

Keys to Further Development in Japan's Online Shopping Market

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The Cyber Life Observations (CLO) surveys conducted by Nomura Research Institute, Ltd. (NRI) suggest that the era of rapid Internet expansion is nearing an end. From this point forward, it is vital to focus on market expansion driven by more advanced Internet applications and services, rather than the mere increase of Internet subscribers. With the steady growth of online shopping, which is one of the leading Internet services, the market size as of March 2003 exceeded ¥1 trillion for the first time since we started these CLO surveys in 1997. This upward trend is expected to continue for some time to come. The two main contributors to the growth of the online shopping market are a higher degree of Internet experience and the proliferation of broadband access. These two drivers of growth are expected to remain strong, thereby ensuring a steady expansion of the online shopping market for a number of years yet to come.

Considering the fact that the increase in Internet subscribers has started to slow down, however, it is highly likely that the growth of the online shopping market might reach a ceiling in the near future if it continues to rely exclusively on these two growth drivers. It is therefore important to identify and develop additional engines of growth at this time. This paper recommends the active implementation of new approaches, including a better use of net communities, improvements in after-sales services, and the utilization of new media such as mobile phones and digital TV in order to ensure the future growth of online shopping.

I Trends in Using Information and Telecommunications Equipment and Services Among Japanese Consumers

1 CLO Survey Overview

In order to study the actual use of a wide variety of information and telecommunications equipment such as communications and broadcasting devices, personal computers (PCs) as well as ancillary services among Japanese consumers, Nomura Research Institute, Ltd. (NRI) has carried out its Cyber Life Observations (CLO) surveys every six months since March 1997. Through these fixed-point observations from various perspectives, the surveys are aimed at identifying (1) the use of information and telecommunications equipment and services (e.g., PCs, mobile phones, online games, digital broadcasting, web browsing, broadband and online shopping) among Japanese consumers, and (2) measuring any changes in consumer awareness, time spent, or household expenses in connection with such information and telecommunications equipment and services (see Table 1). This paper was compiled primarily to analyze data on consumer activities regarding Internet purchasing (unless otherwise noted, the age of respondents for the time series analyses used in this survey range from 15 to 59 years old).¹

2 Era of Rapid Internet Growth Is Nearing an End

(1) Proliferation of PCs is approaching a ceiling

The most recent CLO survey (which was carried out in March 2003; hereinafter the same) showed that the household ownership ratio of PCs was 65.3 percent, essentially remaining almost flat compared with the results for March 2002 with only a slight uptick of 1.1 percentage points. Additionally, the Economic and Social Research Institute, Cabinet office, Government of Japan provided a similar number of 63.3 percent for

the household PC ownership ratio as of March 2003 (See Figure 1). These data suggest that PCs are as common as CD players and other electrical appliances in Japanese households. It can therefore be reasonably concluded that the proliferation of PCs has nearly reached its peak and that further rapid growth in PC sales would be unlikely.

Other data support these findings as well. According to a study by the Japan Electronics and Information Technology Industries Association (JEITA), the number of PCs sold in Japan has declined over the past two years, after reaching a peak of 12 million units in fiscal 2000. In particular, the number for fiscal 2002 plunged to 9.84 million units, down 8 percent below the figures for the previous fiscal year. In addition to the negative effects of sluggish consumer spending and diminishing investment in information technology (IT) by corporations in the current deflationary economy, this fall-off in PC shipments can also be attributed to the fact that the number of new PC users has been declining.

The CLO surveys also revealed that the number of PC users with less than one year of experience accounted for 7.7 percent of total PC users in March 2000, while climbing to 10.9 percent and 10.6 percent in our March 2001 and March 2002 surveys, respectively. However, this figure dropped to 6.9 percent in the survey for 2003. As these data include PC experience at the workplace or school, it is not possible to simply conclude that the declining population of new PC users has led to the slowdown in PC sales. Nonetheless, we can consider this fact as evidence that the household penetration rate of PCs in Japan is approaching its ceiling.

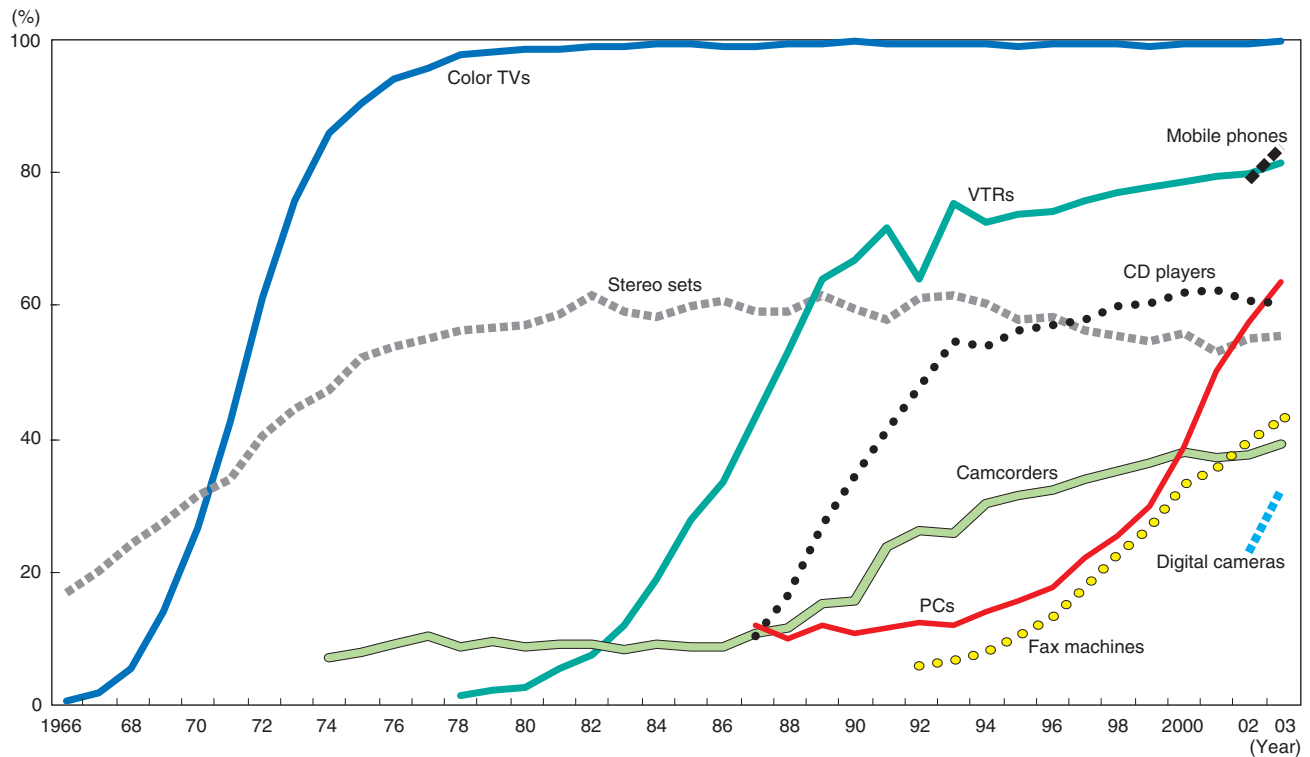
(2) Percentage of Internet users is no longer growing vigorously

More than half the respondents (51%) aged 15 to 59 are accessing the Internet via PCs at their home, workplace or school (Figure 2). Despite this popularity, the overall growth of Internet usage has started to slow down. While the percentage of Internet users reached 47.8 percent in March 2002 (an increase of 7.6 points from the 40.2 percent recorded in March 2001), the

Table 1. Outline of the Cyber Life Observations (CLO) Survey

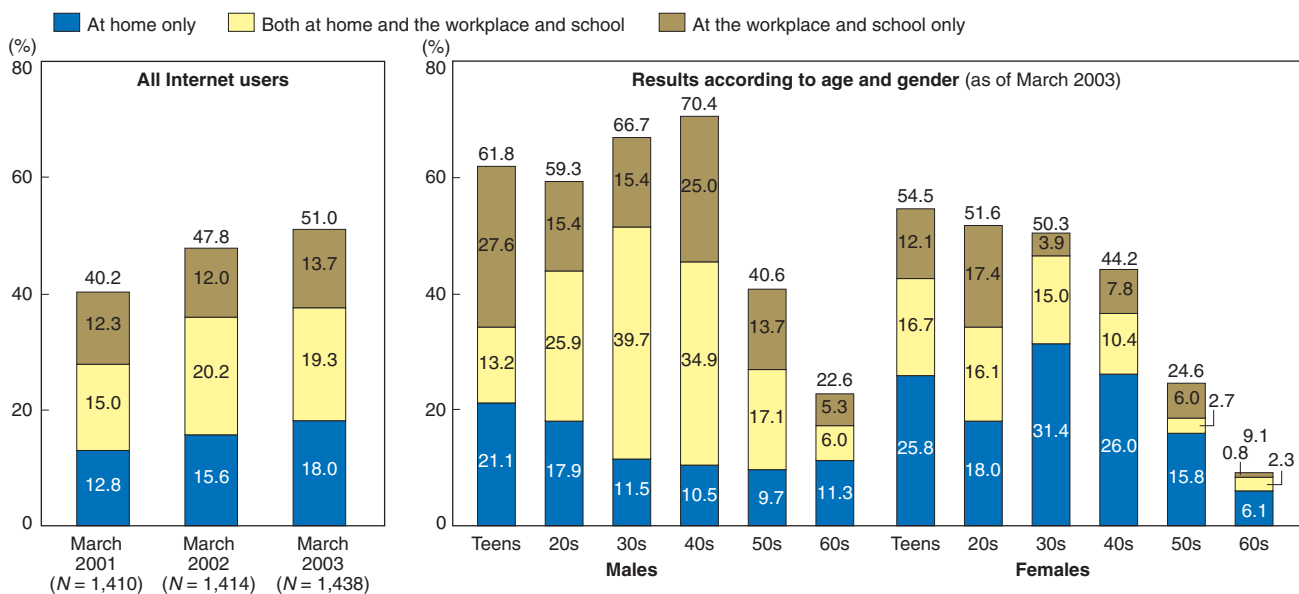
	1st survey	2nd survey	3rd survey	4th survey	5th survey	6th survey	7th survey	8th survey	9th survey	10th survey	11th survey	12th survey	13th survey
Month of survey	March 1997	September 1997	March 1998	September 1998	March 1999	October 1999	March 2000	September 2000	March 2001	September 2001	March 2002	September 2002	March 2003
Targets	Males and females nationwide, aged 15 to 59											Males and females nationwide, aged 15 to 69	
Sampling methodology	Two-stage stratified random sampling												
Survey style	Visit to leave questionnaire, with later return to pick up completed form												
Selected sample number	4,300	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,400	2,400
Number of responses	3,067	1,409	1,406	1,431	1,430	1,410	1,410	1,402	1,410	1,414	1,414	1,703	1,703
Response rate (%)	71.3	70.5	70.3	71.6	71.5	70.5	70.5	70.1	70.5	70.7	70.7	71.0	71.0

Figure 1. Penetration Rate of Major Consumer Durables (Total Households)



Note: This survey was conducted annually in February until 1977, and in March since 1978.
 Source: Survey on Consumer Spending by Economic and Social Research Institute, Cabinet Office, Government of Japan.

Figure 2. Internet Usage via PCs



Note: Values for those in their 60s are not included in the March 2003 figures in the graph on left above.
 Source: Cyber Life Observations, NRI, March 2001 to March 2003.

growth between March 2002 and March 2003 indicated a minimal increase of 3.2 points, which is also indicative of the trend towards slowing growth.

(3) Growth of Internet usage via home PCs is leveling off

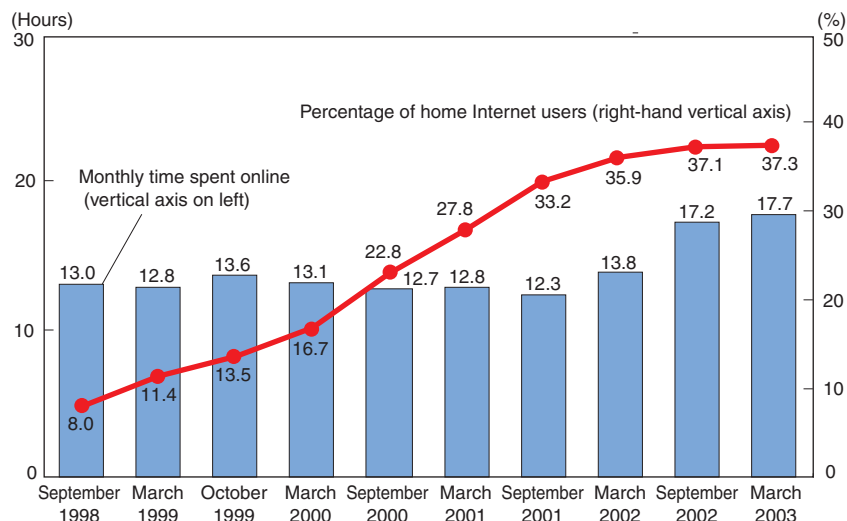
The percentage of users accessing the Internet via PCs at home amounted to 37.3 percent in March 2003, roughly equivalent to the figure for September 2002. It

is worth noting that we are now approaching the upper edge of an S-curve as shown in the graph (Figure 3), which tracks Internet usage over several years.

(4) Time spent on the Internet is no longer increasing sharply

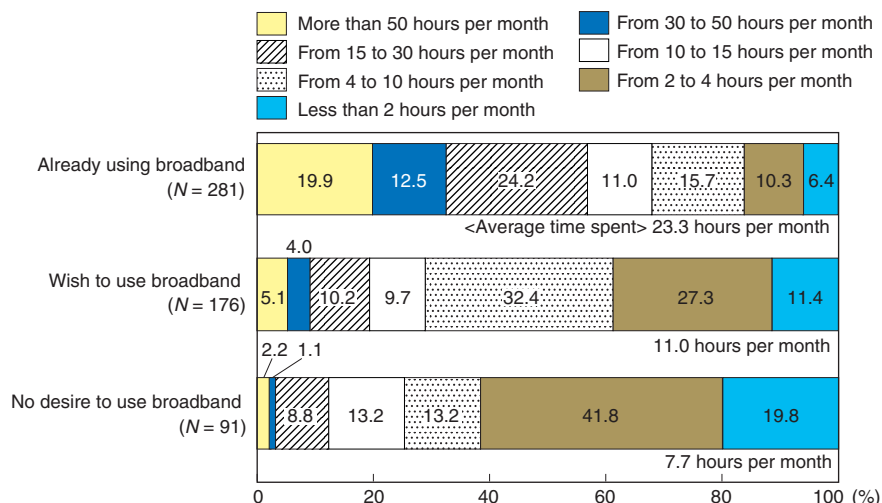
We can recognize a similar trend of slower growth in the monthly time spent online in Figure 3. The September 2002 survey revealed a sharp increase in the

Figure 3. Internet Usage via Home PCs and Monthly Time Spent Online



Note: Monthly time spent online denotes total monthly time spent online at home.
 Source: Cyber Life Observations, NRI, September 1998 to March 2003.

Figure 4. Time Spent Online According to Broadband Accessibility



Note: All respondents are home Internet users.
 Source: Cyber Life Observations, NRI, March 2003.

time spent on the Internet to 17.2 hours from the 13.8 hours recorded March 2002, primarily due to the proliferation of asymmetric digital subscriber line (ADSL) access. However, the survey for March 2003 indicated 17.7 hours, or roughly the same level as that of the previous year.

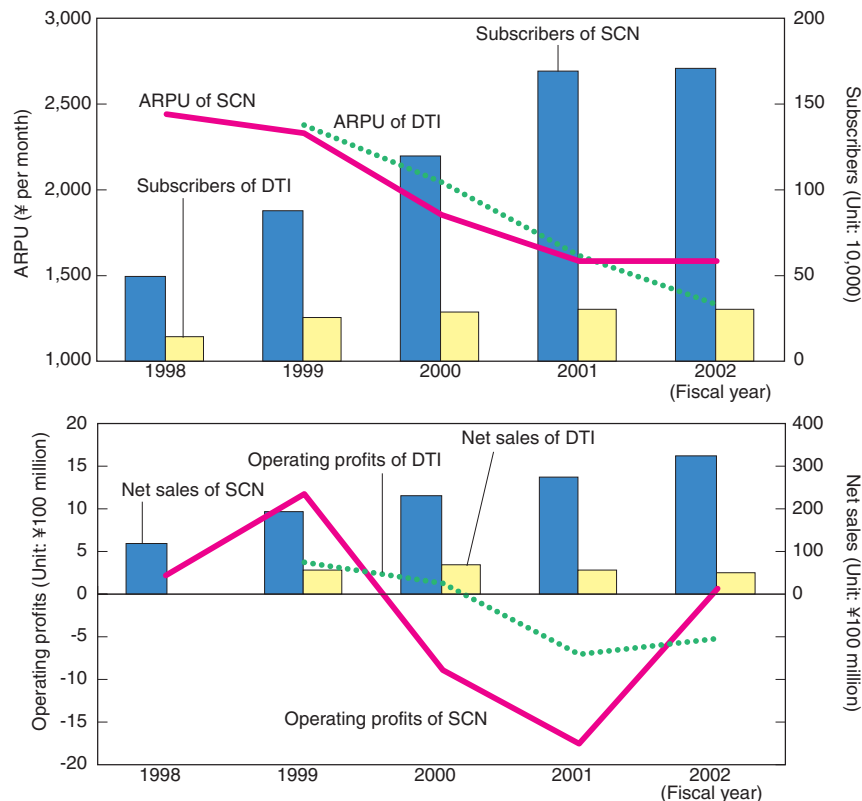
Furthermore, data measuring the time spent online according to broadband accessibility revealed that those already using broadband access spent an average of 23.3 hours monthly on the Internet, while non-broadband users wishing to use broadband in the future spent 11.0 hours, and those who expressed no interest in shifting to broadband spent 7.7 hours (Figure 4). When we compare the data above with the results of the previous survey conducted six months ago (24.7 hours, 14.0 hours, and 8.9 hours, respectively), it can be concluded that the time spent on the Internet has declined across the board among Internet users, regard-

less of broadband accessibility. At the same time, our most recent survey revealed that the increased number of broadband users contributed to an overall minimal upswing in the time spent on the Internet.

(5) Internet service providers facing declining business performance

In order to gain a different perspective that will contribute to a better understanding of Internet use, we shall turn to information released by Internet service providers (ISPs), particularly their data on trends in average revenue per user (ARPU), the number of subscribers and operating profits. Two publicly traded companies, Dream Train Internet, Inc. (DTI) and Sony Communication Network Corporation (SCN), will be examined, as the data needed is available to the public.

As is apparent from Figure 5, ARPU values have been consistently declining at both companies over

Figure 5. Trends in Numbers of Subscribers, ARPU, Net Sales and Operating Profits of Two Sample ISPs

Notes: (1) DTI = Dream Train Internet, SCN = Sony Communication Network; (2) net sales and operating profits above are exclusively from the Internet connection services (revenues from other ancillary services are not included); (3) ARPU = average revenue per user (denotes monthly average amount.); ISP = internet service provider.

Source: Investor relations materials issued by DTI and SCN.

recent years. In particular, ISPs are experiencing even more intense price competition, which was only a logical expectation when accompanied by the overall market expansion stemming from the sharp increase in the number of subscribers. In other words, they were competing based on a policy of “low profits and quick returns.” After achieving steady increases until fiscal 2001, the growth in the subscriber base of both companies stalled in fiscal 2002. Net sales and operating profits have also followed this downward trend, and the operating profits of SCN and DTI started to sharply decline in 2000 and 2001, respectively.

As far as these two companies are concerned, the fierce price competition has had a detrimental effect on their operating profits. This is primarily due to the lack of rapid market expansion, which is a prerequisite for success under such a quick-return policy.

3 Internet Market No Longer Promising Growth and Expansion

In the past, an aggressive business model strategy premised on a skyrocketing three- to four-digit annual growth characteristic of vigorous market expansion was the norm in the Internet industry. As our most recent survey in March 2003 indicates, however, Internet proliferation appears to be approaching its ceiling. As such, ISPs are expected to find ways to conduct their business

operations in a different environment, where the market size and growth rate remain almost constant.

Instead of performance indicators such as growth rates and the extent of proliferation that prevailed in the past, market share and profitability have now become more meaningful indices in evaluating the business performance of ISPs. Beyond this, the Internet market is unlikely to achieve continued growth as it did before by relying on expanding shipments of PCs or increases in the number of ISP subscribers. This means that more attention needs to be given to new Internet applications and services capable of attracting new customers, as well as increasing consumer spending on the Internet. Accordingly, the following chapter focuses on an examination and analysis of the prospective market for online shopping, which is one of the most popular Internet-based services.

II Steady Growth in Online Shopping Market

1 Online Shopping Market Size Now Tops ¥1 Trillion

Although Internet growth appears to be settling into more modest levels after enjoying a rapid growth phase as described above, the online shopping market has not

been following this trend. Instead, it has demonstrated steady growth.

As indicated in Figure 6, the March 2003 survey revealed that those who have engaged in online shopping accounted for 21.1 percent of respondents aged 15 to 59 (18.6% if those in their 60s are included), with the average annual spending reaching ¥62,000 among respondents aged 15 to 59 (¥60,000 if those in their 60s are included). Compared with the figure of ¥47,000 a year ago, a significant increase of approximately 30 percent is seen (Figure 7).

Assuming that Japan's population of those aged 15 to 59 is 78 million people, the total market size for online shopping is estimated at approximately ¥1.02 trillion (78 million people × 21.1% × ¥62,000), surpassing ¥1 trillion for the first time.

2 Popular Online Purchases

Books and magazines, foodstuffs and liquor, and airline and train tickets are ranked high as the most popular items purchased online (Figure 8). More than 30

percent of respondents answered that they have purchased books or magazines online in the past, mainly because online bookstores such as Amazon.co.jp have become popular. In addition, foodstuffs and liquor have also become examples of the highly popular purchases, as websites for online shopping such as Rakuten, Inc. have succeeded in offering services that make it easy for customers to purchase such products as their favorite local specialties. And purchasing airline and train tickets online seems to be attracting many consumers as special discounts often apply.

On the other hand, package trips, electrical appliances (excluding PCs), and furniture and interior goods are not very popular online purchases, mainly because such items are relatively expensive or it is difficult to make up one's mind without actually seeing the products. The limited information provided on the Internet is inadequate for many consumers to make a final decision on whether to buy such an item or not.

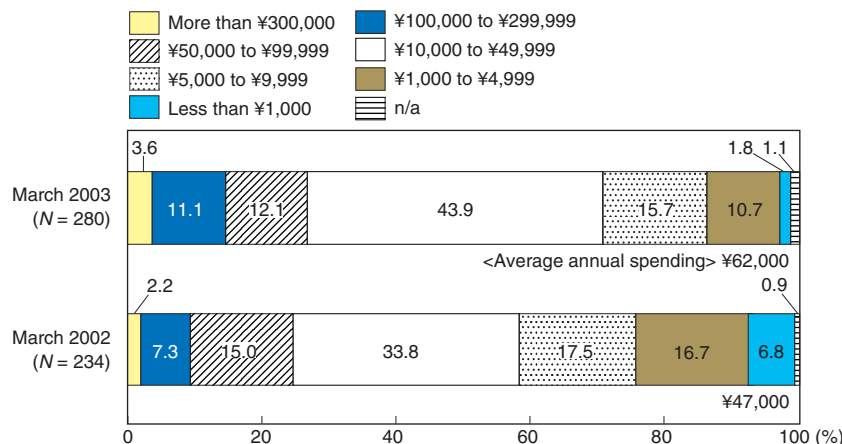
Despite its potential, digital content (including music and videos) is still not very popular with online shoppers, primarily due to the lack of both quality and

Figure 6. Trends in Online Shopping Usage and Intent Ratio



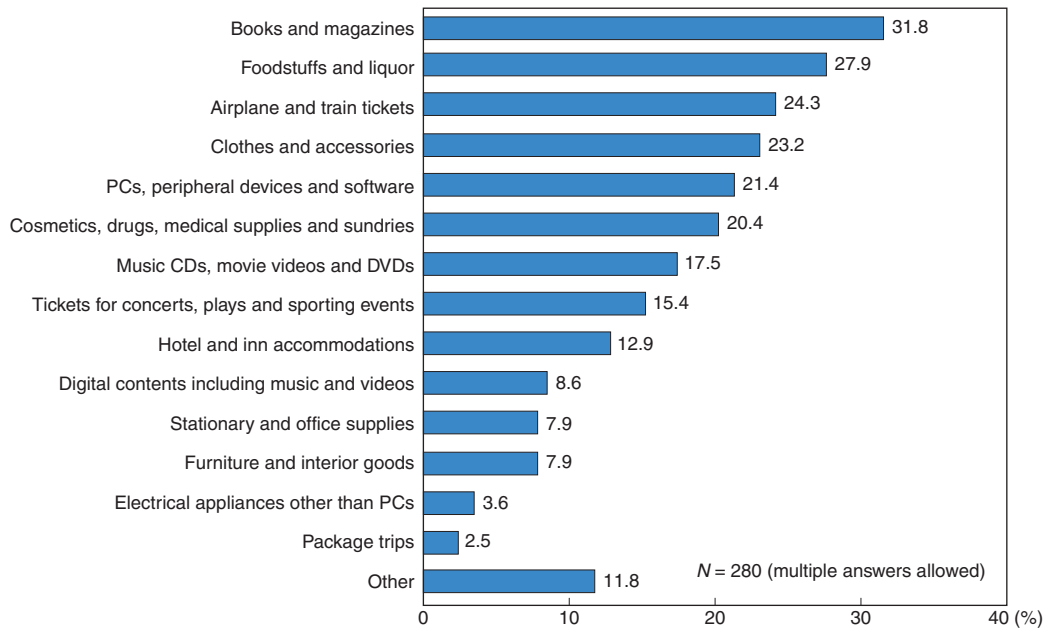
Notes: (1) Online shopping here includes all such shopping, whether conducted from the home, school, or workplace, etc.; (2) values for March 2003 exclude those in their 60s.
Source: Cyber Life Observations, NRI, March 2001 to March 2003.

Figure 7. Amount Spent on Online Shopping During the Past Year



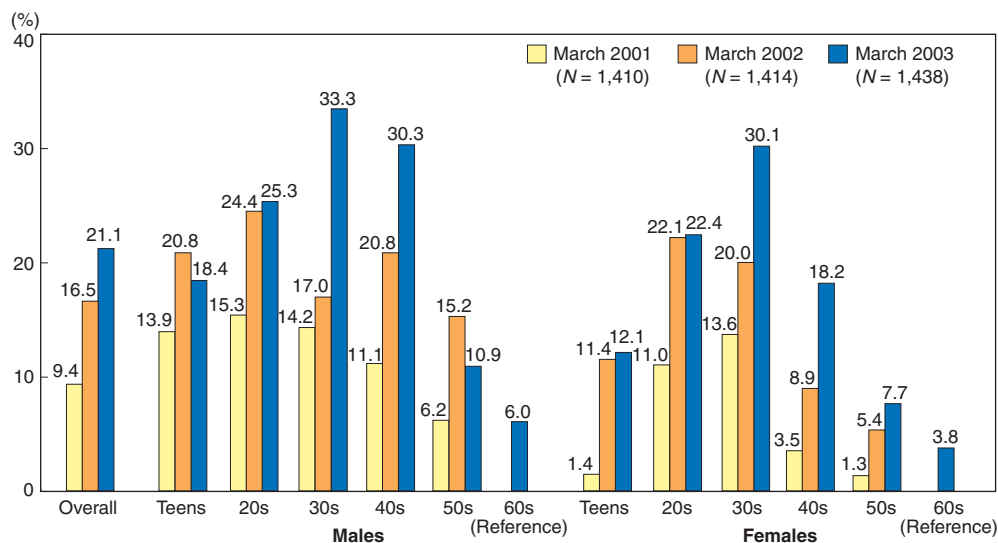
Notes: (1) Data refers only to those with online shopping experience; (2) n/a responses excluded when calculating average annual spending.
Source: Cyber Life Observations, NRI, March 2002 and March 2003.

Figure 8. Products Frequently Purchased Online



Source: Cyber Life Observations, NRI, March 2003.

Figure 9. Trends in Online Shopping Usage by Age and Gender



Source: Cyber Life Observations, NRI, March 2001 to March 2003.

variety in the software that is currently available. Furthermore, tighter enforcement of copyright protection, including measures against illegal copying, appears to contribute to this situation, as content providers cannot always offer comprehensive, user-friendly services.

3 Growing Online Shopping Market

(1) Steady growth of usage

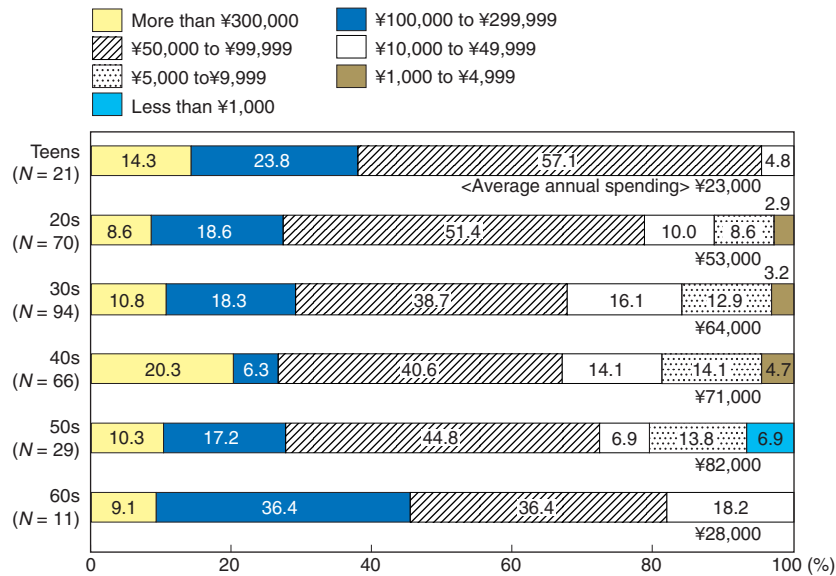
According to time-series analyses of respondents aged 15 to 59, only 9.4 percent had shopped online as of March 2001. This same figure increased to 16.5 percent in the following year, and 21.1 percent in March 2003. As such, the percentage of online shopping users more than doubled over the past two years. A breakdown by age showed an increasing percentage of users

across all age brackets, especially with noticeably high growth over the past year among the respondents in their 30s and 40s, regardless of gender (Figure 9).

(2) Increasing number of online shoppers who spend higher amounts

The results of the total annual amount spent on online shopping indicate that the number of online shoppers who annually spent ¥100,000 to ¥299,999 or more than ¥300,000 has increased (Figure 7). On the other hand, the number of those who spent less than ¥10,000 has decreased. Overall, these data suggest that there is a tendency for online shoppers to increasingly spend more money. Additionally, online shoppers spending ¥10,000 to ¥49,999 became the norm (the most frequent answer), accounting for 43.9 percent of the total.

Figure 10. Amount Spent on Online Shopping During the Past Year by Age



Note: Data refers only to those with online shopping experience.
 Source: Cyber Life Observations, NRI, March 2003.

Table 2. Frequently Purchased Products and Amount Spent Online During the Past Year

(Unit: %)

	Less than ¥10,000 (N = 79)	¥10,000 to ¥49,999 (N = 123)	¥50,000 to ¥99,999 (N = 34)	More than ¥100,000 (N = 41)	Overall (N = 277)
Airplane and train tickets	7.6	27.6	23.5	48.8	24.5
Hotel and inn accommodation	2.5	8.9	26.5	34.1	13.0
Package trips	3.8	1.6	0.0	4.9	2.5
Tickets for concerts, plays and sporting events	11.4	17.1	8.8	24.4	15.5
Foodstuffs and liquor	20.3	33.3	23.5	31.7	28.2
Clothes and accessories	11.4	26.0	26.5	36.6	23.5
Furniture and interior goods	2.5	8.9	8.8	14.6	7.9
Cosmetics, drugs, medical supplies and sundries	15.2	17.9	26.5	34.1	20.6
Books and magazines	29.1	30.9	29.4	43.9	32.1
Music CDs, movie videos and DVDs	8.9	19.5	17.6	29.3	17.7
Digital contents including music and videos	2.5	13.0	8.8	7.3	8.7
Stationary and office supplies	3.8	5.7	8.8	22.0	7.9
PCs, peripheral devices and software	13.9	13.0	35.3	51.2	21.7
Electrical appliances other than PCs	2.5	2.4	2.9	9.8	3.6
Other	16.5	5.7	20.6	14.6	11.9

Source: Cyber Life Observations, NRI, March 2003.

Excepting for those in their 60s, annual spending by age indicates a gradual upward trend as respondents grow older. The breakdown shows ¥23,000 by teenagers, ¥53,000 by those in their 20s, ¥64,000 by those in their 30s, ¥71,000 by those in their 40s, ¥82,000 by those in their 50s, and ¥28,000 by those in their 60s (Figure 10).

In addition, the results of frequently purchased items according to the amount spent on online shopping show that books and magazines as well as foodstuffs and liquor are generally popular items in all amount brackets, even allowing for some scattering (Table 2). On the other hand, clothes and accessories, cosmetics, drugs, medical supplies and sundries ranked higher among those who spent higher amounts on online shopping. The results suggest that many experienced online shoppers (who tend to spend higher amounts) are actively shopping via web services in order to obtain products that are exclusively offered online.

III Two Drivers of Growth

Our more detailed analysis of consumer experience and willingness to shop online, as well as average annual spending on online shopping, suggested the following two major contributors to market growth: a high degree of Internet experience and the proliferation of broadband Internet access. These two factors will be discussed in greater detail in the following section.

1 Higher Degree of Internet Experience

(1) Majority of respondents with more than four years of Internet experience engage in online shopping

First, let's examine the correlation between the number of years of Internet browsing and online shopping experience. Our most recent survey in March 2003 revealed that a majority of the respondents with more

than four years of Internet experience has engaged in online shopping or intends to do so (Figure 11), while respondents with less Internet experience generally have not yet engaged in online shopping. Therefore, we can conclude that there is a high correlation between the number of years of Internet experience and online shopping.

The proportion of respondents who are willing to shop online appears to consistently range within a band of 10 percent to 20 percent, regardless of the number of years of Internet experience. Even so, those with less Internet experience showed a slightly higher willingness to shop online.

(2) More experienced Internet users tend to spend more in shopping online

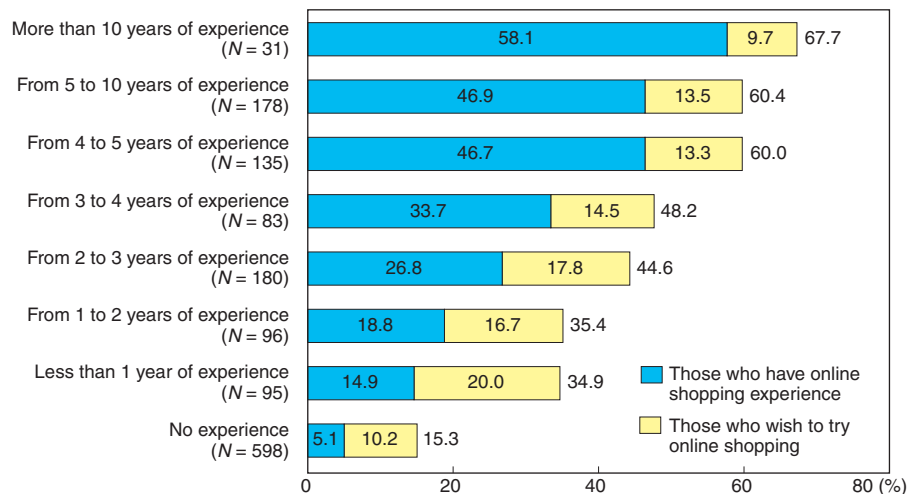
Online shoppers with more than 10 years of Internet experience spent an average of ¥102,000 annually, while those whose Internet experience is between five

and 10 years spent ¥68,000. And those with between two and five years of Internet experience spent ¥49,000. The results suggest that online shoppers with more Internet experience tend to spend higher amounts in shopping online (Figure 12).

However, this trend did not apply to online shoppers with less than two years of Internet experience, as they spent as much as ¥74,000 on average (an exceptional case that will be discussed from a different perspective later). Suffice it to say at this point that—with some exceptions—there is an overall correlation between the amount spent in online shopping and the shopper’s level of Internet experience. Moreover, there were no significant differences in the types of products purchased online depending on Internet experience.

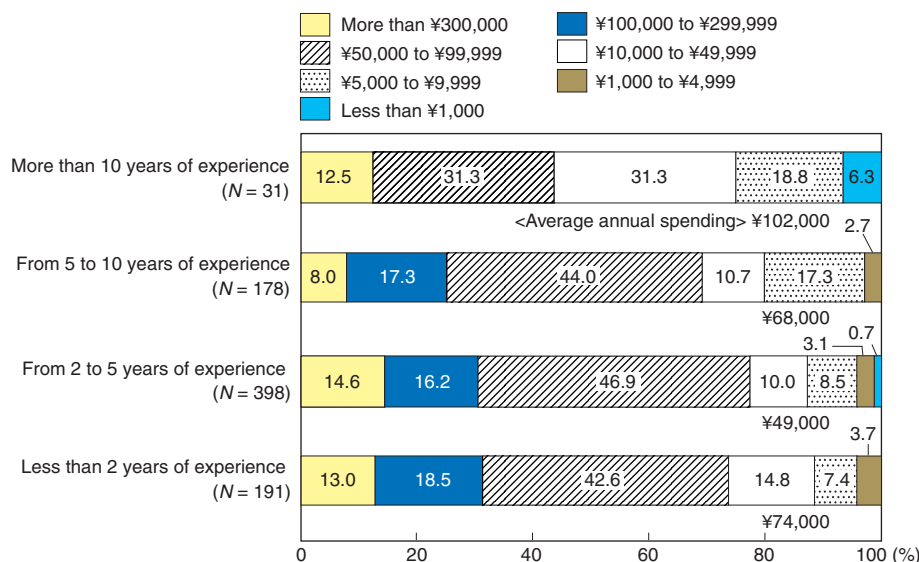
Furthermore, we consider that IT literacy and a better understanding of the advantages and/or disadvantages of online shopping could be the reasons why respondents with more Internet experience tend to shop

Figure 11. The Rate of Online Shopping Usage and Intention to Shop Online by Years of Internet Experience



Source: Cyber Life Observations, NRI, March 2003.

Figure 12. Amount Spent on Online Shopping during the Past Year by Years of Internet Experience



Note: Data refers only to those with online shopping experience.
Source: Cyber Life Observations, NRI, March 2003.

online more frequently and spend higher amounts. Experienced Internet users with a higher level of IT literacy can easily find their favorite products and place an order online, without any trouble following the directions on the screen or inputting the necessary data to complete the transaction. They also have the ability to compare different websites and efficiently find those products that are most suited to their needs.

Because they are knowledgeable about what products are ideally purchased online as well as the precautions they need to be familiar with regarding net security, these experienced Internet users are fully aware of the advantages and disadvantages of online shopping. Accordingly, they tend to get involved in online shopping more actively once they recognize the advantage of completing any particular online transaction.

2 Proliferation of Broadband Access

(1) Nearly half of broadband users have engaged in online shopping

Let's look now at the correlation between broadband accessibility and online shopping experience. Nearly half of broadband users (49.1%) have shopped online,

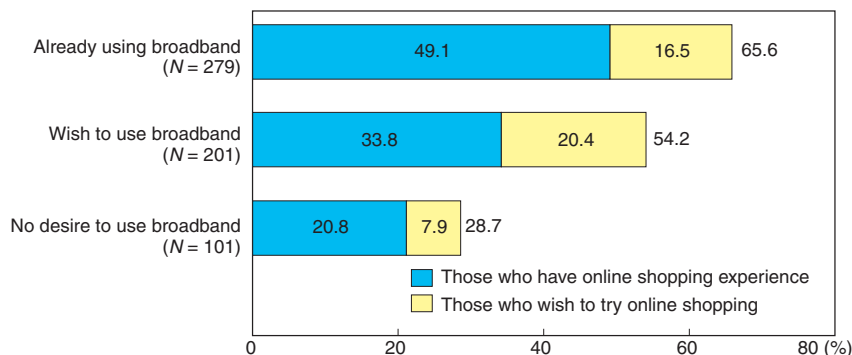
which exceeds the percentage that has engaged in online shopping among those wishing to use broadband (33.8%) or those who showed no interest in using broadband (20.8%). (See Figure 13.)

(2) Average annual online spending by broadband users

Broadband users reported spending an average of ¥75,000 on online shopping, which is around 1.2 times higher than the average expenditures of all respondents who have engaged in online shopping (Figure 14). Furthermore, one-third of broadband users spent more than ¥50,000 annually. These findings suggest that broadband users tend to spend higher amounts on online shopping. At the same time, those non-broadband users who wish to use broadband in the future spent ¥48,000 on average, while those with no interest in using broadband spent ¥32,000. The following three advantages of broadband are considered to have contributed to this higher spending among broadband users.

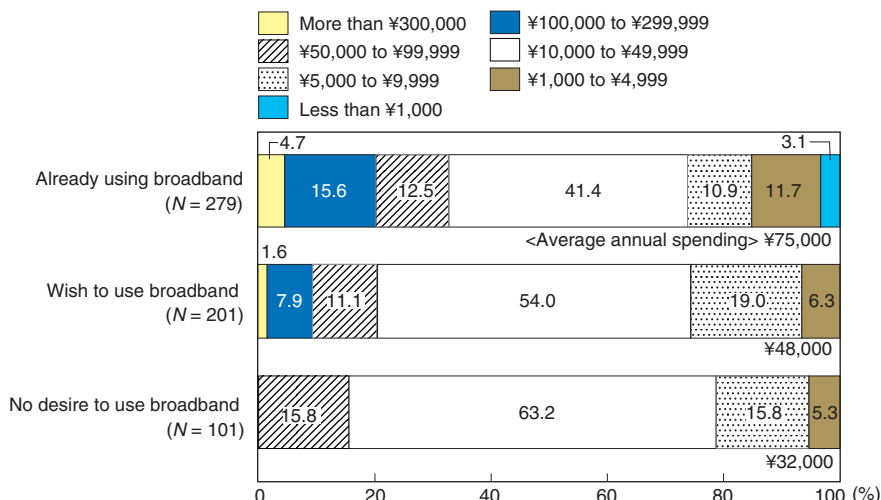
First, the higher transmission capacity of broadband access enables its users to browse websites in less time. Users can save time especially when they want to compare different websites before making a purchasing

Figure 13. Ratio of Online Shopping Usage and Intent to Shop Online by Broadband Accessibility



Source: Cyber Life Observations, NRI, March 2003.

Figure 14. Amount Spent on Online Shopping During the Past Year by Broadband Accessibility



Note: Data refers only to those with online shopping experience.
Source: Cyber Life Observations, NRI, March 2003.

decision. As such, broadband users are more likely to find products suitable to their needs in an efficient manner.

Second, broadband users can take advantage of high-bandwidth information such as high-resolution pictures, moving images and sound without much down time. This is a significant advantage especially when consumers want to compare details of a product involving high-bandwidth information during their online shopping. As already mentioned, there seem to be many consumers who hesitate to make a final purchasing decision without looking at the real product, especially in the case of expensive items. Broadband access can provide consumers with more precise and detailed information on the products, almost as if they were examining them in person. This advantage may increase consumer willingness to shop online.

Lastly, the flat-rate plan for broadband access also plays an important role. Broadband accessibility enables users to browse many different websites and do as much comparison-shopping as they might like without paying any extra communications charges.

IV Two Drivers of Growth Expected to Remain Strong

1 Degree of Internet Experience Is Expected to Increase

The results of surveying the Internet utilization ratio via PCs revealed that male respondents in their 40s are the most active Internet users. More than 70 percent of this age group uses the Internet through a PC (Figure 15). In addition, approximately 60 percent of male respondents in their teens, 20s, and 30s regularly utilize

the Internet. Among female respondents, teenagers made up the highest percentage of Internet users at 54.5 percent. Although the older generations of women are less active Internet users, more than 40 percent of those in their 40s still reported using the Internet.

Considering the fact that Japanese students receive PC and Internet lessons at school (elementary, junior and senior high schools), it seems predictable that nearly 100 percent of teens will be able to use the Internet in the future. While those cohorts aged 50 and above are currently pushing down the averages for Internet usage, consumers in these age brackets are expected to become regular Internet users in the future, simply because the current younger generations that are now using the Internet will then be in their 50s. Based on the assumptions above, the extent of Internet experience is sure to grow rather rapidly.

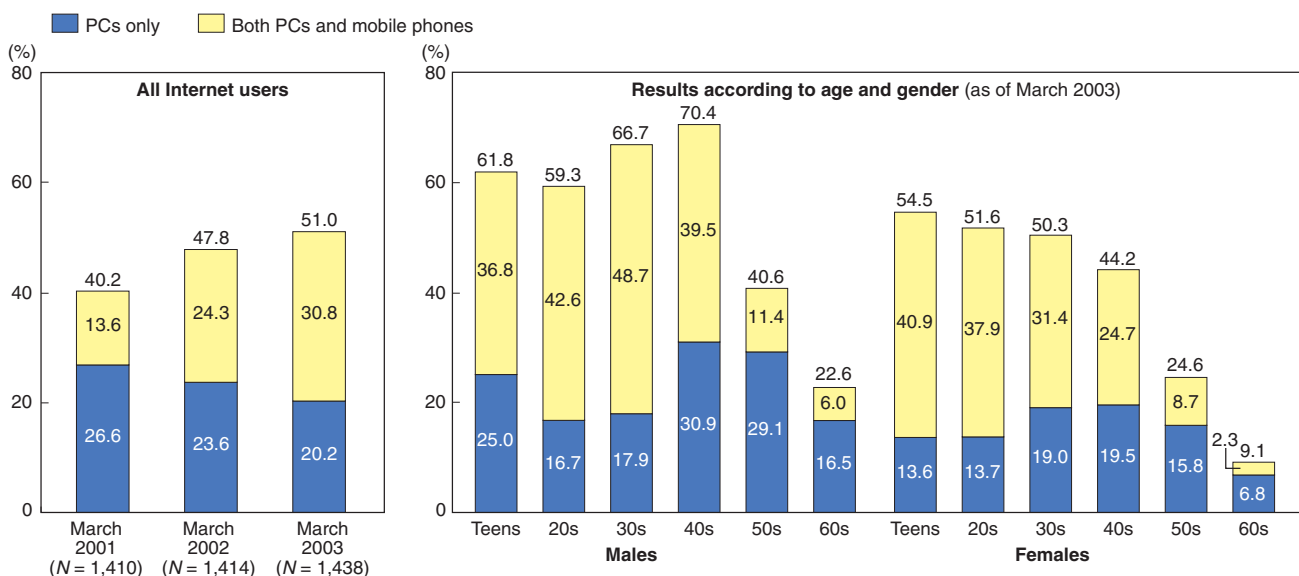
2 Number of Broadband Users Expected to Increase

(1) Nearly half of home Internet users have broadband access

According to the most recent survey in March 2003, nearly half (49.0%) of respondents aged 15 to 59 who use the Internet via a home PC have broadband access (Figure 16). In terms of Internet connection types, ADSL is the most popular and is utilized by 39.9 percent of the broadband users. Approximately 10 percent of broadband users are utilizing CATV (cable TV) for their Internet access, a ratio that shows virtually no increase from previous figures.

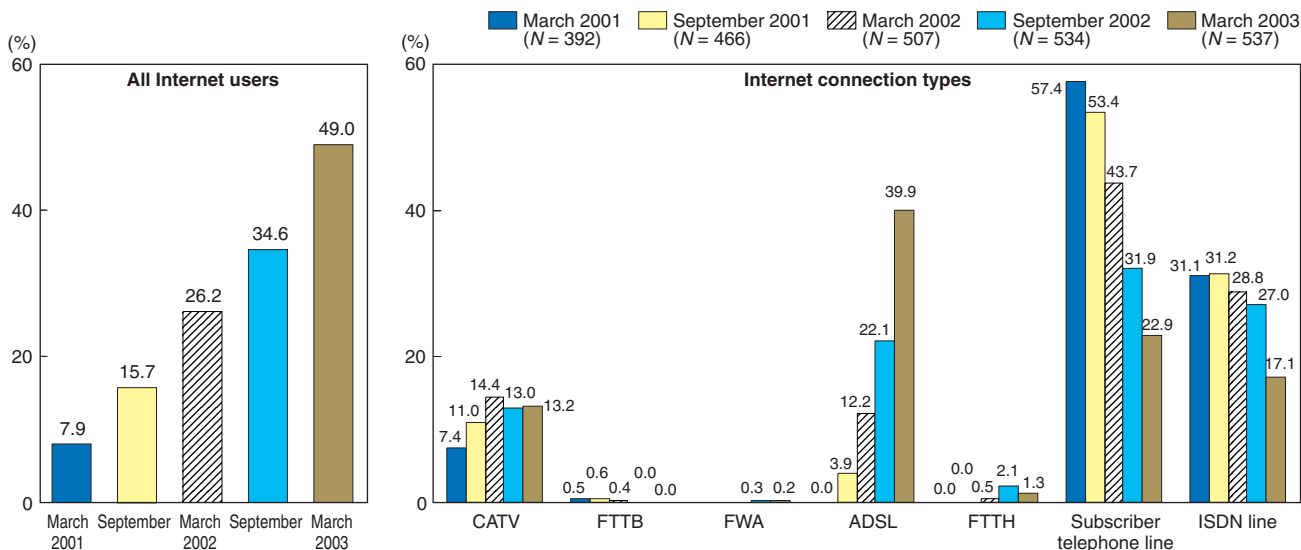
On the other hand, Internet access via subscriber telephone line or integrated services digital network (ISDN) connections has been rapidly declining in recent years. In fact, while nearly 90 percent of the

Figure 15. Internet Usage and Internet Access Devices



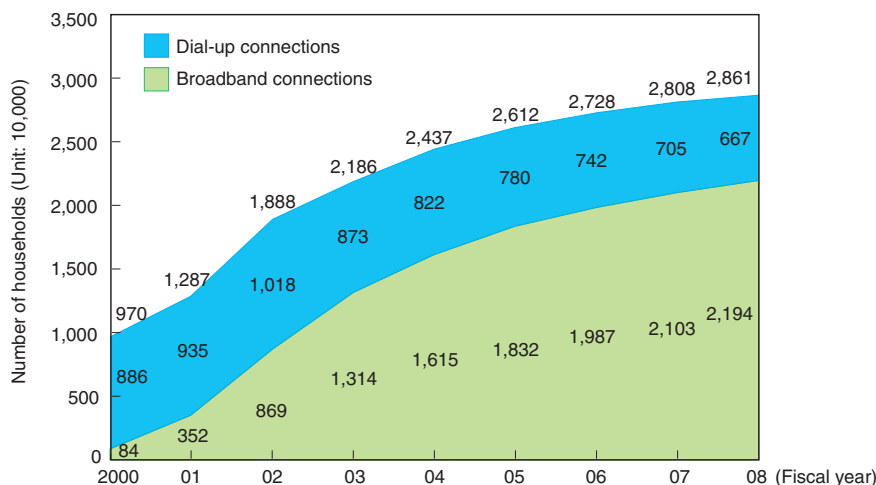
Note: Values for those in their 60s are not included in the March 2003 figures in the graph on the left above.
 Source: Cyber Life Observations, NRI, March 2001 to March 2003.

Figure 16. Trends in Broadband Usage and Internet Connection Types



Notes: (1) Respondents limited to those who use the Internet at home; (2) CATV = cable TV; FTTB = Fiber to the building; FWA = fixed wireless access; ADSL = asymmetric digital subscriber line; FTTH = fiber to the home; ISDN = integrated services digital network.
 Source: Cyber Life Observations, NRI, March 2001 to March 2003.

Figure 17. Outlook for Internet Connection Types



Note: Broadband connections include ADSL, FTTH, FWA and CATV; dial-up connections include subscriber telephone lines and ISDN lines.
 Source: Prepared by NRI.

Internet users were using a subscriber telephone or ISDN connection in March 2001, this number dropped to 40 percent in March 2003. Although infrequent Internet users are expected to maintain their subscriber telephone line connections, many Internet users have already switched to broadband connections, primarily by ADSL.

(2) Total broadband household subscriptions expected to reach 22 million in fiscal 2008

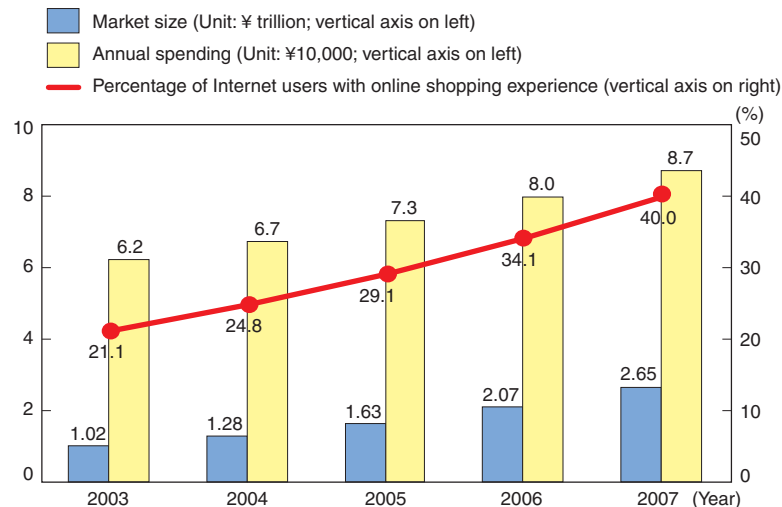
According to a separate NRI study, the number of broadband subscribers is predicted to continue to rise in the future, with ADSL and fiber-to-the-home (FTTH) as the primary connection mode. In fiscal 2008, broadband users at home are projected to reach a total 22 million, accounting for 75 percent of all home Internet users (Figure 17). In addition, increasing broadband subscriptions will further accelerate the

degree of Internet experience. In this respect, we can also expect synergistic effects between these two drivers of growth.

3 Online Shopping Market Estimated to Reach ¥2.6 Trillion in 2007

Based on the results of the March 2003 survey, NRI has projected the size of the future online shopping market under the assumption that consumers will continue to accumulate Internet experience and the number of broadband users will continue to increase. These findings suggest that the scale of this market will reach approximately ¥2.6 trillion in 2007, with an annual growth rate of approximately 27 percent (Figure 18).

This prognosis also assumes that 40 percent of consumers aged 15 to 59 would engage in online shopping, and that annual spending in online shopping would

Figure 18. Estimated Size of Online Shopping Market

Source: Estimation based on Cyber Life Observations by NRI.

grow by 8.8 percent per year due to further increases in the degree of Internet experience as well as the expected growth in the number of broadband users.

V The Third Driver of Growth for Further Development

Although the online shopping market is expected to continue to grow steadily in the future, a wider variety of users will be essential to ensure further development. Despite the increasing number of consumers who have shopped online, the percentage of those who have not yet experienced online shopping but wish to give it a try in the future declined to 16.7 percent in March of 2003 from the 20.6 percent recorded in March of 2002 (Figure 6). Moreover, the percentage of online shoppers including prospective customers (i.e., the ratio of those who have shopped online plus those who wish to try online shopping in the future) is slightly less than 40 percent, only a minimal increase over the results from March 2002. Therefore, a third driver of growth that could expand the user base—including that for potential users as well—is essential for the further development of the online shopping market.

1 What Could Serve as the Third Driver?

As mentioned above, experienced Internet users and broadband users have primarily contributed to the growth of the online shopping market. These user segments, which constitute the two engines of growth mentioned above, are expected to further develop in the coming years. This means that the thrust of the third prospective engine of growth should be focused on how to acquire or cultivate other types of Internet users, e.g., those who are neither experienced Internet users nor those with broadband access. The two options for ways to expand this user base are as follows:

- (1) Creating a framework where every consumer can enjoy online shopping regardless of his or her Internet experience (soliciting Internet novices).
- (2) Using a new media source other than broadband (soliciting non-broadband users).

Based on these two options, some suggestions for the further development of the online shopping market are presented below.

2 Different Promotion Approaches Not Dependent on Consumer Internet Experience

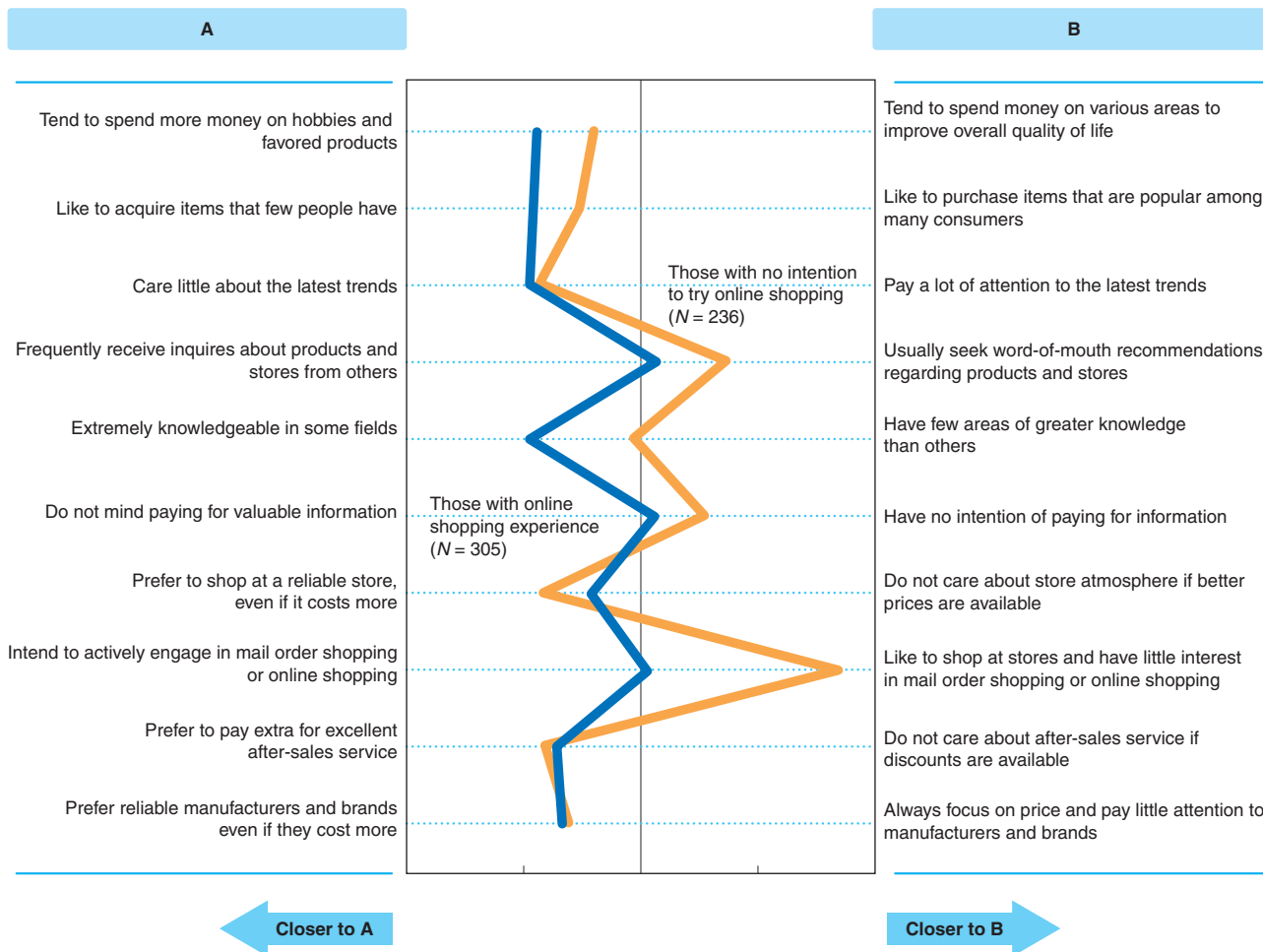
(1) Consumer attitudes differ between those with online shopping experience and those with no intention of trying online shopping

A study comparing consumer awareness between those with online shopping experience and those with no experience nor intentions to try online shopping revealed that the latter frequently demonstrated the following passive and overly cautious attitudes when they collect information and purchase products:

- Usually seek word-of-mouth recommendations regarding products and stores
- Have few areas of greater knowledge than others
- Have no intention of paying for information
- Prefer to shop at a reliable store, even if it costs more

Those who are unwilling to try online shopping can essentially be characterized as consumers who make their purchasing decisions based on word-of-mouth recommendations from their friends and acquaintances because they lack special knowledge in any particular field. For this type of consumer, online shopping may be too confusing and overwhelming. Furthermore, it lacks sufficient user-friendly features, as such users tend to be intimidated by the plethora of websites

Figure 19. Different Attitudes Towards Consumption Between Those with Online Shopping Experience and Those with No Intention to Try Online Shopping



Source: Cyber Life Observations, NRI, March 2003.

offering a huge selection of products that may suit their needs, but at such a broad range of prices that they cannot make a decision.

For them, “user friendliness” does not mean an easy and efficient way to find products that meet their needs from a wide variety of choices. The truth is that they often have trouble in finding “what really meets their needs,” and instead rely on knowledgeable friends to obtain appropriate information and assess any particular products.

In order to encourage these consumers to engage in online shopping, what is really needed would be a framework where they can be confident of obtaining easy access to recommendations by individual users or testimonials on certain products on the Internet. In concrete terms, a user review corner (equivalent to word-of-mouth recommendations from their friends) and refined search engines based on reviewed information would be ideal for these passive consumers.

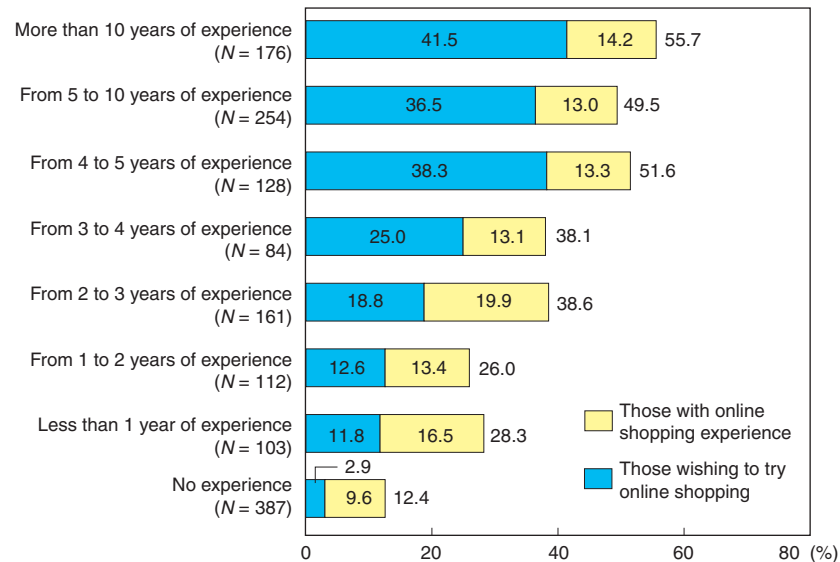
It is true, of course, that many online shopping websites are already offering various user reviews. However, the over abundance of information and/or anonymous comments are not appealing to these passive and extremely cautious consumers. In this regard, carrying

out detailed analyses of how word-of-mouth communication on the Internet will affect consumer spending behavior would be highly recommended.²

(2) Improvement of after-sales services

As has already been pointed out, online shoppers who have recently started using the Internet tend to spend higher amounts. In fact, the average annual spending of online shoppers who have less than two years of Internet experience reached ¥74,000 in the March 2003 survey, exceeding the average of ¥62,000 in annual spending by all online shoppers aged 15 to 59 (Figure 12).

The following two significant service enhancements are responsible for this result: Internet set-up services that are part of the purchase of a PC at large electrical appliance outlets, and customer support services by ISPs for the initial ADSL hookups. Before these services were readily available, consumers had to have a certain level of know-how in order to set up the Internet on their own home PCs. Although this was not a problem for experienced PC users, many novices were forced to go through considerable frustration until they were actually able to access the web. Now that Internet

Figure 20. Online Shopping Usage and Intent Ratio by Years of the Internet Usage

Source: Cyber Life Observations, NRI, March 2003.

beginners can avoid such hassles and enjoy the Internet right away, these new customer services have made a significant difference.

Indeed, it is worth noting that those who purchased a PC in early 2001 (i.e., before such customer services had become widely available) demonstrated a slightly lower willingness to shop online compared with those whose PC experience is less than one year. In other words, those whose PC experience ranged between one and two years displayed more reluctance than those with under one year of experience (Figure 20). One possible solution would be to augment their inadequate Internet experience by promoting special campaigns aimed at those customers who missed the chance of receiving such customer services when they purchased their machines.

3 Use of New Media Other Than Broadband

In general, the existing broadband service works only with PCs. As seen in the previous chapters, Internet usage via PCs is expected to slow in the years ahead. We therefore need to look at other types of media to further develop and expand the online shopping market.

(1) Mobile commerce

Digital content such as ring tones and some electronic commerce products are the main services offerings currently available via mobile phone (i.e., mobile commerce). As mobile phones include the following features that PCs lack, this is an area that would seem to offer great potential for a new online shopping host.³

- Extremely high proliferation.
- Limitations on available interfaces (while this may appear to be a disadvantage, it is really an advantage in terms of avoiding excessive information).

- The ability to collect fees and purchase costs in addition to communications charges.
- The ability to ensure settlement reliability by identifying the terminal used.

(2) Digital TV

Digital TV broadcasting was launched in the Tokyo metropolitan area, Nagoya and Osaka in December 2003. While this new offering does not initially include the contents and services that optimally leverage the superb interactive features of digital broadcasting, it still has the potential to play a significant role in the future online shopping market over the long run. This so-called T-Commerce has the following advantages:

- Vast market potential due to high proliferation of TV units.
- The highest average usage among major media formats.
- The ability to introduce products in the TV programming to enhance product appeal.
- The ability to utilize already accumulated TV shopping know-how.
- The ability to provide more precise and detailed information on a large TV screen.

4 Accelerating Development by the Third Engine of Growth

According to a joint study by the Electronic Commerce Promotion Council of Japan (ECOM), the Ministry of Economy, Trade and Industry (METI) and NRI, the size of Japan's B-to-C (business-to-consumer) market was estimated at approximately ¥2.7 trillion in 2002, and is projected to reach approximately ¥12.3 trillion in 2007.⁴ This represents an average annual growth of around 35 percent.

Meanwhile, it is estimated in the CLO survey for March 2003 that the size of Japan's online shopping market as propelled forward by the two growth drivers explained above totaled approximately ¥1.02 trillion in 2003, and is forecast to reach ¥2.65 trillion in 2007 (Figure 18). This scenario envisions an average annual growth rate of approximately 27 percent.

Although we cannot simply compare these two sets of estimates as they are based on different methodologies and assumptions, we consider the discrepancy between the two as the area that is potentially attributable to the third engine of growth. In other words, roughly 8 percent—the difference between the 35 percent growth rate estimated in the ECOM-led study and the 27 percent growth rate estimated in the March 2003 CLO survey—constitutes the arena in which this third growth driver will be active.

5 Consumers Life to Be Enriched by Growing Online Shopping Market

Although online shopping is expanding in Japan, it does not yet appear to have spread throughout all levels of society. The online shopping market's heavy reliance on experienced Internet users and those with broadband access should be changed and expanded to cater to a more diversified user base. Without this expansion of the user base, it is unlikely that a solid foundation for a "ubiquitous networked society" can be established in the future.

Efforts to improve customer service and develop new types of media by Internet service providers will contribute to creating a new distribution infrastructure that anybody can easily access from anywhere and at any time. Through this new system, consumers can select and purchase products and/or services that best meet their needs from a wide variety of choices. Accordingly, this new online shopping infrastructure could exert a considerable impact on the overall socioeconomy, with much the same magnitude as the impact created by the appearance of convenience stores, and thereby benefit consumers in myriad ways.

Furthermore, as online shopping involves basic monetary transactions on the Internet, its continuous growth is essential for the more sophisticated use of the Internet in the future. In conclusion, instead of being content with the current level of prosperity available

through online shopping, we should take prompt action now to accelerate growth in the online shopping market of the future.

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- (1) This survey was conducted in March 2003 and sampled 2,400 males and females aged 15 to 69 nationwide on the basis of the two-stage stratified random sampling method. NRI visited each respondent to leave a questionnaire and returned to collect it at a later date. Until our 11th survey in March 2002, the samples were based on consumers aged between 15 and 59. Given consideration to the increasing use of information technology by older generations, however, a new cohort representing those in their 60s was added to the sample starting with the 12th survey. In this survey for March 2003, the effective responses totaled 1,703, constituting a collection rate of 71.0 percent.
 - (2) Tsuyoshi Kanamori and Atushi Kimura, "Net Communities in Brand Marketing," *NRI Papers*, No.63, April 1 2003.
 - (3) Taro Morioka, "The Potential of Mobil Phones in Mobile Commerce," *Knowledge Creation and Integration*, September 2003.
 - (4) The estimate for the B-to-C market size presented by ECOM and other organizations was based on the results of questionnaires and interviews conducted with e-commerce providers. For the CLO survey, on the other hand, NRI estimated the market size of online shopping based on actual consumer experience. In addition, sampling was limited to those aged 15 to 69. Therefore, the estimated figures in the CLO survey could be somewhat lower than the estimates in similar data on market size as derived from the e-commerce providers. In terms of the target markets, moreover, automobile manufacturers and real estate agencies were included in the study on the B-to-C market conducted by ECOM, but excluded from the CLO survey. In the estimates by ECOM and other organizations, the combined market size of the automobile and real estate sectors reached approximately ¥1.2 billion in 2002, occupying more than 40 percent of the entire B-to-C market of approximately ¥2.7 trillion.
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