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Legislative Council Panel on
Information Technology and Broadcasting

2001 Surveys on IT Usage and Penetration
in the Household and Business Sectors

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Purpose

This paper briefs Members on the results of the two surveys on IT usage and penetration in the household and business sectors conducted during April to June 2001.

Background

2. In the Policy Objective for the Information Technology and Broadcasting Bureau (ITBB) published as part of the 2000 Policy Address, we committed to conduct annual surveys to assess the usage of IT in the business sector and the community. The statistics collected will serve as useful reference in the development of the IT strategy for Hong Kong.

3. The Information Technology Services Department (ITSD) requested the Census and Statistics Department (C&SD) in early 2001 to conduct two surveys on IT usage and penetration in the household and business sectors in Hong Kong respectively. A Working Group comprising representatives from ITBB, ITSD and C&SD was subsequently set up to steer and monitor the progress of the surveys. The surveys were conducted from April to June 2001. After data compilation and analysis, two reports had been produced and the results were announced on 12 November 2001.

Household Survey on IT Usage and Penetration

Objective

4. The objective of the household survey was to collect information on the penetration and/or usage of personal computers (PCs), the Internet, electronic business services, Chinese input methods, and awareness of Government online services, etc.

Coverage

5.   The survey covered the land-based non-institutional population of Hong Kong and did not cover inmates of institutions and persons living on board vessels.

Data Collection

6.   Some 10 000 households selected in accordance with a scientifically designed sampling scheme to represent the population of Hong Kong were successfully enumerated in the survey, constituting a response rate of 75%.   The fieldwork was carried out between April and June 2001 through face-to-face interviews with all members aged 10 and over in each enumerated household.   A total of about 27 400 persons had been interviewed.

Key Results

7.   A brief account of the key results is set out in paragraphs 8 to 16. A summary is at **Annex A**.

8.   According to the results of the survey, PCs and Internet connections were getting more and more common amongst households.   Some 1 258 400 households, or 61% of all households in Hong Kong, had PCs at home at the time of the survey.   Of the households with PCs at home, some 1 009 800 (80%) had their PCs connected to the Internet, representing 49% of all households in Hong Kong.   This represents a significant increase compared to the situation in 2000 when only 50% of the households in Hong Kong had PCs at home and 36% of all households had their PCs at home connected to the Internet.

9.   With the increased penetration of PC and Internet amongst households, more persons aged 10 and over had used PC and Internet service. As revealed from the 2001 survey, some 3 117 100 persons aged 10 and over, or 52% of all persons in that age group, had knowledge of using PC.   And some 3 020 000 persons aged 10 and over or 50% of all persons in that age group had actually used PC in the twelve months before the survey.   The corresponding figures comparable to the latter were 2 639 700 and 43% for the 2000 survey.   The 2001 survey also revealed that the rates of using PC were higher among younger persons, better-educated persons and students.

10.   There was no significant difference between the two sexes in respect of the rate of using PC for the age bracket of 10-34. From age 35 onwards, proportionally more males than females had used PC in the twelve months before the survey.

11.   For persons aged 65 and over, the percentage of those who had used PC in the twelve months before the survey increased from 0.6% in 2000 to 1.2% in 2001 (or by 4 500 persons).

12.   Moreover, some 2 601 300 persons aged 10 and over, or 43% of all persons in that age group, had used Internet service in the twelve months before the survey via various media including PC, WAP phones and personal digital assistants (PDA). The corresponding figures were 1 855 200 persons and 30% for the 2000 survey.

13.   Utilization of electronic business services was also high in Hong Kong. About 89% of all persons aged 15 and over had used electronic business services of one form or another for personal matters in the twelve months before the survey, as against 85% recorded in 2000. The electronic business services covered in the household survey included the use of Octopus card, Automatic Teller Machine (ATM), e-cash, Easy Pay System (EPS), Payment by Phone Service (PPS), online searching for financial information/information on goods and services/job vacancies, etc.

14.   Regarding the usage of online purchasing services, the 2001 survey estimated that around 313 300 persons aged 15 and over, or 6% of all persons in that age group, had purchased one or more types of goods/services online for personal matters in the twelve months before the survey.

15.   As for Chinese input, 40% of all persons aged 10 and over had knowledge of using Chinese input methods in 2001, as compared with 30% in 2000. Keyboard input was the most commonly used method.

16.   As for Government online services, 32% of all persons aged 15 and over were aware of the Electronic Service Delivery scheme, as compared to 29% in 2000.

Survey on IT Usage and Penetration in the Business Sector

Objective

17.	The objective of the business sector survey was to collect information relating to IT usage and penetration in the sector.	Major areas of study included PC and Internet penetration rates, web site usage, e-business and manpower situation in IT work.

Coverage

18.	The survey covered all industry sectors except the agricultural and fishing sector and the mining and quarrying sector.	The survey covered establishments of all employment sizes, which are classified into large, medium and small.	Large establishments referred to those with 100 or more persons engaged for the manufacturing sector, and 50 or more persons engaged for other industry sectors.	Small establishments referred to those with less than 10 persons engaged regardless of sectors.	The others were regarded as medium establishments.

Data Collection

19.	A total of 3 492 establishments selected in accordance with a scientifically designed sampling scheme were successfully enumerated in the survey, constituting a response rate of 96%.	The fieldwork was carried out between April and June 2001 through mailed questionnaires followed by field officers' visits/telephone calls to verify the information and provide assistance in completing the questionnaires.

Key Results

20.	A brief account of the key results is set out in paragraphs 21 to 30. A summary is at **Annex B**.

21.	According to the results of the survey, the percentages of establishments using PCs and having Internet connection, as compared to the percentages recorded in 2000, remained stable in 2001, being 50% and 37% respectively.	The corresponding percentages in 2000 were 52% and 37% respectively.

22.　　　　The slight drop in the percentage of establishments using PCs, which is not statistically significant, was mainly due to the slight drop in PC usage by small establishments.　Analyzed by size of the establishments, 93% of large establishments, 79% of medium establishments and 46% of small establishments were using PCs.　The corresponding figures for 2000 were 92%, 78% and 48% respectively.　As regards Internet penetration, the percentage of establishments having Internet connection remained the same at 37% in 2001 as compared with 2000.　Nevertheless, the percentage of large establishments having Internet connection had increased from 78% in 2000 to 86% in 2001. The corresponding percentages in medium and small establishments remained stable, being 64% and 33% in 2001, as compared with 63% and 34% in 2000.

23.　　　　Of the major sectors, PCs were most popularly used in the financing, insurance, real estate and business services sector (76%).　The percentage of establishments with Internet connection was also highest in this sector, at 62%.

24.　　　　In 2001, about 11% of the establishments (or 35 900 establishments) had a web page or web site.　This had shown an increase as compared to 7% (24 900 establishments) in 2000.　The percentage continued to be much higher for large establishments (57%) as compared with medium establishments (29%) and small establishments (8%).　A predominant proportion (98%) of the web pages or web sites served to provide information on the establishments concerned and the products and services rendered. About 17% served as the channel for online ordering, payment or delivery of products and services.

25.　　　　In the 12 months before the survey, about 6% of the establishments had ordered or purchased goods, services or information through electronic means, representing a slight increase of 1 percentage point over 2000. Electronic means included interactive response system through telephone lines, designated private network, and the Internet.

26.　　　　About 40% of the establishments had received goods, services or information through electronic means, representing an increase of 5 percentage points over 2000.　In the survey, goods received through electronic means were only restricted to those products that could be transmitted through electronic media, such as software packages and songs.　Browsing information on the Internet was also regarded as receiving information through electronic means.

27.   The percentage of establishments having sold goods, services or information through electronic means increased from 0.3% to 1.1%. In the survey, an establishment was regarded to have sold its goods, services or information through electronic means if it offered them and accepted orders or purchases that were placed completely through electronic means.

28.   About 12% of the establishments had delivered their goods, services or information through electronic means, 4 percentage points higher than that in 2000.

29.   The amount of business receipts from selling goods, services or information through electronic means in 2000 was estimated at HK$7.6 billion, or 0.17% of the total business receipts of establishments in all industry sectors covered, as against HK$4.6 billion or 0.11% in 1999. Of the total amount received from selling goods, services or information through electronic means, the percentage share in respect of selling through the Internet increased from 21% in 1999 to 40% in 2000.

30.   The scope of the 2001 survey was also expanded to collect data on persons engaged in IT work. As at end-March 2001, it was estimated that around 69 500 persons were engaged in IT work. Analyzed by job level, 41% were engaged in development/support/maintenance of software/web site/ database/multimedia/contents; 21% in IT management and consultancy; and 16% in telecommunications and networking/hardware support. Analyzed by major sectors, 54% of the person engaged in IT work were in the financing, insurance, real estate and business services sector, followed by the wholesale, retail and import/export trades, restaurant and hotels sector (19%). The number of vacancies in IT jobs as at end-March 2001 was about 5 200. The total number of IT posts (number of persons engaged plus vacancies) as at end-March 2001 was about 74 700. The number of IT posts as at end-March 2002 as forecast by the industry was 76 300, representing an increase of 2% over 2001. In the survey, persons engaged in IT work included staff spending over 50% of their work time on IT work. Those who were only end-users of computer software and programs and those engaged only in data input were excluded.

Conclusion and Way Forward

PC and Internet Penetration in the Household Sector

31.　　　In the past year, public awareness and usage of IT and computers has significantly increased.　The household PC and Internet penetration rates have increased to 61% and 49% respectively in 2001, which are among the highest in the region.　Building on this strong foundation, the Government will continue to promote wider use of IT in the community, in particular amongst the elderly, housewives and the disabled, etc. who have less opportunities to learn and use IT in the daily life.　Specifically, we will continue to provide free IT awareness courses to the general community, expand our Community Cyber Points project to provide more public computer facilities with Internet connection for free use by the community and undertake other measures to meet the specific needs of the different sectors of the community.

PC and Internet Penetration in the Business Sector

32.　　　The survey results indicate that IT is quite commonly used in the business sector to enhance operational efficiency and explore market opportunities.　However, the adoption is slower in small and medium-sized enterprises (SMEs).　While we will continue with territory-wide promotional programmes such as organising seminars and distributing free reference materials, we will also work with industry support organisations and the industry to launch sector-specific programmes to promote and facilitate the adoption of IT and e-business amongst SMEs in specific sectors.

33.　　　For example, in partnership with the Hong Kong Productivity Council (HKPC), we launched in December 2001 a pilot sector-specific IT audit programme for 400 SMEs.　Participating SMEs will be provided with packaged services including an assessment of their IT resources and infrastructure, evaluation of their existing business applications and recommendations on IT planning and solutions so as to streamline their operations, enhance productivity and/or expand business opportunities. The HKPC will also assist participating SMEs in making applications to the relevant SME funding schemes to enhance their IT capability (for example, the SME may apply to the Business Installations and Equipment Loan Guarantee Scheme for guarantee on the bank loan for acquiring the computer hardware and software and communications system required; and/or to the SME Training Fund for the necessary IT training for the employers and employees).

34.	The HKPC also plans to, in collaboration with IT industry associations, develop a directory of IT solutions and services to help participating SMEs implement the recommendations arising from the audit. Funding may be sought from the SME Development Fund[1] to develop the directory. Based on the results of the audit programme, the HKPC will also develop self-assessment tools, successful cases for showcasing purposes and implementation guidelines to benefit other SMEs which have not participated in the pilot programme.

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[1]   The SME Development Fund provides financial support to projects that will enhance the competitiveness of Hong Kong's SMEs in general or SMEs in specific sectors.   Projects to be supported may include research studies, award schemes, codes of best practice, conferences, seminars, databases, exhibitions, service centres, support facilities and technology demonstration projects.   The Trade and Industry Department, which administers the Fund, is soliciting, among others, the following projects for the first tranche of applications :

-   setting up IT promotion teams to enhance SMEs' awareness on the importance of IT; and
-   organising an SME IT Expo.

Summary of Survey Results

Household Survey on Information Technology Usage and Penetration

Data Item	**2000**	**2001**
Information technology penetration amongst households		
Percentage of households with personal computer (PC) at home among all households in Hong Kong	**49.7%**	**60.6%**
Percentage of households with PC at home connected to Internet among all households with PC at home in Hong Kong	**73.3%**	**80.4%**
Percentage of households with PC at home connected to Internet among all households in Hong Kong	**36.4%**	**48.7%**
Information technology usage amongst household members		
Percentage of persons aged 10 and over who had used PC in the twelve months before the survey among all persons aged 10 and over	**43.1%**	**50.3%**
Percentage of persons aged 10 and over who had used Internet service in the twelve months before the survey among all persons aged 10 and over	**30.3%**	**43.3%**
Usage of electronic business services		
Percentage of persons aged 15 and over who had used one or more types of electronic business services for personal matters in the twelve months before the survey among all persons aged 15 and over	**84.9%**	**88.5%**
Usage of online purchasing services		
Percentage of persons aged 15 and over who had used online purchasing services for personal matters in the twelve months before the survey among all persons aged 15 and over	**Not available**	**5.6%**
Chinese input		
Percentage of persons aged 10 and over who had knowledge of using Chinese input methods among all persons aged 10 and over	**29.8%**	**39.9%**
Government online services		
Percentage of persons aged 15 and over who were aware of the Electronic Service Delivery scheme among all persons aged 15 and over	**28.7%**	**32.4%**

Summary of Survey Results

Annual Survey on Information Technology
Usage and Penetration in the Business Sector

Data Item	2000	2001
	(As a % of all establishments)	
Personal Computer (PC) Usage		
Establishments using personal computer	**51.5%**	**49.7%**
Internet Usage		
Establishments having Internet connection	**37.3%**	**37.2%**
Web Site Usage		
Establishments having Web page/Web site	**7.3%**	**10.7%**
Electronic Business		
Establishments having *ordered/purchased* goods, services or information through electronic means	**4.9%**	**6.2%**
Establishments having *received* goods, services or information through electronic means	**35.3%**	**40.0%**
Establishments having *sold* goods, services or information through electronic means	**0.3%**	**1.1%**
Establishments having *delivered* goods, services or information through electronic means	**8.1%**	**12.4%**
	1999	**2000**
Business receipts from selling goods, services or information through electronic means	**$4.6 billion**	**$7.6 billion**
Above business receipts as a % of total business receipts received	**0.11%**	**0.17%**

Persons engaged in information technology (IT) work

Number of persons engaged in IT work as at end-March 2001 (a) = **69 476**

Number of vacancies of IT posts as at end-March 2001 (b) = **5 187**

Total number of IT posts as at end-March 2001{(c)=(a)+(b)} = **74 663**

Number of IT posts as at end-March 2002 as forecast by the industry in the 2001 Survey = **76 268**