers in each district, city or prefecture to form a number library (local bureau 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 and combined with the local bureau number to form a telephone number, and then such number is dialed and visited. To avoid repeated sampling, only residence fixed-line telephones are visited.

According to the latest population attribute structure published by provincial statistical bureaus, we use the method of multi-variable joint weighting to estimate the size of netizens. The data published by statistical bureaus are annual census data projections or annual population sample survey projections. Such data are used in this report as the basis for adjusting the weights of the semi-annual survey data, ignoring the differences between survey periods.

1.3 Sampling Error

Based on the design, analysis and calculation of sampling, 0.67 percentage point is the

estimated maximum allowable absolute error of the proportional target quantity (e.g. the Internet penetration rate) among the individual netizen survey results, when the confidence is 95%. From this, we can deduce the error range of estimating other kinds of target quantities, such as the scale of netizens.

1.4 Survey Method

The Computer-assisted Telephone Interviewing (CATI) system is adopted for the survey.

1.5 Differences between Survey Population and Targeted Population

A study for the subpopulation who are not covered by telephones, conducted by CNNIC at the end of 2005, shows those Internet users are very few in this subpopulation. Currently, the subpopulation is downsizing gradually with the development of China's telecom industry. In this survey, there is an assumption, i.e., Internet users who are not covered by fixed-line telephones or mobile phones are negligible.

(II) Automatic Online Search and Statistical Data Reporting

Automatic online search mainly makes technical statistics on the number of websites, and the reported data mainly includes the number of IP addresses and domain names.

2.1 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 in each database, that can be distinguished by the province which the addresses belong to, 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 IP addresses, also requires IP address allocation organizations to report the quantity of IP addresses they own semiannually. To ensure the accuracy of IP data, CNNIC will compare and verify APNIC statistical data with the reported data to confirm the final quantity of IP addresses.

2.2 Number of Websites

The number of websites is detected and obtained by CNNIC according to domain name lists. The lists of .CN and .中国 are obtained though the database of CNNIC, while the lists of



gTLD are provided by international relevant registries.

2.3 Number of Domain Names

The numbers of domain names under .CN and .中国, which are registered globally, are derived from CNNIC database, while those under gTLD, New gTLD, .CO, .TV, .CC, .ME, .HK, and .PW are provided by domestic domain name registration units.

II. Definitions of Terms in the Report

◇ Internet Users or Netizens: Chinese residents at the age of 6 or above who have used the Internet in the past 6 months.

◇ Mobile Internet Users: Internet users who have used mobile phones to access and surf the Internet in the past 6 months.

◇ Computer Internet Users: Internet users who have used computers to access and surf the Internet in the past 6 months.

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

Ourban Internet Users: Internet users who have been living in urban areas of China in the past 6 months.

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

◇ Website: It refers to a web site with a domain name itself or "www. + domain name". Such domain names include those, which are registered under China's ccTLDs, namely .CN and . 中国, or gTLDs, and whose registrants are within the territory of China. For example, the domain name of "cnnic.cn" has only one website and the corresponding web address is "cnnic.cn" or "www.cnnic.cn". Other web addresses with such domain name as the suffix, like "whois.cnnic.cn" and "mail.cnnic.cn", are regarded as different channels of the website.

Scope of Survey: Unless otherwise expressly indicated, data in this Report only refer to
 Chinese mainland, excluding Hong Kong, Macao and Taiwan.

♦ **Deadline of Survey Data:** The deadline of the statistical survey data is Jun 30, 2024.



◇ Data Explanation: Most of the data in this Report are approximate values after rounding and retaining significant digits.



Appendix 2 Attached Tables of Basic Internet Resources

Region	Number of Addresses	Equivalence
Chinese mainland	343,168,256	20A+116B+85C
Hong Kong	13,127,424	200B+79C
Macau	337,920	5B+40C
Taiwan	35,713,536	2A+32B+242C

Table 1 Number of IPv4 Addresses

Organization Name	Number of Addresses	Equivalence
China Telecom	125,763,328	7A+126B+255C
China Unicom	69,866,752 note1	4A+42B+21C
IP Address Allocation Alliance of CNNIC	62,947,328 note 2	3A+192B+94C
China Mobile	35,294,208	2A+26B+140C
China Education and Research Network	16,649,984	254B+16C
China Mobile Tietong	15,796,224 note 3	241B+8C
Others	16,850,432 note 4	257B+30C
Total	343,168,256	20A+116B+85C

Table 2 Allocation of IPv4 Addresses among Organizations

Data sources: APNIC and CNNIC

Note 1: The addresses of China Unicom include the addresses of former China Unicom and former China Netcom. Specifically, the IPv4 addresses 6316032 (96B+96C) of former China Unicom are 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 Allocation Alliance. So far, the total number of IPv4 addresses held by the members of IP Address Allocation Alliance is 85.06 million, equivalent to 5.1A. The IPv4 addresses of the IP Address Allocation Alliance listed in the above table do not include those IPv4 addresses already assigned to former China Unicom and China Mobile Tietong.

Note 3: The IPv4 addresses of China Mobile Tietong are assigned by CNNIC.

Note 4: Others refer to enterprises and institutions that apply for IPv4 addresses directly from APNIC.

Note 5: The deadline for the above statistical data is Jun. 30, 2024.



Region	Number of Addresses
Chinese mainland	64,435
Hong Kong	2,024
Macau	9
Taiwan	2,612

Table 3 Number of IPv6 Addresses (unit: /32^{note 1})

Table 4 Allocation of IPv6 Addresses among Organizations

Organization Name	Number of addresses
IP Address Allocation Alliance of CNNIC	26,726 note 2
China Telecom	16,387
China Education and Research Network	10,258
China Unicom	4,097
China Mobile	4,097
China Mobile Tietong	2,049 note 3
Others	821 note 4
Total	64,435

Data sources: APNIC and CNNIC

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

Note 2: At present, the number of IPv6 addresses held by the members of IP Address Allocation Alliance of CNNIC is 28775/32. The IPv6 addresses held by the members of IP Address Allocation Alliance listed in the above table do not include those IPv6 addresses already assigned to China Mobile Tietong.

Note 3: The IPv6 addresses of China Mobile Tietong are assigned by CNNIC.

Note 4: Others refer to enterprises and institutions that apply for IPv6 addresses directly from APNIC.

Note 5: The deadline for the above statistical data is Jun. 30, 2024.

Table 5 Proportion of IPv4 Addresses in Each Province / Autonomous Region / Municipality

Province / Autonomous Region /		
Municipality Directly under the Central	Proportion	
Government		
Beijing	25.19%	
Guangdong	9.43%	
Zhejiang	6.39%	
Shandong	4.83%	
Jiangsu	4.70%	
Shanghai	4.47%	
Liaoning	3.29%	
Hebei	2.81%	
Sichuan	2.74%	
Henan	2.60%	
Hubei	2.37%	
Hunan	2.33%	
Fujian	1.92%	
Jiangxi	1.71%	
Chongqing	1.66%	
Anhui	1.63%	
Shaanxi	1.61%	
Guangxi	1.36%	
Shanxi	1.26%	
Jilin	1.20%	
Heilongjiang	1.19%	
Tianjin	1.04%	
Yunan	0.96%	
Inner Mongolia	0.77%	
Xinjiang	0.60%	
Gansu	0.47%	
Hainan	0.47%	
Guizhou	0.44%	
Ningxia	0.27%	
Qinghai	0.17%	
Tibet	0.13%	
Others	10.00%	
Total	100.00%	

Directly under the Central Government

Data sources: APNIC and CNNIC

Note 1: The above statistics are made on the basis of the location of the IP address owners.

Note 2: Others refer to countries or regions other than the Chinese mainland.

Note 3: The deadline for the above statistical data is Jun. 30, 2024.



Table 6 Number of Domain Names in Each Province / Autonomous Region / Municipality

Province / Autonomous Region	on Total Domain Names r	.CN Domain	.中国 Domain
/ Municipality Directly under		Names	Names
the Central Government	Number	Number	Number
Guangdong	6851219	4597950	14649
Beijing	5498275	4403704	22743
Fujian	1994714	1367440	5487
Guizhou	1796635	1680824	3201
Shandong	1488593	916043	27623
Jiangsu	1363800	554343	7365
Shanghai	1321866	647902	6313
Anhui	1284504	265187	3146
Zhejiang	1166355	384557	6526
Henan	1005956	552990	3961
Sichuan	1001037	489944	10549
Hunan	850735	405814	2534
Hubei	732662	388603	2904
Jiangxi	596044	279824	1664
Guangxi	589855	366847	1388
Hebei	588199	287340	4980
Shaanxi	414710	196386	7383
Liaoning	413962	204654	5407
Chongqing	407917	215949	4514
Shanxi	388723	207346	1721
Heilongjiang	294425	168622	1858
Yunnan	283465	141273	4358
Tianjin	205232	75504	1086
Hainan	178303	93885	879
Jilin	170489	102668	1370
Gansu	154546	98029	1280
Inner Mongolia	130333	64039	1594
Xinjiang	79265	43485	832
Ningxia	37858	19276	488
Qinghai	21534	11753	473
Tibet	9170	2883	504
Others	551578	326943	12310
Total	31871959	19562007	171090

Directly under the C	entral Government
----------------------	-------------------

Data sources: CNNIC

Note 1: Others refer to countries or regions other than the Chinese mainland, or the location of domain name registrants can not be identified.

Note 2: The deadline for the above statistical data is Jun. 30, 2024.



Table 7 Number of Internet Users in Each Province / Autonomous Region / Municipality Directly

Province / Autonomous Region	
/ Municipality Directly under	Number of Internet Users (10,000)
the Central Government	
Beijing	1972
Tianjin	1157
Hebei	6304
Shanxi	2599
Inner Mongolia	1996
Liaoning	3771
Jilin	1911
Heilongjiang	2780
Shanghai	2194
Jiangsu	6846
Zhejiang	5102
Anhui	4457
Fujian	3091
Jiangxi	3287
Shandong	7775
Henan	7294
Hubei	4524
Hunan	4980
Guangdong	10617
Guangxi	3812
Hainan	828
Chongqing	2362
Sichuan	6016
Guizhou	2435
Yunnan	3265
Tibet	271
Shaanxi	3135
Gansu	1789
Qinghai	425
Ningxia	522
Xinjiang	1950

under the Central Government in 2023

Data sources: CNNIC

Note 1: Individual surveys are made in some provinces, autonomous regions, or municipalities directly under the central government.

Note: The deadline for the above statistical data is Dec. 31, 2023



Appendix 3 Supporting Organizations

We would like to express our heartfelt thanks to the following organizations that have

supported the collection of data in this report. (Not listed in any particular order)

Ministry of Industry and Information Technology Cyberspace Administration of China National Bureau of Statistics Central Committee of the Communist Young League

China Organizational Name Administration Center E-governance Research Center of Party School of the Central Committee of C.P.C (National Academy of Governance) China Academy of Information and Communications Technology Computer Network Information Center of Chinese Academy of Sciences Network Center of China Education and Research Network

China Mobile

China Unicom Baidu Online Network Technology (Beijing) Co., Ltd. Beijing Micro Dream Network Technology Co., Ltd. (Micro-blog) Alibaba Cloud Computing (Beijing) Co., Ltd. Beijing Oriental Wangjing Information Technology Co., Ltd. Beijing Guoxu Network Technology Co., Ltd. Beijing Xinnet.com Co., Ltd. Beijing BrandCloud.cn Co., Ltd. Beijing Zihai Technology Co., Ltd. Chengdu 51web.com Co., Ltd. Daqing dqzc.com Co., Ltd. Fanxi Corporation Service (Shanghai) Co., Ltd. Fuzhou Zhongxu Network Technology Co., Ltd. Guangdong Jinwanbang Technology Investment Co., Ltd. Guangzhou DNSPod Technology Co., Ltd. Hefei Juming Network Technology Co., Ltd. Trademark Domain Technology Co., Ltd. Leascend Technology Co., Ltd Xiamen Dianmei Network Technology Co., Ltd. Xiamen 35.Com Technology Co., Ltd. Xiamen eName Technology Co., Ltd.

China Telecom Beijing Ucap Information Technology Co., Ltd. Tencent Cloud Computing (Beijing) Co., Ltd. Beijing ByteDance Technology Co., Ltd. Alibaba Cloud Computing Co., Ltd. Beijing Guoke Cloud Computing Technology Co., Ltd. Beijing Wanweitonggang Technology Co., Ltd. Beijing ZW.cn Co., Ltd. Beijing Zhuoyueshengming Technology Co., Ltd. Chengdu Feishu Technology Co., Ltd. Chengdu West Digital Technology Co., Ltd. Doumai (Shanghai) Network Technology Co., Ltd. Foshan Yidong Network Co., Ltd. Guangdong HUYI Internet & IP Services Co., Ltd. Guangdong Now.cn Co., Ltd. Guizhou Zuuq Internet Technology Co., Ltd. ZDNS Beijing Co., Ltd. Jiangsu Bangning Science & Technology Co., Ltd. Makeyubiao Information Technology (Shanghai) Co., Ltd. Xiamen Nawang Technology Co., Ltd. Xiamen ZZY.cn Co., Ltd. Shangzhong Online Technology Co., Ltd.



CNNIC 中国互联网络信息中心 CHINA INTERNET NETWORK INFORMATION CENTER

Shanghai Oray Co., Ltd.	Shanghai CNDNS.com Co., Ltd.
Shanghai Yovole Network Co., Ltd.	Shenzhen Vanguard of Interconnection Co., Ltd.
Shenzhen Webnet.com Technology Co., Ltd.	Shenzhen EIMS Information Technology Co., Ltd.
Sichuan Cloud Yuqu LLC Co., Ltd.	Tianjin Zhuiri Technology Development Co., Ltd.
Vantage of Convergence (Chengdu) Co., Ltd.	WangJu Brands Management Co., Ltd.
Xi'an Qianxinet Technology Co., Ltd.	Yantai DNSpod Network Technology Co., Ltd.
Yunan Landui Cloud Computing Co., Ltd.	Zhejiang 22net Inc.
Zhengzhou Shanglv Technology Co., Ltd.	Zhengzhou Shijichuanglian E-Technology Co., Ltd
Grow Force Technology Co., Ltd.	Knet Registrar (Tianjin) Co., Ltd

We have also received great support from other organizations, which are not listed above, in

the process of compiling and revising this report. We extend our sincere thanks to them!



The copyright of this report is reserved by China Internet Network Information Center (CNNIC).

Please indicate the source in case of citation or reproduction.

If you are interested in cooperation, please contact Ms. Hao at 58813423 or Ms. Meng at 58813423.

