**Press Release: 2010/01/15 by Macao Internet Project**

**The Internet peneration rate reached 70%**

**The Internet in Macao has entered a mature stage**

The Macao Internet Project of the University of Macau (UM) and the ERS e-Research Lab released the latest (8th) Annual Survey Statistical Report on Internet Use yesterday in the Luso-Chinese Building of UM over the past nine years. The event was chaired by the director of Macao Internet Project, Dr. Angus Cheong. He also summarized the last eight surveys and pointed out several major characteristics of the Internet development and usage in Macao. He indicated, the popularization of the Internet has entered a mature stage and wireless internet connection has become a growth point of the Internet access and usage. In addition, he said the influences of BBS and SNS (Social Network Site) have been becoming more and more significant.

The release of the Macau report is the sixth time since the cooperation between Macao Internet Project and the China Network Information Center (CNNIC). Today both parties concurrently release their reports respectively in Macau and Beijing.

From 2001, eight large-scale random sample telephone surveys have been conducted over the past nine years. By December of 2009, there have been over 365,000 netizens in Macao and the peneration rate reached 70%. The peneration rate from 2001 to 2009 were 33%, 36%, 40%, 46%, 53%, 55%, 64%, 66% and 70% respectively. The number of netizens has grown from 130,000 to more than 365,000 from 2001 to 2009. The peneration rate was 70% in 2009 which marked a 4% increase compared to the 66% in 2008. The number of netizens has increased about 25,000.

In addition, there was a continuous increase in terms of the number of online computers. By the end of 2009, the number of online computers reached 83% of the total households in Macao, reaching to 140,000. The increasing of the penetration rate of Internet and online computers shows that the popularization of the Internet in Macao has entered a mature stage.

In terms of mode of the Internet access, 97% computers connect to the Internet via broadband and only 1% of them use Dial-up connection, which shows that broadband have been the mainstream of the Internet connection.

It is noticeable that wireless Iinternet access (wireless set up by ISP and WLan) grown rapidly from 11% in 2006 to 38% in 2009 and has probably become the new area for further growth. In which 12% of the wireless internet connection set up by ISP whereas 26% set up by WLan. The data means that wireless internet connection has become a growth point of the Internet access and usage.

The popularity of mobile online mode is proofed by the following three evidences: tools, time, and locations of the Internet use. More than 90% netizens use desktop computer to get online. 36% of them use laptop computer to get online which increases 13% compared with the number of 2008. 16% netizens use mobile phone or PDA to surf the Internet, increasing 10% and 1% respectively compared with the numbers of 2008. Portable Internet tools make mobile online behave more conveniently.

In addition, the same to the result of past surveys, netizens get online mainly at home at night and the peak time period of online is still from 8:00 pm to 10:00 pm. Compared with numbers of 2008, the increasing range of the online rate in every time period from 9:00 am to 5:00 pm is from 3% to 11%. In terms of online locales, data shows that both the online rate in public locations except public libraries and the street increase 3%, indicating that more and more netizens choose other places to get online besides home or working places.

In 2009, nearly 100% college graduates use the Internet. In general, the tendency shows that people who are male, younger, unmarried, students, and have a higher level of occupation, education level, and family income are more likely to use the Internet.

Besides, the highest proportion of Macao Internet users are taken up by young male under 24, students, unmarried people, managerial/professional/white collar, high family income and those who had a senior middle school degree or below.

Facebook is the most popular one among various Social Network Websites. Following Facebook is QQ site and MySpace. Half of the netizens uses Facebook. 27% of the netizens access Facebook at least once every day. There are many activities which netizens can engage in Social Network Websites,70% of the netizens who uses Facebook mainly for game playing. Moreover, 22% of netizens play the game called FarmVille on Facebook, 10% of netizens play it every day.

In 2009, 44% of netizens access online forum. It is noticeable that if netizens want to express their opinions on the government or policies of the government, over one-fourth of netizens choose online forum as the first channel, 8% of them may discuss with others.

The Internet is frequently used for its utilitarian functions (e.g., information searching, news exposure, and communication). More than 80% netizens had the experience in using search engine and news exposure. 40% to 70% of the Internet users had the experience in using instant messaging software, online forums, social network websites, blogs viewing, and e-government, etc. Besides, Yahoo, Google and Baidu are three most frequently used search engines by netizens, 82% of netizens use Yahoo, 61% use Google and 25% use Baidu. In addition, Yahoo is the site with which the largest number of netizens use to scan news and MacaoDaily site is the one which netizens use to read online news most frequently.

As far as e-government is concerned, about 27% to 37% of the users who aged over 18 rarely or never used the government websites in the past five years. 69% of netizens who aged over 18 uses the government websites in 2009 which increased 7% compared with 2008. More than 90% of the users mainly checked government websites for information and seldom used them for interaction purpose, not the least of which was lodging complaints and making suggestions.

Based on the results of past surveys, Dr. Angus said, the development of the Internet in Macao has entered a mature stage and the popularization the Internet has leaped into the front ranks of the world. Getting online has become a necessary part of everyday life in Macao, the functions of which include knowing the world, enlarging social networking, and conducting entertainment behaves. Online forums and SNS generate more and more influences. When talking about one’s establishment of social relations , entertainment methods, and opinion expressions, we should view them from a creative perspective.

In addition, wireless internet connection/mobile online will promote the development of the Internet as key roles. Habitual mobile online behaves will impact the nature of communication and the consumption modes of forms and content of the Internet usage. In offering information and interactive functions, Government websites are supposed to take into account the changes of netizens’message processing and opinion expression, and then find out new methods to resolve concerning problems.

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**SURVEY METHODOLOGY OF MACAO INTERNET PROJECT**

1. **Study Population**

The 2009 survey was carried out between November 19 and December 2, 2009. It was conducted by using a computer-assisted telephone interviewing (CATI) system, targeted at regular residents aged between 6 and 84 years old who speak Chinese (including Cantonese, Mandarin and other dialects) and lie in Macao with a residential telephone line.

1. **Sampling Method**

**Sample Size:** 1586 residents were successfully interviewed in the survey. The sample size gives a sampling error of ±2.5% at the 95% confidence level.

**Sampling Procedure:** as in the seven previous surveys, all Macao residential telephone numbers formed the sampling frame. In the first step, 7512 telephone numbers were randomly selected by a computerized program. Then, with the assistance of the CATI system, all those numbers were dialed. When proven to be a residential number, interviewers requested a Chinese-speaking household person aged between 6 and 84, with the last birthday among other qualified members, to be interviewed. In the event of no answer from the dialed number, the chosen individual was not at home or unavailable or interview, interviewers randomly selected another qualified person in the house or made call backs up to five times at different times of different days. Eventually, 7510 numbers were used during the whole survey period.

**Survey Response Rate:** calculated by Response Rate Formulae 3 (RR3) and Cooperation Rate Formulae 3 (CR3) of the American Association for Public Opinion Research (AAPOR) (for details for
<http://www.aapor.org/default.asp?page=survey_methods/standards_and_best_practices/standard_definitions#response>), the response rate of the current survey is 38.1%, and the cooperation rate is 65.6%.

1. **Weighting Method**

Prior to formal analysis, the data were weighted against the latest Macao Population Census Estimates, in terms of cross-distribution of age and gender. Consequently, the distribution of gender and age of the current sample resembles that of the population.

1. **Data Cleaning**

A series of mean figures have been reported above, such as average online time per user. As is commonly known, mean averages are vulnerable to extremely large or small values in the data. We have therefore followed the customary practice in data processing: replacing extreme values (defined as larger or smaller than three standard deviations from the mean) with those equal to three standard deviations from the mean. Averages calculated from the adjusted data are generally about 2~18% smaller than the averages of the original data, which is closer to the parameters of the population.


### About ERS e-Research Lab

Founded by Dr. Angus Cheong, ERS e-Research Lab brings together industry experts and scholars with PhD and Master’s degrees from the Greater China Region to study and actualize the integration of Internet technology and scientific research.

ERS e-Research Lab focuses on technological innovation, product development and research partnerships with other institutions. Our aim is to deepen research on the Internet technology and surveys, promote regional research cooperation, and regularly publish reports and electronic data to popularize and facilitate the applied utility of research findings.