



# Section 3

## ICT and Life and Society

### 1. Deepening of ubiquitous network society

#### (1) Penetration of the Internet

The penetration rate of the Internet in 2006 was 68.5%, and the number of Internet users is estimated at 87.54 million (an increase of 2.6% from the previous year) (Graph 1-62).

#### (2) Broadband diffusion

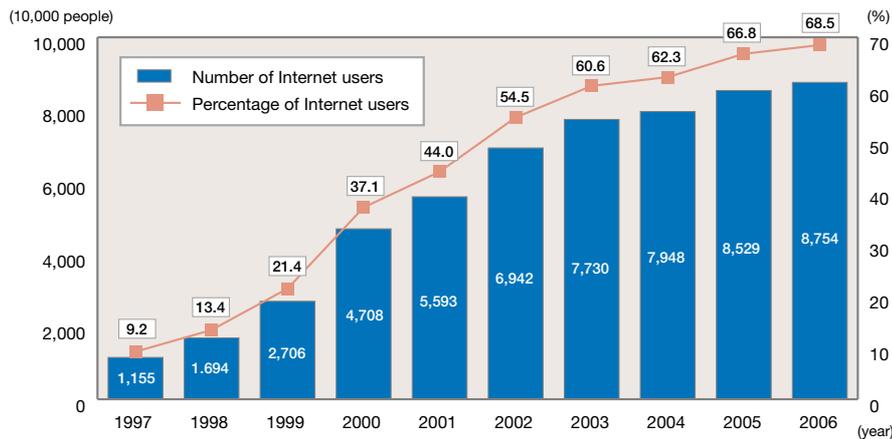
The number of broadband contracts in 2006 stood at 26.44 million (Graph 1-63). Of them, the number of DSL contracts posted a first year-on-year decline to

14.01 million. On the other hand, the number of FTTH contracts posted a sharp increase to 8.8 million, indicating that the use of FTTH has been increasing rapidly.

#### (3) Mobile diffusion

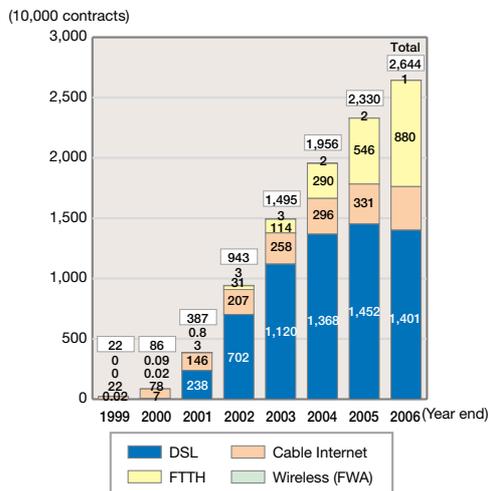
The progress of mobile diffusion plays a central role in promoting the deepening of ubiquitous networks allowing access to networks anytime and anywhere. The number of Internet users via mobile phones, PHS or mobile ICT terminals as of the end of 2006 came to 70.86 million, an increase of 1.63 million from the previous year (Graph 1-64).

Graph 1-62 Transition in the Number and Percentage of Internet Users in the Population



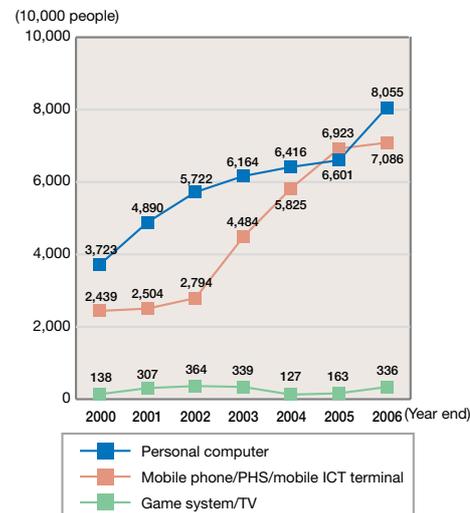
(Source) "2006 Survey on the Use of Communications (Household)," Ministry of Internal Affairs and Communications

Graph 1-63 Changes in the Number of Broadband Contracts



Compiled from Ministry of Internal Affairs and Communications materials

Graph 1-64 Changes in the Number of Internet Users by ICT Terminal



(Source) "2006 Survey on the Use of Communications (Household)," Ministry of Internal Affairs and Communications

**(4) Trend toward networked/multi-functional mobile ICT terminals**

Mobile ICT terminals have made a drastic advancement due to the progress in the technologies to produce smaller and lighter devices and the advancement of wireless communication technology. The direction of the advancement can be characterized as a move toward “multi-function” and “networking.” With mobile phones and other mobile ICT terminals equipped with various functions and connected to networks, the terminal functions will be further advanced.

**2. Flat Information Distribution**

**(1) Increased information generated by individuals**

By deepening of a ubiquitous network society, services that are called consumer-generated media, such as blogs, social networking services (SNS) and “word-of-mouth” sites, have been spreading rapidly in recent years. The spread of consumer-generated media means that individuals, who had been passive receivers of information collected, edited and sent out by corporations, have become entities that actively send information by themselves. It can be said that the prevalence of CGM has changed the conventional one-way information flow into two-way information flow on an equal footing.

**(2) Blogs and SNS**

Of consumer-generated media, blogs and SNS in particular have spread dramatically. The percentage of Internet users browsing blogs opened by individuals comes to around 40%, and 12.4% browse every day (Graph 1-65). The ratio of SNS users to total Internet users is still low. SNS is still in the process of increasing

diffusion (Graph 1-66).

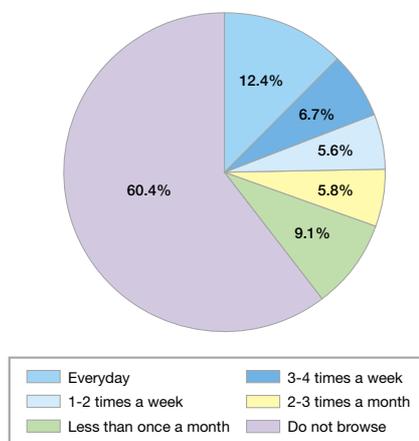
**(3) New trend in mass media**

While the opportunity for individuals to generate information has expanded, there are new moves in the mass media, the conventional main distributors of information. Business tie-ups and corporate acquisition among existing media and between existing media and Internet companies have been increasing on a global scale. Amid these movements, the Internet has been increasing its impact. The Internet is also increasing its influence as a new advertisement medium. This can be attributed to the facts that, unlike the conventional mass media which distribute undifferentiated contents to the general public, the spread of the Internet has made it possible to distribute contents meeting the needs and interest of specific users without regard to location and time, and that the development of broadband networks has made it easy to distribute video contents.

**(4) Emergence of new social and economic systems**

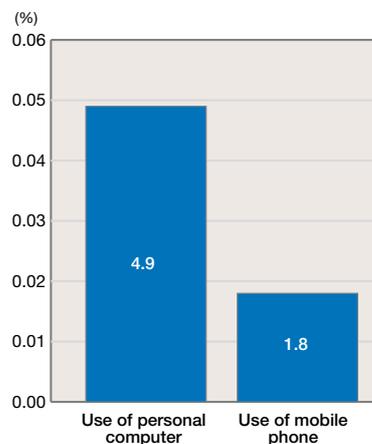
The development of ubiquitous networks has enabled various types of collaboration and diverse information/knowledge accumulation through networks, increasing the influence of individuals. In the field of commerce, it has enabled two-way communications between suppliers and consumers, establishing a route to transmit consumers’ detailed needs to suppliers. This has led to the creation of a new “collaborative” business model based on two-way communications between suppliers and consumers, different from the conventional supplier-led business model.

**Graph 1-65 Frequency of Browsing Blogs**



(Source for Graph 1-65) “Survey on the Use of ICT in Social Life in Japan”

**Graph 1-66 Ratio of SNS Users to Internet Users**



(Source for Graph 1-66) “2006 Survey on the Use of Communications (Household),” Ministry of Internal Affairs and Communications

### 3. Change in Life-Style

#### (1) Change in social life brought about through the use of networks

More than 30% of the people say that their daily activities in social life have changed in particular in purchase, hobby/amusement, sleep and meal. More than half of them attribute the change to the Internet in purchase and hobby/amusement (Graph 1-67). With ubiquitous networks advancing and the use of ICT networks widely spreading to the realm of the social life of individuals and households, various new patterns of network usage have been created, and this is having a major impact on people's lifestyle.

#### (2) Diversification of communications

The development of ubiquitous networks, such as progress in broadband and greater use of mobile devices, has made person-to-person communications more diversified, enabling various combinations of communication

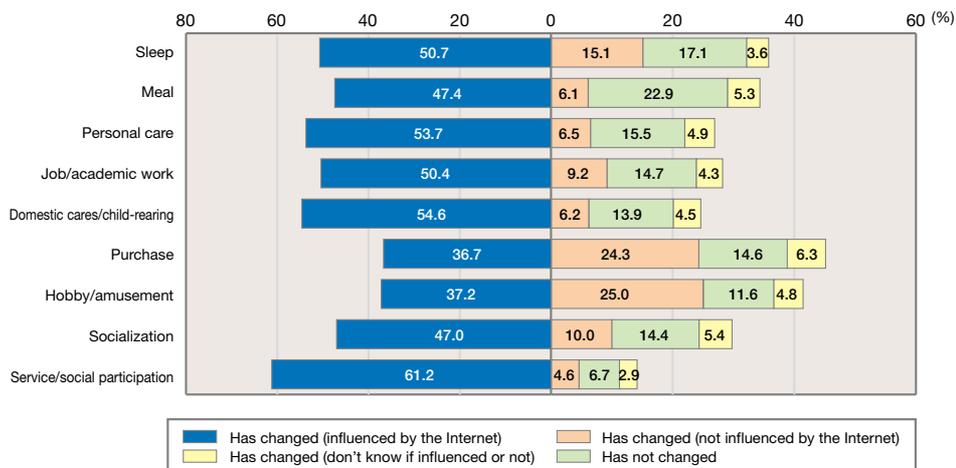
tools, such as fixed telephone, mobile phone and personal computer, and communication patterns, such as telephone call and e-mail (Graph 1-68).

### 4. Toward Establishment of Ubiquitous Network Society

#### (1) Digital divide as seen from each attribute

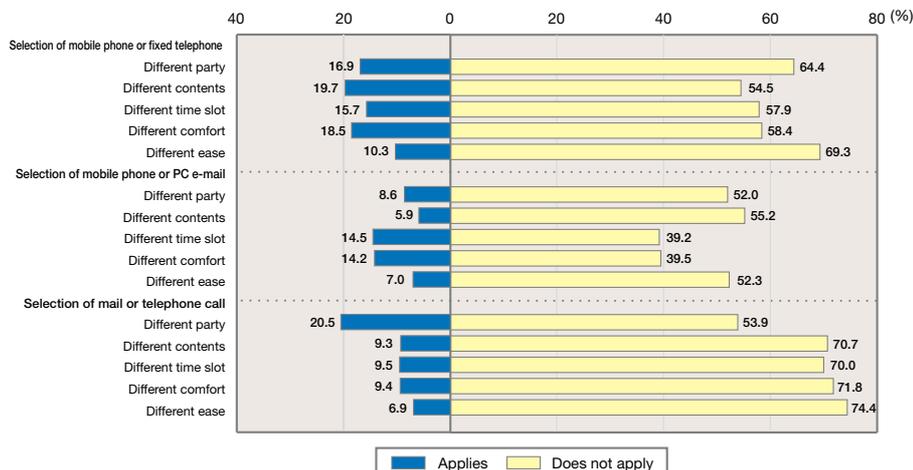
A study of the generation-by-generation use of the Internet as of the end of 2003 and as of the end of 2006 shows that every generation increased the use of the Internet during the three years, with those aged 60 years and older posting a significant increase. As to the use of broadband among those who access the Internet from their home PCs, every generation also increased the use of broadband. However, whereas the percentage of broadband subscribers between the late teens to the 40s is above 50%, the percentage remains below 40% for those aged 50 years and older.

**Graph 1-67 Changes in Daily Activities in the Past 1~2 Years and Internet's Impact**



(Source) "Survey on the Use of ICT in Social Life in Japan"

**Graph 1-68 Selective Use of Communication Tools and Patterns**



(Source) "Survey on the Use of ICT in Social Life in Japan"

**(2) Digital divide as seen from household income**

The act of sorting out necessary information from vast amounts of information and using it effectively has not only the psychological effects of satisfying one's curiosity about knowledge but also economic effects of increasing the likelihood of obtaining a job at higher pay from a variety of job options by, for instance, getting larger amounts of job information via the Internet. This means that in a ubiquitous network society, the digital divide may cause economic disparities among individuals.

A study of the use of the Internet, the use of broadband and the use of mobile Internet by household annual income shows that the lower household annual income is, the lower its usage rate is (**Graph 1-69**).

**5. Safe and Secure Use of the Internet**

**(1) Information security damage**

A study of information security damage with regard to personal computers and mobile phones used by households shows that unsolicited e-mails accounted for the largest proportion of damage both to personal computers

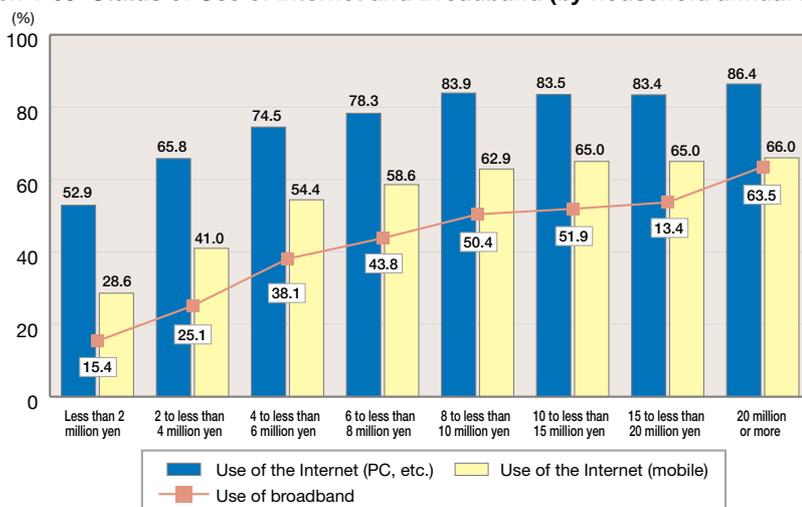
(38.7%) and mobile phones (29.6%). As to information security damage suffered by corporations, discovery of a computer virus accounted for 35.7% and infection with a virus for 26.4%.

**(2) Use of the Internet by juveniles**

Amid the increasing use of the Internet among younger people, there are many cases of juveniles being involved in an incident by accessing harmful information on the Internet, such as dating sites, increasing the importance of safe and secure use of the Internet by juveniles.

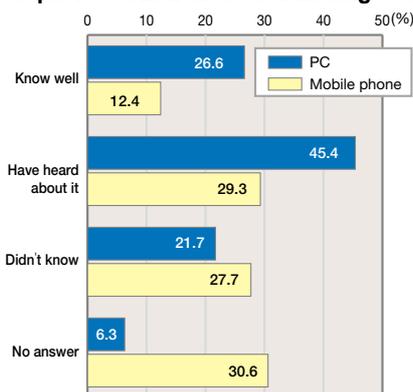
According to a survey on the awareness and use of filtering software against harmful information on the Internet, 21.7% of responding households said they are not aware of filtering software for personal computers and 27.7% of the households are unaware of similar software for mobile phones (**Graph 1-70**). As to the use of filtering software, 54.7% of the households said they are not using filtering software for personal computers used by children and 33.5% of the households said they are not using similar software for mobile phones (**Graph 1-71**).

**Graph 1-69 Status of Use of Internet and Broadband (by household annual income)**

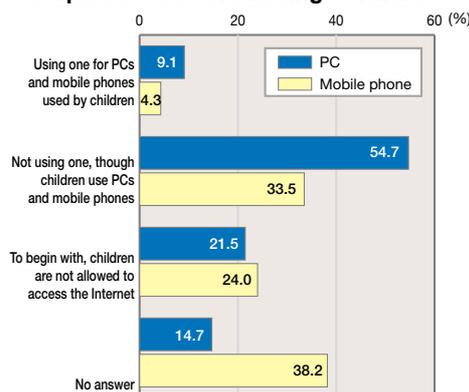


(Source) "2006 Survey on the Use of Communications (Household)," Ministry of Internal Affairs and Communications

**Graph 1-70 Awareness of Filtering Software**



**Graph 1-71 Use of Filtering Software**



(Source for Graph 1-70 and 1-71) "2006 Survey on the Use of Communications (Household)," Ministry of Internal Affairs and Communications