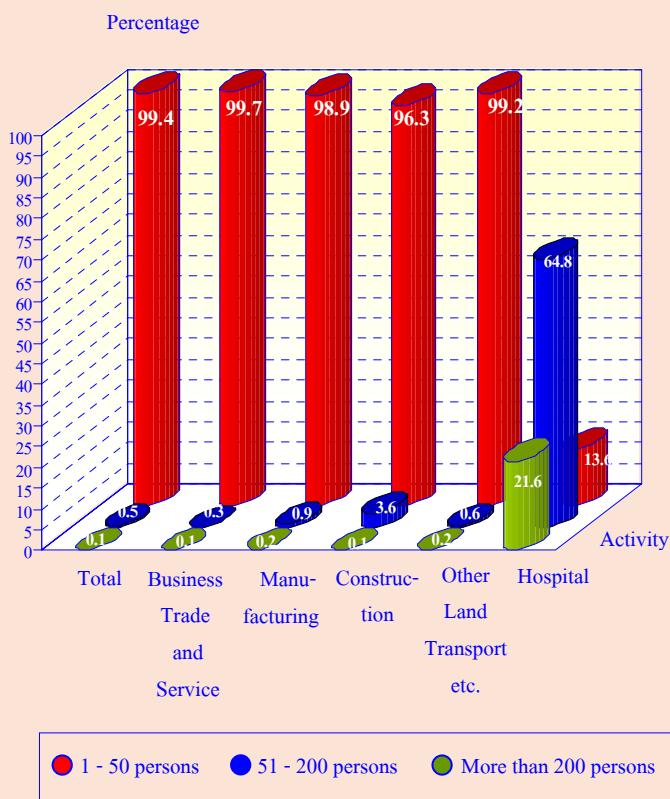


EXECUTIVE SUMMARY

Due to attention is given to use the knowledge and technology as the country development base in order to enhance the country's competitiveness through knowledge - base learning. The National Statistical Office (NSO), as an authorized government agency, therefore, decides to conduct the first survey of Information and Communication Technology Survey in 2004. This is the 4th Survey.

The data presents the results concerning information and communication technology of the establishments with at least one person engaged located **in municipal areas in the Northern Region**. The coverage of the survey are business trade and services, manufacturing, construction, other land transport, activities of travel agencies and hospital. The information collected refers to the operation period of establishment during April 1, 2006 to March 31, 2007. The major findings are as follows;

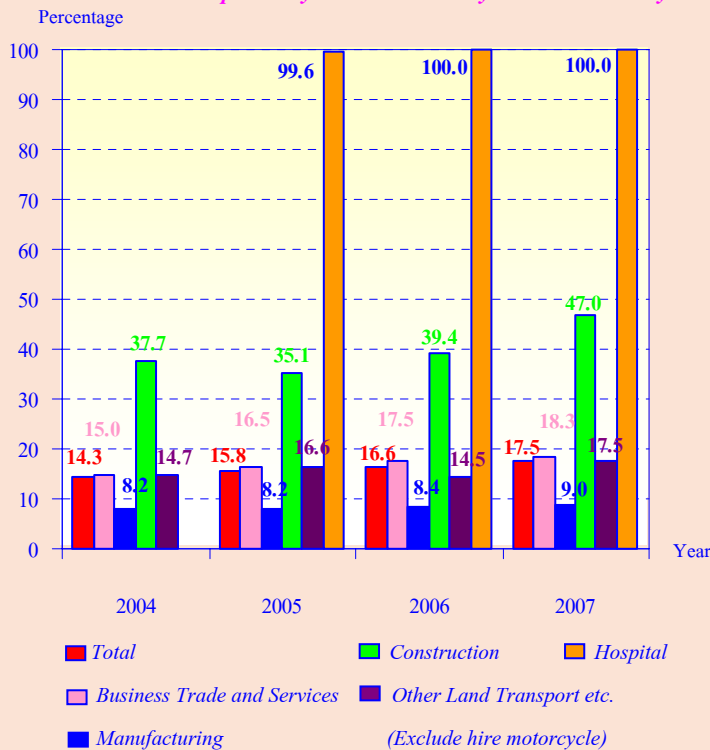
Figure A Percentage of Establishment in year 2007 by Size of Establishment (Number of person engaged) Economic Activity



1) Number and size of Establishments, there were totally 115,686 establishments. Most of them were engaged in *business trade and services activity*, which was about 96,965 establishments or 83.8 percent. Followed by those engaged in *manufacturing activity* was about 15,400 establishments or 13.3 percent. Those engaged in the *other land transport and activities of travel agencies, construction and hospital activities* had proportion of about 1.9, 0.8 and 0.2 percent respectively.

Considering by size of establishment, specified by the numbers of persons engaged, it was found that most of establishments (about 114,967 establishments or 99.4 percent) were small size, with 1 - 50 persons. Those with 51 - 200 persons and more than 200 persons were very small proportions of about 0.5 and 0.1 percent respectively. It is noticed that establishments with 1 - 50 persons in each activity had the highest proportion, except establishments engaged in *hospital activity* had establishments with 51 - 200 persons and more than 200 persons higher proportion than the establishment with 1 - 50 persons.

Figure B Percentage of Establishments with Use of the Computer in year 2004 – 2007 by Economic Activity

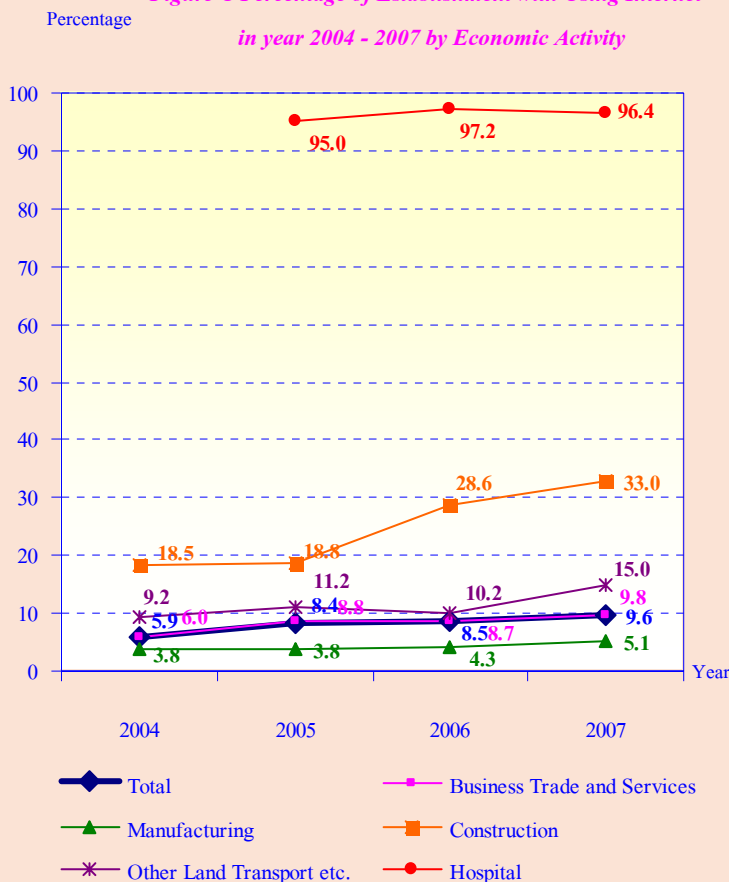


2) Computer Used, the survey was found that 17.5 percent of establishments in the Northern Region used the computers. It was 16.6 percent increased from 2006. It is noticed that all hospital in the Northern used computers.

For the unit of computers facilitated the business process, there were totally 72,197 units or one unit per establishment. The highest average number of computer was found in *hospital activity* about 71 units.

The number of persons using computers in their normal work routines (at least once a week), there were 80,701 persons .

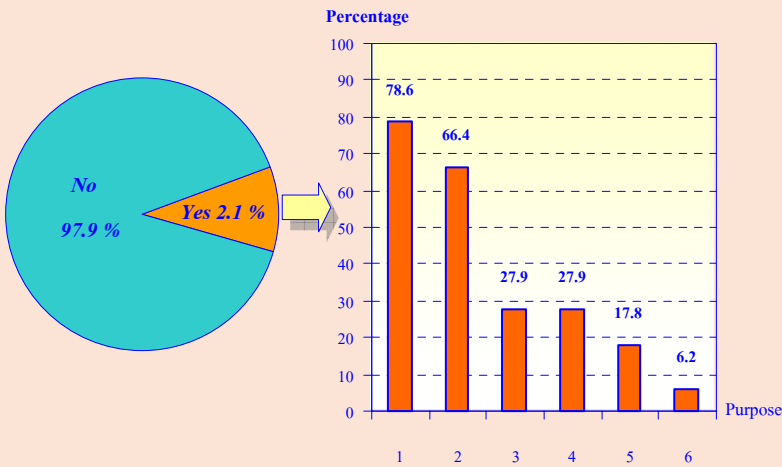
Figure C Percentage of Establishment with Using Internet in year 2004 - 2007 by Economic Activity



3) Internet used, figure C show that 9.6 percent of establishments use of internet which is increased from 2006. The highest proportions of using internet, about 96.4 percent, engaged in *hospital activity*. The followings engaged in *construction* and *other land transportation and activities of travel agencies activities* which were about 33.0 and 15.0 percent respectively.

The major purpose of internet activities, about 90.7 percent, accessed to the internet for information searches, about 51.5 and 48.9 percent of establishments had accessed to the internet for electronic mail and monitoring the market respectively.

Figure D Percentage of Establishments with Use of Web Site in year 2007 By purpose

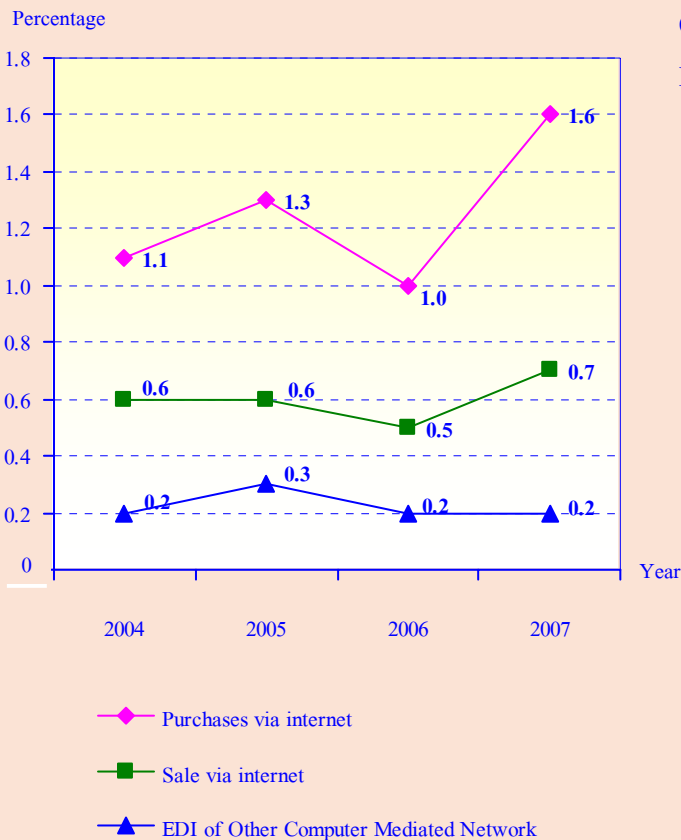


- 1. Marketing the establishment product
- 2. Inquiry/Contact facility
- 3. Receiving Purchased order
- 4. Providing after sales services
- 5. Information networking
- 6. Online payment 6.2%

Note : More than one characteristic can be done by an establishment

4) **Website used**, there was about 2.1 percent. The purposes of using of web site were *marketing the establishment products* of about 78.6 percent. The following was *inquiry or contact facility* by 66.4 percent. The *receiving purchased order* and *providing after sale services* had the same proportions of about 27.9 percent.

Figure E Percentage of Establishments with Purchase, Sale via Internet and Use of EDI in year 2004 - 2007



5) **Purchase via internet**, there was very small proportion of about 1.6 percent. For the Sales via internet was about 0.7 percent and use of EDI or Other Computer Mediated Networks (Other than Internet), was about 0.2 percent.

Table A Spending on Information and Communication Technology Goods and Services of Establishments in 2007 by Size of Establishments and Economic Activity

Amount in Million Baht							
Size of Establishments/ Economic Activity	Number of Establish- ment	Total	Com- puter Hard ware Spen- ding	Com- puter Soft ware Spen- ding	Com- puter Ser- vices Spen- ding	Com- muni- cation Spen- ding	Com- muni- cation Equip- ment Spen- ding
Total	115,686	1,136.2	254.7	68.2	38.9	700.5	73.8
Size of Establishments							
1 - 50 persons	114,967	922.5	146.1	35.6	25.1	654.0	61.7
51 - 200 persons	586	116.4	51.1	18.0	8.0	33.4	5.9
More than 200 persons	133	97.3	57.6	14.7	5.8	13.1	6.1
Economic Activity							
Business Trade and Services	96,965	861.0	147.3	44.8	20.0	590.3	58.6
Manufacturing	15,400	107.5	22.1	6.2	10.7	63.9	4.5
Construction	886	22.6	5.6	1.2	1.3	13.3	1.1
Other Land Transport etc.	2,185	22.9	3.5	0.7	0.7	16.4	1.6
Hospital	250	122.1	76.2	15.3	6.1	16.6	7.8

6) Spending on Information and Communication Technology Goods and Services of establishments in the Northern Region in 2007, there was totally 1,136.2 million baht or about 9,821 baht per establishment. Most of them were *communication spending* of about 700.5 million baht. The following was spent on *computer hardware* of about 254.7 million baht, while *computer services spending* was the lowest of about 38.9 million baht.

In term of size of establishment, it was found that the spending of the small scale establishments (1 - 50 persons) was totally 922.5 million baht or 8,024 baht per establishment. The establishments with 51 - 200 persons had totally 116.4 million baht or about 198,614 baht per establishment. While the large scale establishments (more than 200 persons) was totally 97.3 million baht or 731,579 baht per establishment. It is noted that the establishments with 1 - 50 persons had the highest communication spending, whereas the establishments with 51 - 200 persons had the highest computer hardware spending.

Considering by economic activity, it was found that the establishments engaged in *business trade and services activity* had spent totally 861.0 million baht or 8,880 baht per establishment. Those engaged in *manufacturing activity* had totally 107.5 million baht or 6,980 baht per establishment. The *construction and other land transportation and activities of travel agencies activities* had 22.6 and 22.9 million baht or 25,464 and 10,500 baht per establishment respectively. It is noticeable that the establishments engaged in *business trade and services activity* had spent on information and communication technology goods and services higher than the other economic activity.

Table B Information Technology Personnel and Personnel graduated in Information Technology Subject of Establishment in 2007 by Size of Establishment and Economic Activity

Unit : Persons

Size of Establishments/ Economic Activity	Information Technology Personnel			Personnel Graduated in Information Technology Subject
	Total	Information Technology Subject	Other Subject	
Total	6,782	2,478	4,305	3,281
Size of Establishment				
1 - 50 persons	4,302	1,686	2,616	2,292
51 - 200 persons	1,436	495	941	581
More than 200 persons	1,045	297	748	408
Economic Activity				
Business Trade and Services	5,449	2,115	3,334	2,759
Manufacturing	658	207	451	289
Construction	110	39	72	50
Other Land Transport etc.	195	38	157	83
Hospital	370	79	291	100

Note : Establishments in formed as company limited, public company limited only.

Considering by activity, it was found that the *business trade and services activity* had the information technology personnel about 2,759 persons. The *manufacturing activity* had about 289 persons. While the establishments engaged in *construction activity* had the lowest number of about 50 persons.

Information Technology Personnel, (Table B) shows that there were totally 6,782 persons. Out of these graduated in Information Technology Subject about 2,478 persons or about 36.5 percent. The rest, about 4,305 persons, did not. It is noticed that most of information technology personnel was not Information Technology Subject graduated.

In term of size of establishment, it was found that most of information technology personnel of about 4,302 persons worked in the small scale establishments (1 - 50 persons). While the large scale establishments with more than 200 persons had the lowest number of about 1,045 persons.

Considering by activity, it was found that establishments engaged in *business trade and services activity* had the highest number of about 5,449 persons. The followings were *manufacturing* and *hospital activities* of about 658 and 370 persons respectively. The establishments engaged in *construction activity* had the lowest number of 110 persons.

7) Personnel Graduated in Information Technology Subject ; (Table B) The result of survey, shows that in 2007, there were totally 481,177 persons worked in establishments in the Northern Region. Out of these graduated in Information Technology Subject of about 3,281 persons or 0.7 percent of the total. Most of them (about 2,292 persons or 70.0 percent) worked in the establishments with 1-50 persons.