3 User Trends

1. Overall Trends

Exhibit 11 summarizes findings on Internet and mobile telecommunications user trends in Japan from *Internet User Survey* and *Survey of Info-communications Usage in Daily Life*. These findings are also described in more detail in the following sections.

2. The Internet

2.1 User Profile

Some 57.8% of Internet users are men; 42.2% are women. Among female users, 61.1% have less then two years of experience using the Internet. Among all users, a majority, 76.2%, are in their 20s or 30s, with the proportions in these two age groups equal at 38.1%.

2.2 Place and Purpose of Usage

As many as 87.9% of respondents stated that they use the Internet from their homes; other sites of use included the workplace (43.0%), school (8.9%), and in vehicles or at places being visited (6.0%). The vast majority of respondents used the Internet for e-mail (91.6%) and viewing home-pages (83.7%) at least once a day

2.3 Future Intentions

A huge 90.5% of respondents said that they would avail themselves of a flat-rate telecom-munications charge for Internet usage if such were made available. At the top of the list of items purchased in an Internet commerce transaction were food and alcoholic beverages (29.0% of respondents). As for the future, respondents tended to want to use the Internet for reservation services: hotels, 65.8% of respondents; tickets for concerts or plays, 58.7%. Many respondents also voiced such concerns as the following: “Personal data could

Exhibit 11. Factors in Internet vs. Mobile Telecommunications Usage

	Internet	Mobile telecommunications
Ratio of male to female users	58:42	Cell phones — 57:42 (No response from 1.2% of those surveyed.) PHS — 39:60 (No response from 1.1% of those surveyed.)
Age	76.2% of users are in their 20s or 30s.	Cell phones — People in their 20s, 30s, and 40s: more than 20% of users are found in each of these groups; people in their 50s: 16.3% of users. PHS — People in their teens, 20s, 30s, 40s: around 20% of users are found in each of these groups; people in their 50s: 13.3% of users.
Usage frequency (proportion of people using the service more than once daily)	E-mail (sending or receiving) — 91.6% Logging on to the Internet itself — 83.7%	Calls from cell phones or PHS handsets — 55.5% Calls received by cell phones or PHS handsets — 50.4%
Place or purpose of usage	Home — 87.9%	For both cell phones and PHS handsets — “Entirely for personal use” or “almost entirely for personal use”: 68.0%

Sources: *Internet User Survey* (for Internet responses); *Survay of Info-communications Usage in Daily Life* (for mobile telecommunications responses).

leak out to other people," 73.4%; "something other than the product I envisioned might be delivered," 72.7% (Exhibits 12, 13).

3. Mobile Telecommunications

3.1 User Profile

Some 51.7% of respondents to *Survey of Info-communications Usage in Daily Life* stated that they used at least one cell phone or PHS handset; 4.8% of respondents said they used more than one handset. Among cell phone users, more than 20% were found in each of the groups of respondents in their 20s, 30s, and 40s, and 16.3% were in their 50s; a low 7.3% were in their teens. PHS users were more spread out in terms of age, with about 20% of users in each of the groups of respondents in their teens, 20s, 30s, and 40s and 13.3% in their 50s.

3.2 Purpose of Usage

As many as 68.0% of respondents used their cell phones or PHS either entirely or almost entirely for personal purposes. Among men, 53.1% used cell phones or PHS either entirely or almost entirely for personal purposes, while 29.6% used the devices either entirely or almost entirely for work. The total proportion of use for personal purposes was higher among women, 87.4%.

3.3 Usage Fees

When asked where they paid their cell phone or PHS charges from, 44.6% of respondents answered, "from the household budget," and 37.2% replied, "from personal pocket money." Among respondents in their teens and 20s, more than 50% paid the charges out of personal pocket money, while the majority of users in older age categories paid the charges out of the household budget.

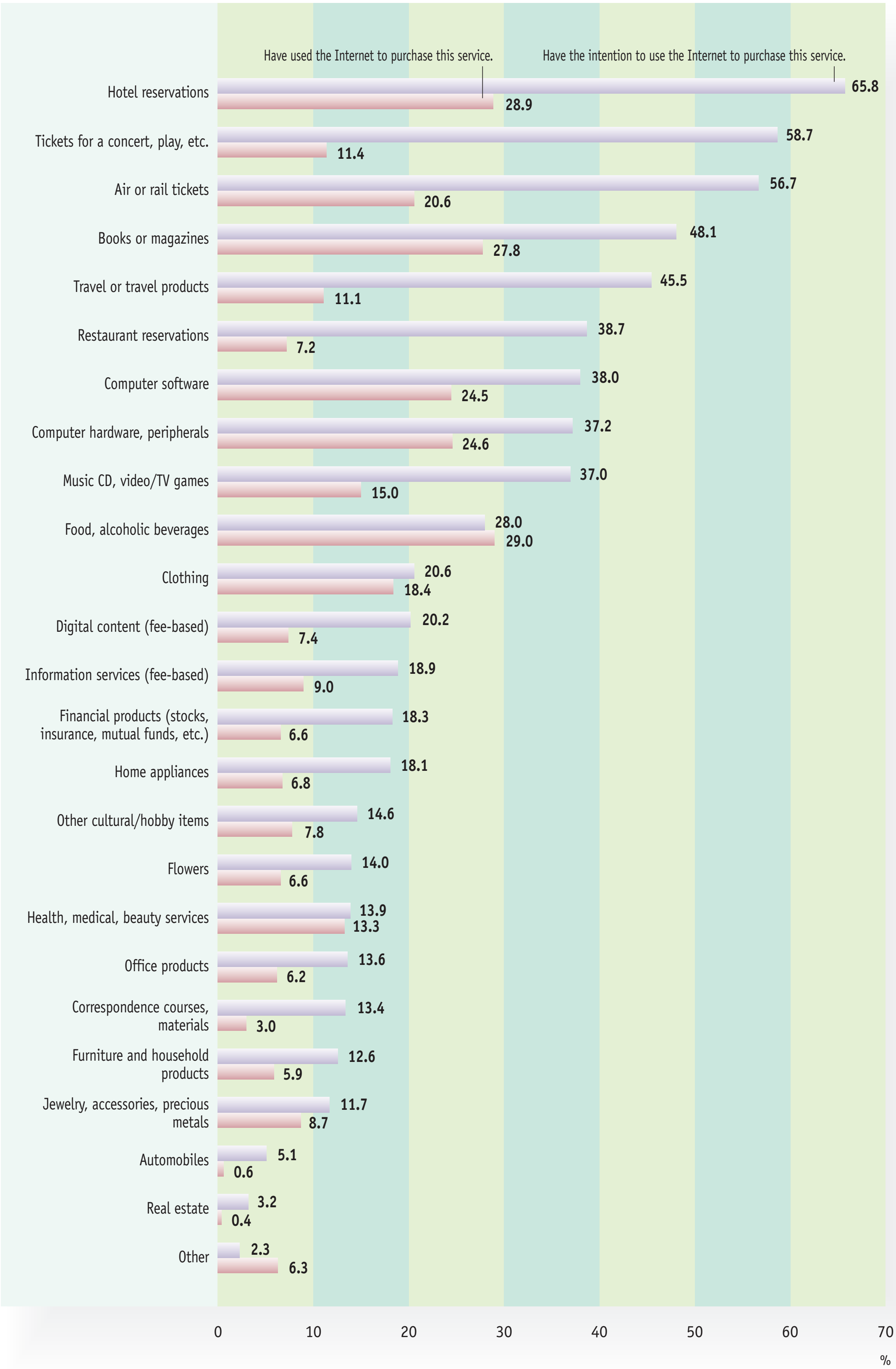
3.4 Future Intentions

Some 63.2% of respondents in their teens already use cell phones or PHS handsets, and the other 26.4% want to use them in the future, the highest proportion among the several age cohorts. Among respondents in their teens, a total of 41.0% stated that they were thinking of buying a cell phone or PHS handset either within the next six months or within the next year. Again, this was the highest proportion responding with these answers among the age cohorts surveyed, indicating that demand for the equipment is concentrated in young people in their teens. Some 13.2% of respondents in their 40s and 15.3% of those in their 60s indicated an interest in using cell phones or PHS handsets in the future; these were also relatively high values, indicating a wide range of penetration by user age. In contrast, among respondents in their 20s, with the highest user rate, only 7.6% indicated a desire to use the devices in the future.

3.5 Churning

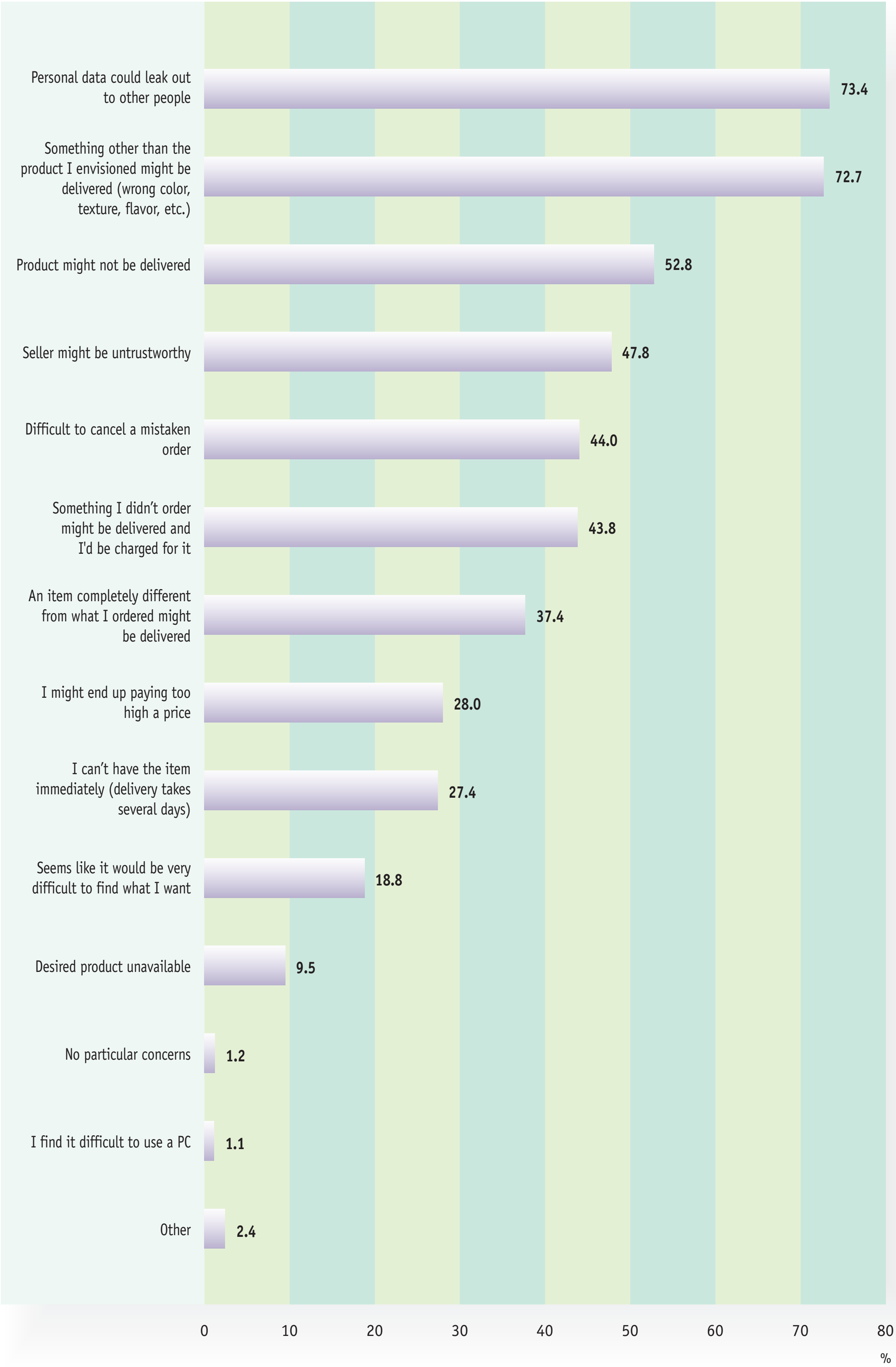
As the mobile telecommunications market has expanded, become more price competitive, and begun offering a greater variety of handsets and services, customers have responded by changing services and carriers in a quest for better quality and lower prices, a process termed churning.

Exhibit 12. Use of the Internet to Purchase Products and Services



Source: *Internet User Survey*.

Exhibit 13. Internet Commerce: Matters Causing Concern



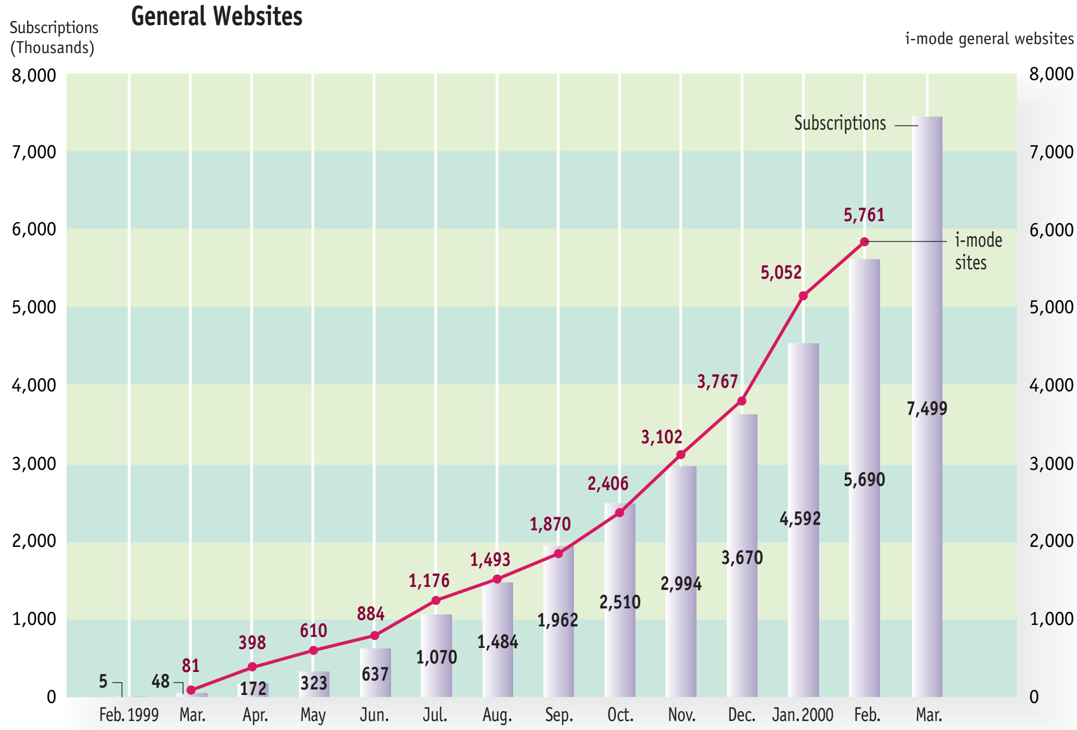
Source: *Internet User Survey*.

Survey of Info-communications Usage in Daily Life reports that, as of December 1999, 40.6% of respondents were still with their first cell phone or PHS carrier, while 56.1% had cancelled a contract at least once. Responses in the latter category included "changed from another company," "changed services at my carrier (no change in phone number)," and "changed services at my carrier (cancelled and then resubscribed)." The proportion of respondents changing from another company amounted to 20.7%, while the total of the "changed at my carrier" categories came to 35.4%, indicating a slightly greater tendency to change services within a company. The proportions were reversed respondents in their teens: "changed from another company," 25.8%; "changed at my carrier," 22.6%.

4. Mobile Internet Access

Demand for direct Internet access via cell phone or PHS handset, without resort to a PC, is growing along with the increasing popularity of the Internet itself. Although e-mail access from cell phones and PHS handsets had been available for some time, it was in February 1999 that NTT DoCoMo launched its i-mode service, a text information service that allows users to access a variety of cell phone-only websites from their handsets. Other carriers have since offered similar services, with the number of subscriptions to i-mode, EZweb/EZaccess, and J-Sky totaling 7.499 million at the end of March 2000 (Exhibit 14).

Exhibit 14. Total Number of Mobile Internet Service Subscriptions and Number of Available i-mode General Websites



Note: The number of subscriptions is the total of those for i-mode, EZweb/EZaccess, and J-Sky services.
Source: Compiled from data of the respective carriers.