INTERACTIVE
SERVICES
ASSOCIATION

SECOND ANNUAL
ONLINE CONSUMER SURVEY
December 1992 - January 1993

A MEMBERS ONLY REPORT
May 1993

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The ISA thanks the following companies who participated in this survey:

America Online
CompuServe
General Videotex - DELPHI
American Airlines - EAASY SABRE
GEnie
Hawaii INC
Heartland Free-net
National Videotex Network
Vicom Information Service
ZiffNet Information Service

ISA Corporate Members receive first copy free. Additional copies may be purchased by ISA Corporate Members only for $25 plus $4 shipping.

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- Active users find that no one system meets their needs completely, and seek out unique content and bargain features. Three in five online survey respondents use at least two online systems, and more than half subscribe to three or more. *This should strongly encourage innovations by incumbents and unique offerings by new entrants – right-minded efforts will be recognized and rewarded by a market that restlessly seeks out new and improved services.* (More representative survey data suggest that only about one-fourth of *all* online users use more than one system.)

- BBS's appeal to online users on both price and content. About two-thirds of respondents use bulletin board systems (BBS's) in addition to commercial online services. A third or more cite cost, software libraries for downloading, and communication with other users as the reasons for BBS's appeal. *Commercial services must continue to expand their offerings beyond these latter areas in order to justify their higher fees.*

- Software downloading, communicating with others who share interests, and getting PC-related help and information lead in popularity among applications. Respondents were asked to choose, from a listing of 10, the three applications they use most. In addition to the three just mentioned, exchanging electronic mail with friends and family, and obtaining current, general news round out the first tier of most-used applications. *Systems and services competing for the core of today's market must continue to advance their offerings in these areas.*

- Online use by multiple household members is substantial and growing. Regular use by other family members was reported by a full 42.5% of respondents, almost double last year's percentage. In addition, a remarkable one in ten of all respondents report regular use by a child or children 12 or under. Although Prodigy did not participate in the survey, its use by multiple-system users may underly this phenomenon – along with the growth of family-oriented features on other systems. *This paradigmatic change, regardless of its source, presents a new opportunity to be addressed broadly by the industry.*

EXECUTIVE SUMMARY

- A large sample of inherently qualified respondents was surveyed. This report presents the findings of a survey of 13,875 users of consumer online services, conducted online by 10 participating system operators and services during December-January, 1992-93.

- The findings describe the most active online services users. Although based on a self-selected sample that is not projectable to the overall online user market, the survey findings profile the behavior and attitudes of a cross section of the most active users of consumer online services.

- "New" users are proliferating. More than a third of the respondents have used online services for less than one year. This proportion of new users is about one-third higher than in the previous year's survey. *Industry participants must recognize the greater needs for support and navigational context of these large numbers of new and inexperienced customers.*

- Regular, frequent usage is on the rise. Three out of ten respondents use online services at least once per day. This also represents an increase of about one-third over last year's findings. *Substantial and growing regularity of usage is especially encouraging for marketers and other "relationship-oriented" service providers.* However, the proportion of users reporting use of online services less than once a month also increased, to almost 14%. *This usage tendency of less than a month, if it continues, may suggest an opportunity to offer usage-based alternatives to flat-rate pricing for less-frequent users.*

- The adjective "consumer" in consumer online services appears justified, though not absolute: Two-thirds of respondents said more than half their online activity is of a personal, rather than business, in nature, and 86% indicated that they personally, rather than an employer pay their online services fees. *By addressing needs of the "whole person," the industry can prosper without worrying too much about consumer vs. business labels.*

BACKGROUND AND METHODOLOGY

Survey Sample

During the period from December 1, 1992 to January 15, 1993, the Interactive Services Association (ISA) conducted its second multi-system consumer online survey with the cooperation of 10 online system operators and services. (The previous study, published in April, 1992, involved users on the systems of 6 member companies – see "Comparison with Previous Year's Methodology" below.) Systems participating in the study were:

- America Online - a national online system operator;
- CompuServe - a national online system operator;
- DELPHI - a national online system from General Videotex;
- EAASY SABRE - a travel and reservation service from American Airlines;
- GEnie - a national online system from GE Information Services;
- Hawaii INC - a public corporation providing and coordinating public and private sector initiatives and information services on Hawaii FYI, a regional interactive system serving Hawaii;
- Heartland Free-net - a non commercial free online system serving central Illinois with information from the public and private sectors;
- National Videotex Network - a national online system operator;
- Vicom - a regional online system serving Chillicothe, OH and Ross County, OH providing in-depth community information; and
- ZiffNet - an online service providing information on buying, using, supporting, and understanding personal computers.

The survey was conducted via an online questionnaire available on each of the systems for a minimum of two weeks, and most for nearly a month. Although the survey activity was promoted to users by each system operator or service, participation by respondents was optional. Thus, respondents are 1) personal computer users of online services who logged on to one of the participating systems during the time period in which the survey was being conducted on that system, and 2) who chose to take the time to complete the questionnaire.

Seven of the participating systems were national and scope, while three were local or regional. The regional systems represented just 6% of the total responses to the multiple-choice portion of the questionnaire.

Comparison with 1991 Survey Methodology

Although this report includes comparisons with the previous year's findings, there are significant differences in the way the two surveys were conducted. The following comparison highlights some of the major differences in the methodologies employed:

1991	1992
• 19,716 Respondents • Six Systems • One System Forced Users to Take Survey • Systems Had Limited Subscription Base	• 13,875 Respondents • Ten Systems • Voluntary For All Participants • Participating Systems More Representative of Online Community

Among the systems and services participating in 1991 (America Online, American Airlines' EAASY SABRE, CUC International, General Videotex's DELPHI, Minitel Services Company, and ZiffNet), not all participated in the same manner: two (EAASY SABRE and Minitel Services) sent the survey only to their advisory committees, rather than making it available online to users. It was estimated at that time that these companies and or services exposed the survey to a potential quarter of a million subscribers, out of a total consumer online population believed at the time to total 2.5 million.

With the participation in 1992 of additional systems (particularly CompuServe), a much broader group of users had the opportunity to respond. These 10 represented over 1.5 million online users out of a population believed to total 3.5 million. In addition, while in 1991 one system "forced" its users to respond to the questionnaire upon log-in, in 1992 the survey was optional on all systems. Therefore, although comparisons between 1991 and 1992 results are less meaningful than would be the case if the 1991 and 1992 methodologies had been more uniform, there is every reason to believe that the 1992 results are considerably more representative of the online community as a whole. The most serious omission from the sample in terms of its representativeness of the overall market stems from the non-participation of Prodigy Services Company.

Questionnaire

1992 Survey respondents were presented a series of nine closed-ended questions (several of which had follow-on components depending on the response to the primary question). In addition, five open-ended questions were asked at the end, to elicit more qualitative, written responses. The closed ended questions, and the aggregated responses to them, are presented as Appendix A.

Data Analysis

Each participating system retained the data collected from its own users for internal analysis; the ISA compiled aggregated sets of responses to both closed- and open-ended responses, so that system-specific findings are disguised within the overall results. An initial, top-line analysis was presented by an ISA board member overseeing the survey process (David Shnaider of ZiffNet). The more detailed analysis presented in this document was then commissioned via competitive bid to an ISA member research company (LINK Resources). This analysis draws upon:

- ISA's tabulation of the aggregated responses to the closed-ended questions;
- A complete set of the written responses to the open-ended questions;
- David Shnaider's presentation of the survey findings at a special members-only session of the ISA's Spring Conference (February 4, 1993);
- A brief analysis of the findings presented by LINK's Steven Sieck at the same conference.

Comparison with LINK Resources Survey Data

As part of Mr. Sieck's presentation at the survey results conference session, selected comparisons were made between the ISA survey findings and responses to similar questions contained in LINK's telephone survey of a projectable sample of 2500 U.S. households. In general, this comparison strongly suggested that the self-selected nature of the ISA's sample of respondents introduced a bias toward users most actively involved in using online services. The analysis indicated that, in contrast to the ISA survey respondents, the overall online services market tends to be:

- more loyal to one or a few individual services
- more balanced in its usage of a variety of application types
- more oriented toward work-related usage and budgets for online services

These apparent biases in the ISA sample should be borne in mind in reading the following analysis of the survey results; occasionally, comparisons with the LINK data are made in the text in order to draw attention to apparent anomalies. Importantly, however, the ISA results offer a portrait of the most active (and therefore most lucrative) customers of the consumer online services industry.

ANALYSIS OF QUANTITATIVE FINDINGS

The quantitative, or closed-ended portion of the survey was divided into three sections: length, frequency, and business/personal orientation of use; number and type of applications or services used; and family usage of online services. Because of the significant participation of regional as well as national online systems in the 1992 survey, the results were aggregated at the level of national, regional, and total respondents. Thus, where warranted by significant differences in results, comparisons are made based on the geographic orientation of the systems on which users responded, as well between the overall results for the 1992 vs. 1991 studies.

Length of Time Using Online Services

More than a third (36.6%) of the respondents reported that they had been using online services for less than one year. Given the past year's rapid growth in subscribership to consumer online services, combined with subscriber "churn" (the rates at which some subscribers discontinue usage as others begin), it is notable but not surprising that the proportion of such new users of online services increased by about one-third from the 1991 to 1992 surveys (Figure 1).

Average length of usage of regional services is quite similar to that of national services users; subscribers to the former are somewhat more likely to fall within the one-to-three-year category.

Frequency of Using Online Services

On the face of it, a more unambiguously positive trend is the increase over last year's results in the percentage of users who log on to an online system at least once a day: 30.7%, compared with 22.2% in (Figure 2). The efforts of the online services industry to "hook" users on the benefits of regular and frequent usage (including or in addition to the trend toward offering flat-rate pricing), seem to be paying off. Even so, at least part of this trend may be due to the greater frequency of use reported by users of the regional systems newly participating in the 1992 survey (Figure 3). The regional systems generally involve no-cost or lower-cost pricing in comparison with national systems.

Figure 1

Length of Time Using Online Services, 1991–1992

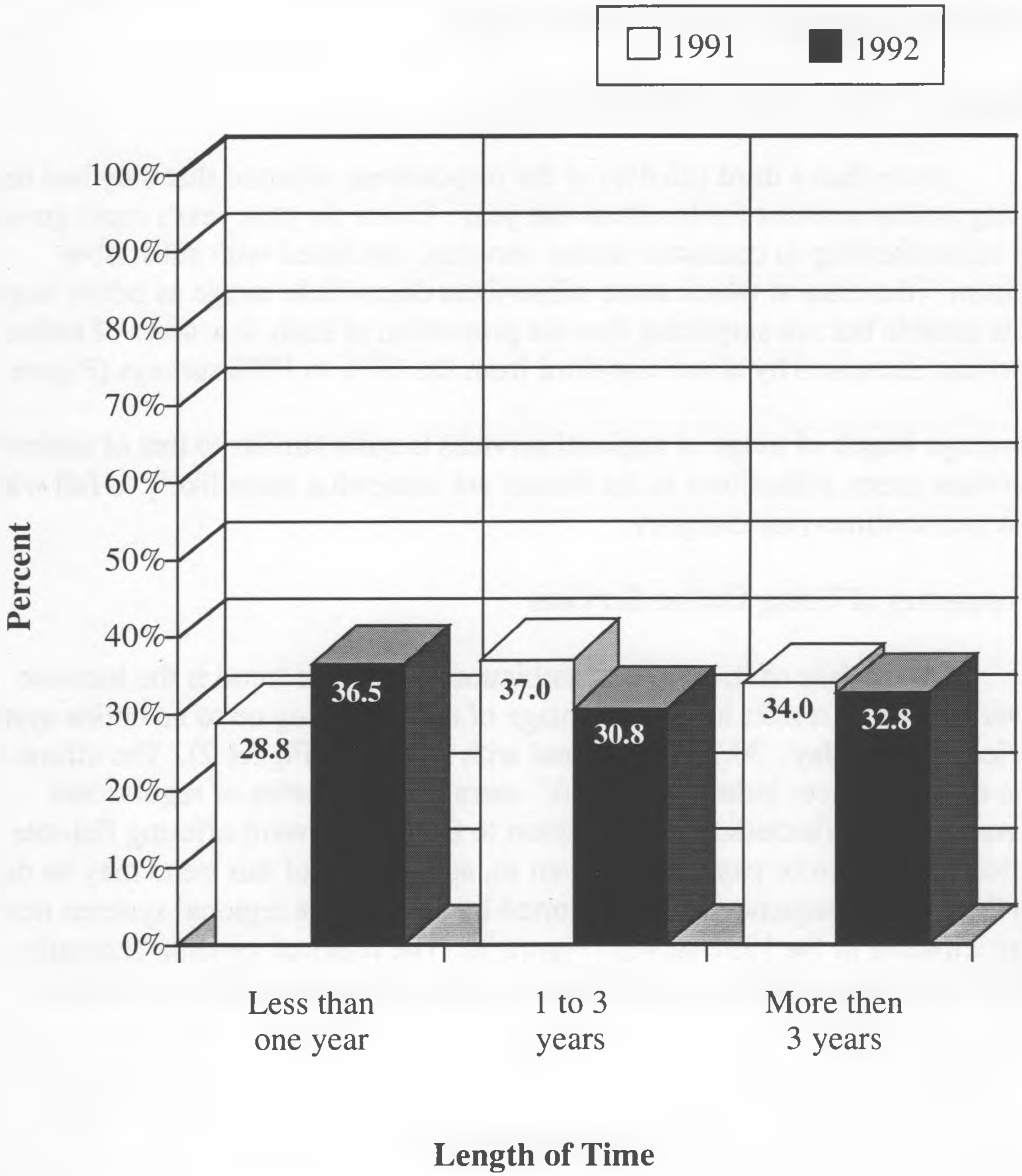


Figure 2

Frequency of Online Use,
1991–1992

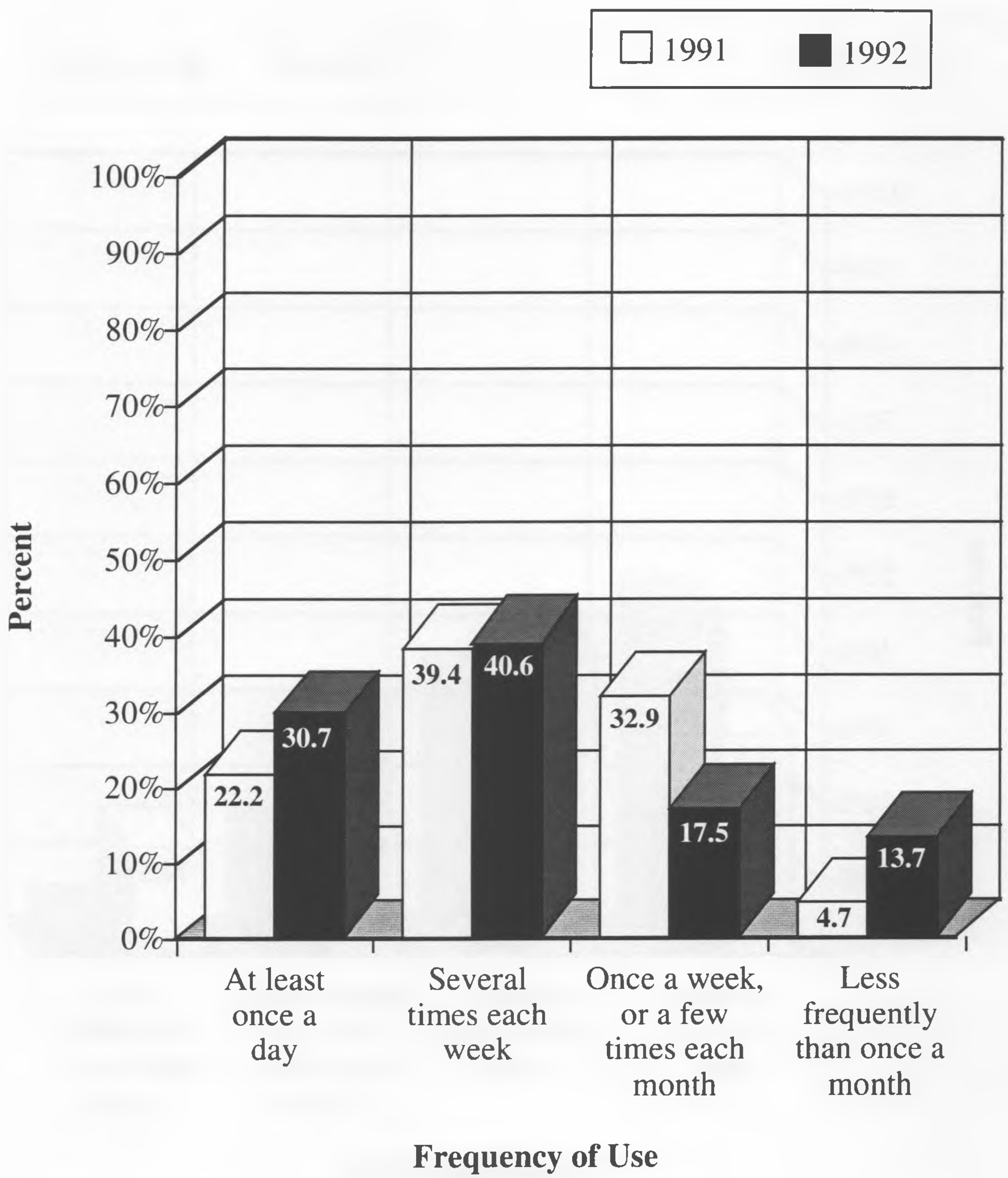
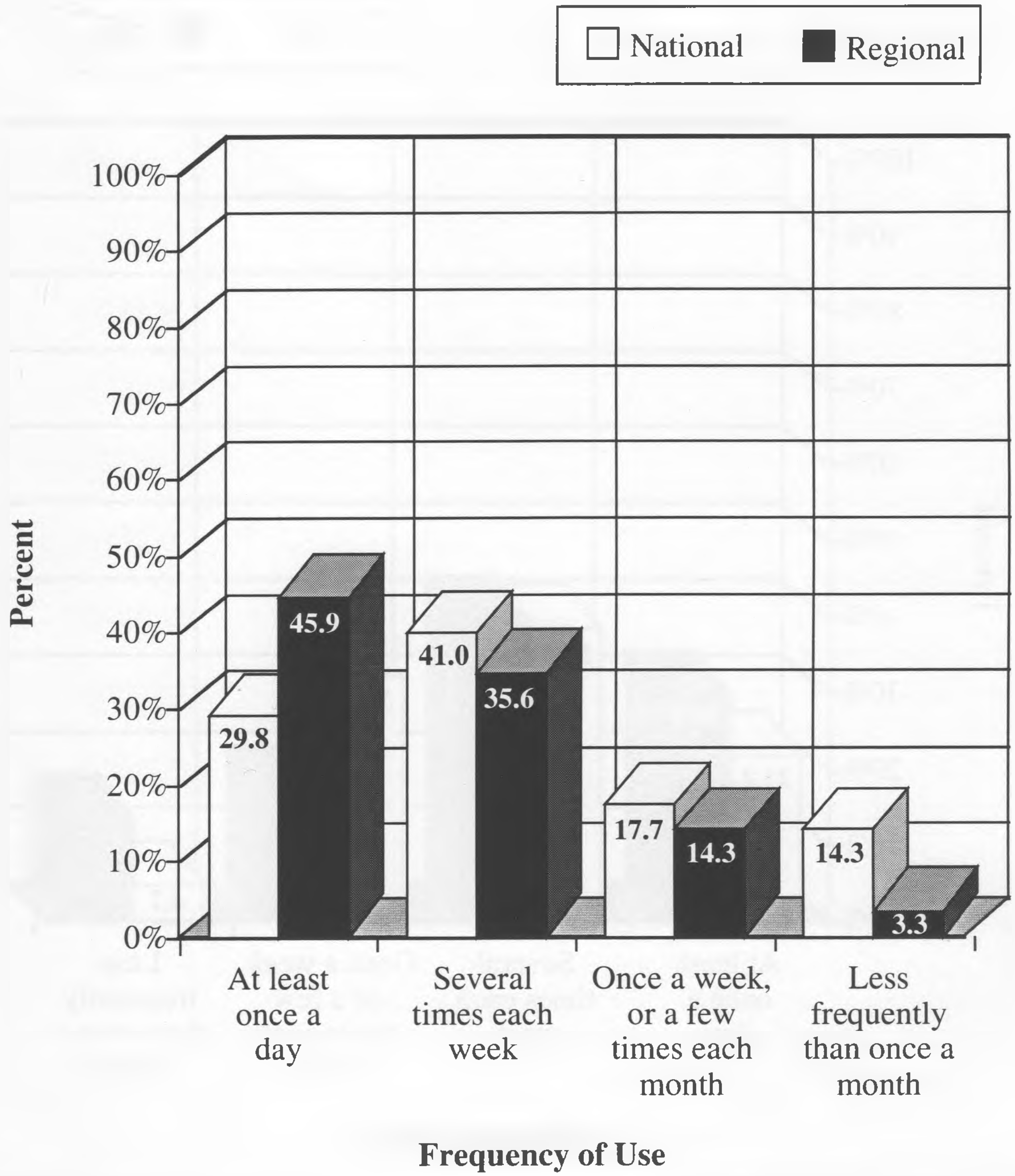


Figure 3

Frequency of Online Use, National vs. Regional Systems



Less positive is the increase from 1991 in the percentage of respondents who report using online services less than once a month (from 4.7% to 13.7% in the total 1992 sample). Especially given the industry trend toward flat-rate pricing, such as increase in the percentage of low-frequency users, may suggest an opportunity for some vendors to offer pre-session usage-based pricing as an alternative for less-frequent users.

Business vs. Personal Use

As shown in Figure 4, about two-thirds (64.8%) of respondents indicated that more than 50% of their online activity is of a personal, as opposed to a business, nature. About one in six (16.2%) reported that their use is about equally divided between business and personal activity. Consistent with this finding, and even more strongly suggesting the "personal" nature of most online services usage, 86% said that they personally, rather than an employer, pay their online services fees; 8% share the cost of online services fees with an employer (Figure 5).

Of those for whom employers pay all or some of the fees, almost half work for companies with more than 50 employees, with the rest divided nearly equally between those in companies of less than 50 employees, and those who characterize themselves as self-employed (Figure 6). It is interesting to note that users of regional systems seem to be substantially more likely to be self employed or employed by smaller companies (Figure 7).

LINK's survey findings are generally consistent with this portrait of consumer online services use as predominantly personal in nature, showing that 73.1% of online services households pay for their use with personal funds. The two surveys together would seem to firmly refute those participants in industry discussions who sometimes maintain that the term "consumer online services" is a misnomer for an industry whose users and usage are primarily business/professional in nature. (Many of the written comments to the survey, in answer to the question on hardware/software support, lend support to the contention that much of the professional use of these services involves technology support activities.)

Figure 4

Personal vs. Business Use,
1992

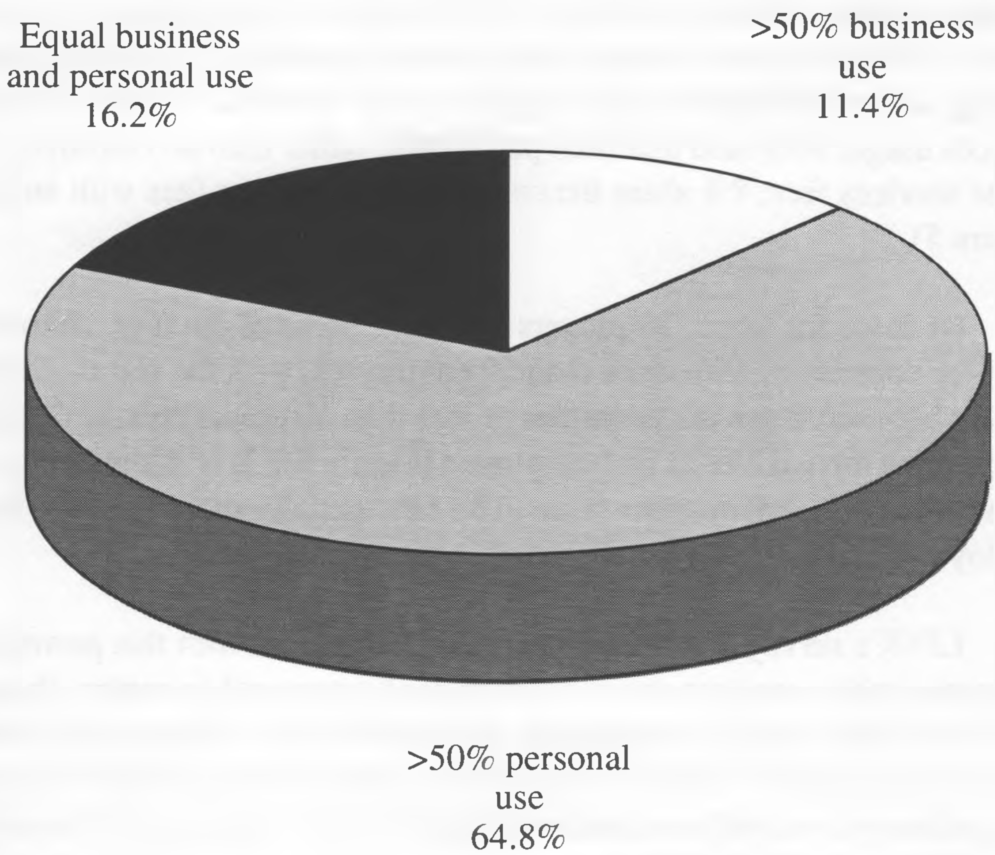


Figure 5

Payment of Online Services Fees
(personal vs. employer)
1992

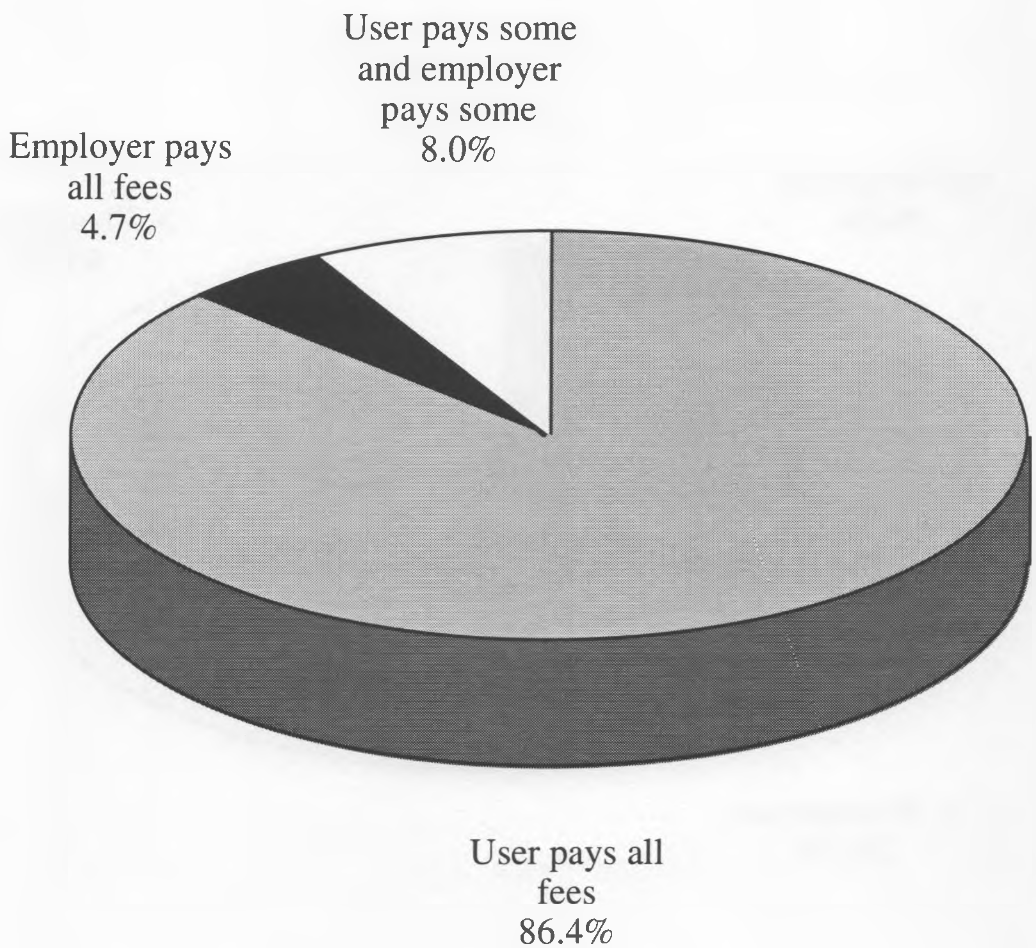


Figure 6

Size of Companies Where Employees Pay All or Some of Consumer Online Fees, 1992

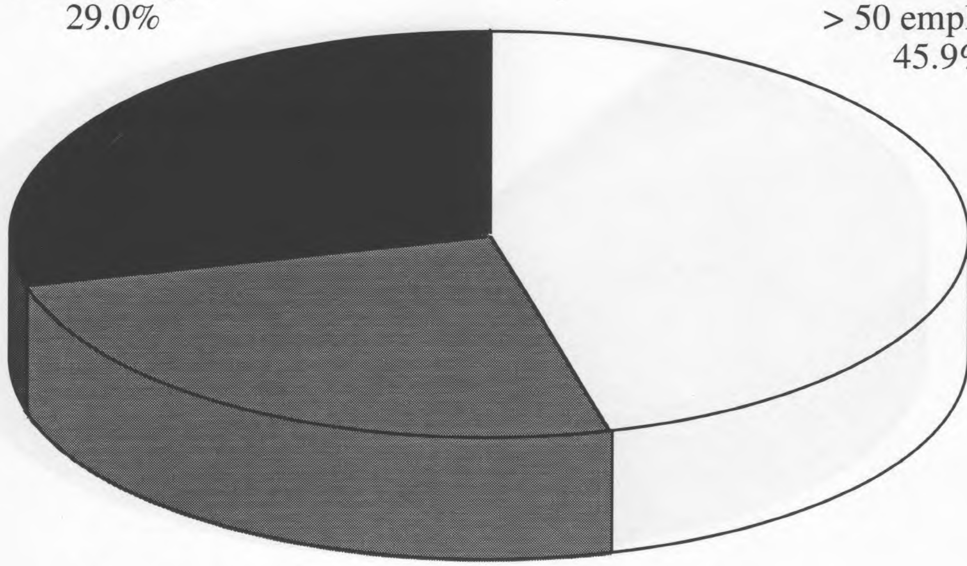
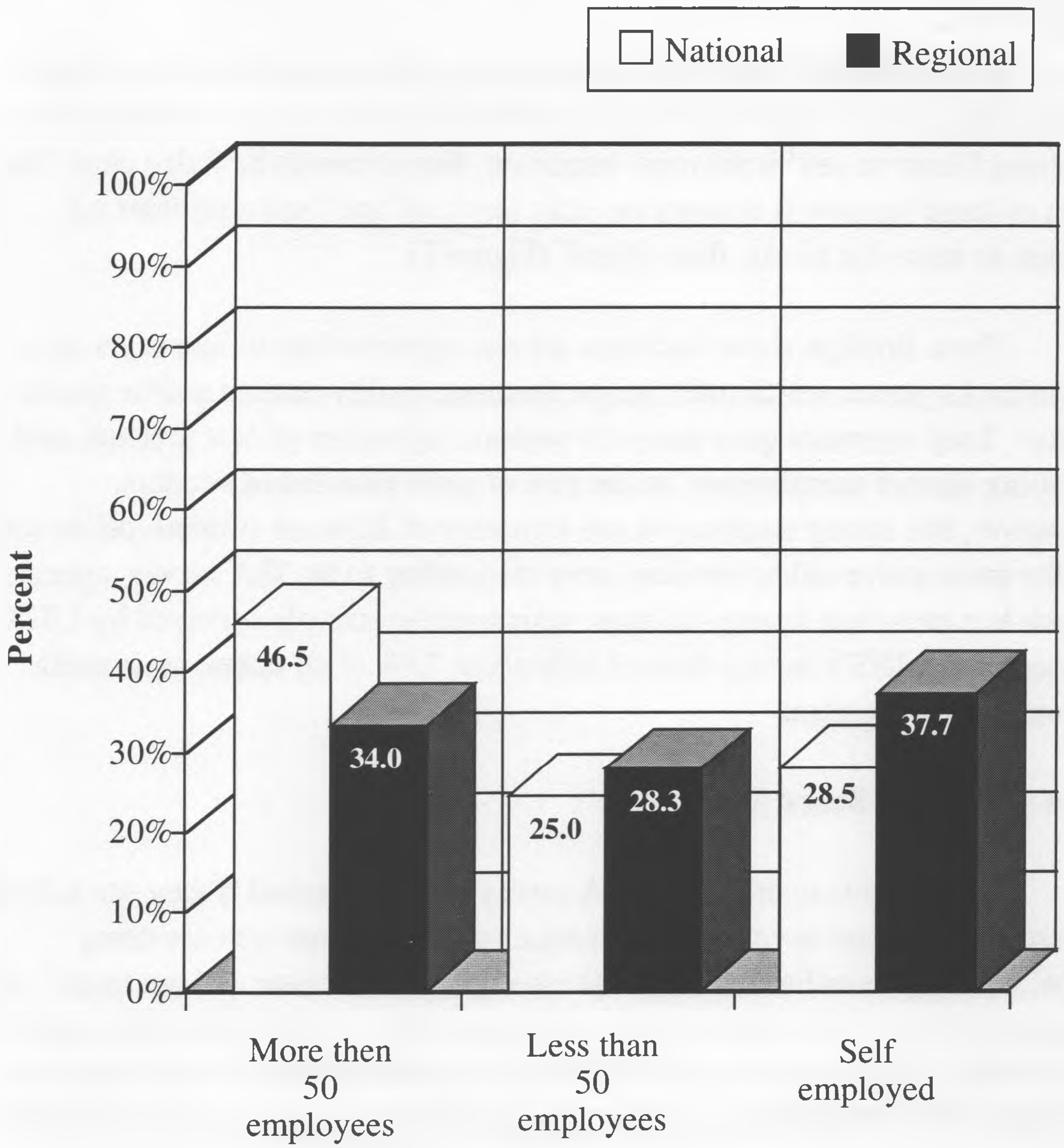


Figure 7

Size of Companies Where Employers Pay All or Some of Consumer Online Fees, Regional vs. National Systems



Use of Multiple Systems

In addition to the system on which each respondent replied to the online questionnaire, about three in five (61.8%) report using other online systems. Of these multiple-system users, more than half subscribe to two or more additional systems, with 15% reporting that they subscribe to four or more additional systems (Figure 8). And fully three of ten (31.2%) of the respondents on regional systems said they used four or more additional systems.

Asked which of three potential reasons apply to their use of more than one system, survey respondents indicated that "no one service provides all the features I want to see" is the most important, though nearly half also cited "the cost of some features is cheaper on other services" and "some services are easier, or more fun to use, than others" (Figure 9).

These findings show that there are real opportunities to lure users onto additional systems which offer unique features, quality content and/or special value. They represent good news for potential operators of new systems, and a warning against complacency on the part of more established vendors. However, this strong tendency to use a number of different systems, on the part of the more active online services users responding to the ISA survey, appears much less prevalent among the more representative sample surveyed by LINK Resources. LINK's survey showed only about 25% of all online users utilize more than one system.

Use of Bulletin Board Systems

Respondents to this year's ISA survey were also asked if they use bulletin boards "in addition to commercial services such as the one you are using now....defined as online services that usually free to the user and are local." As shown in Figure 10, about two-thirds of respondents indicated they do indeed use BBS's. The fact that such services are free, offer shareware and freeware programs for downloading, and provide the ability to communicate with other users were all cited as reasons by more than a third of the respondents who use BBS's, with a work or employer-related reason cited by one in five (Figure 11).

Figure 8

Number of Other Online Services Used

(by respondents using more than one service)

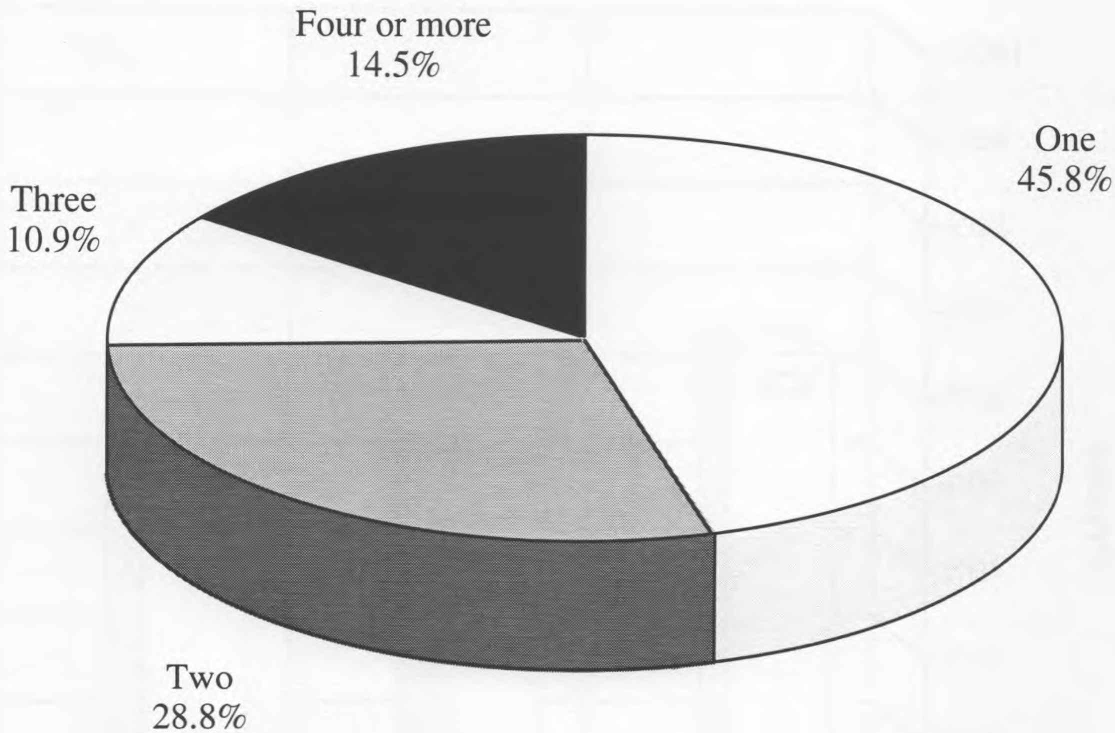


Figure 9

Reasons for Using More Than One Online Service
(includes multiple responses)

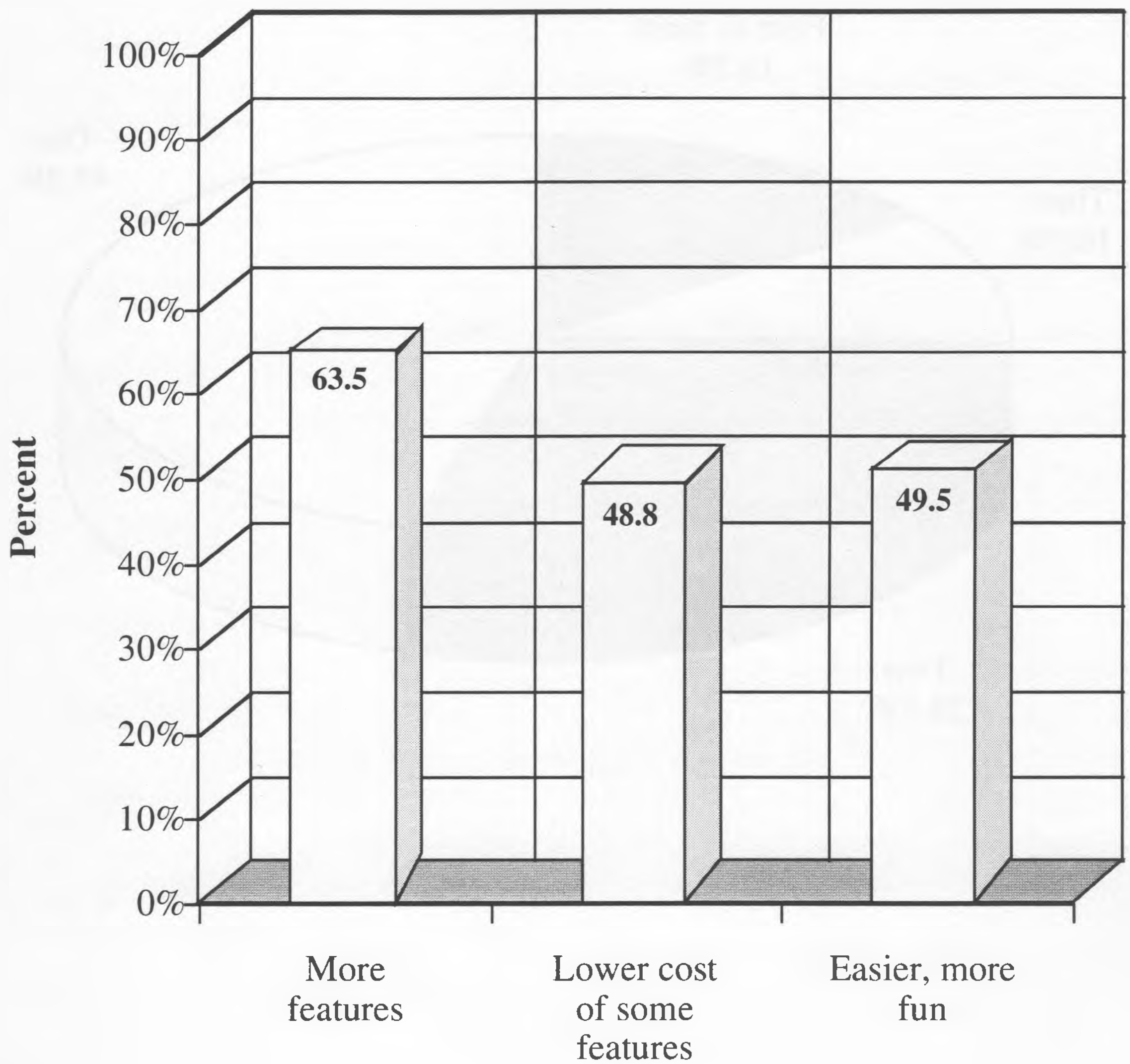


Figure 10

Use of Bulletin Board Services

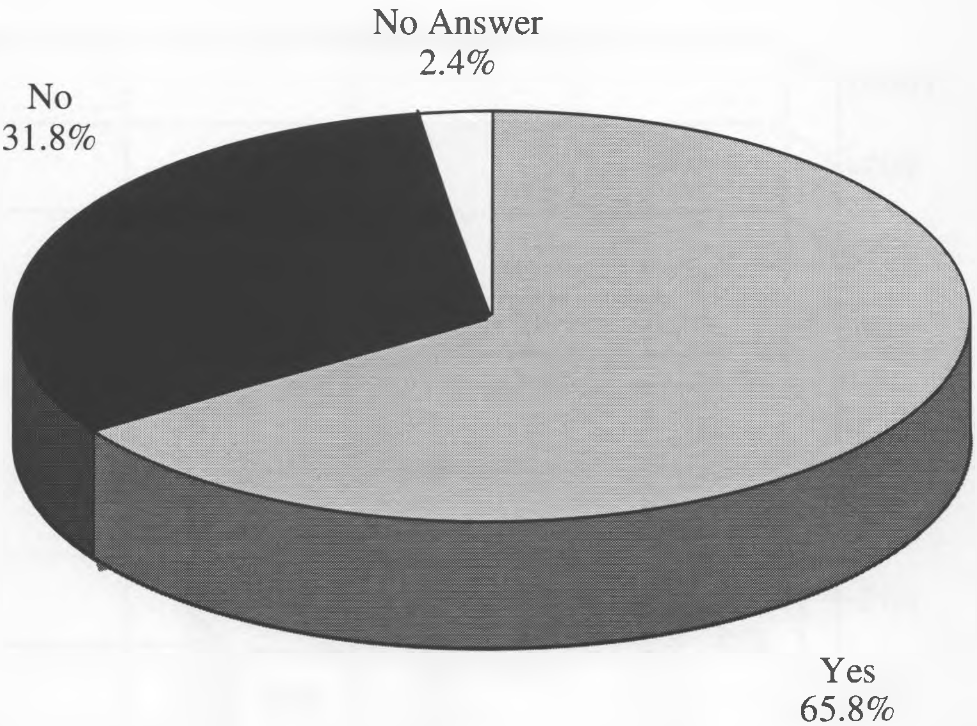
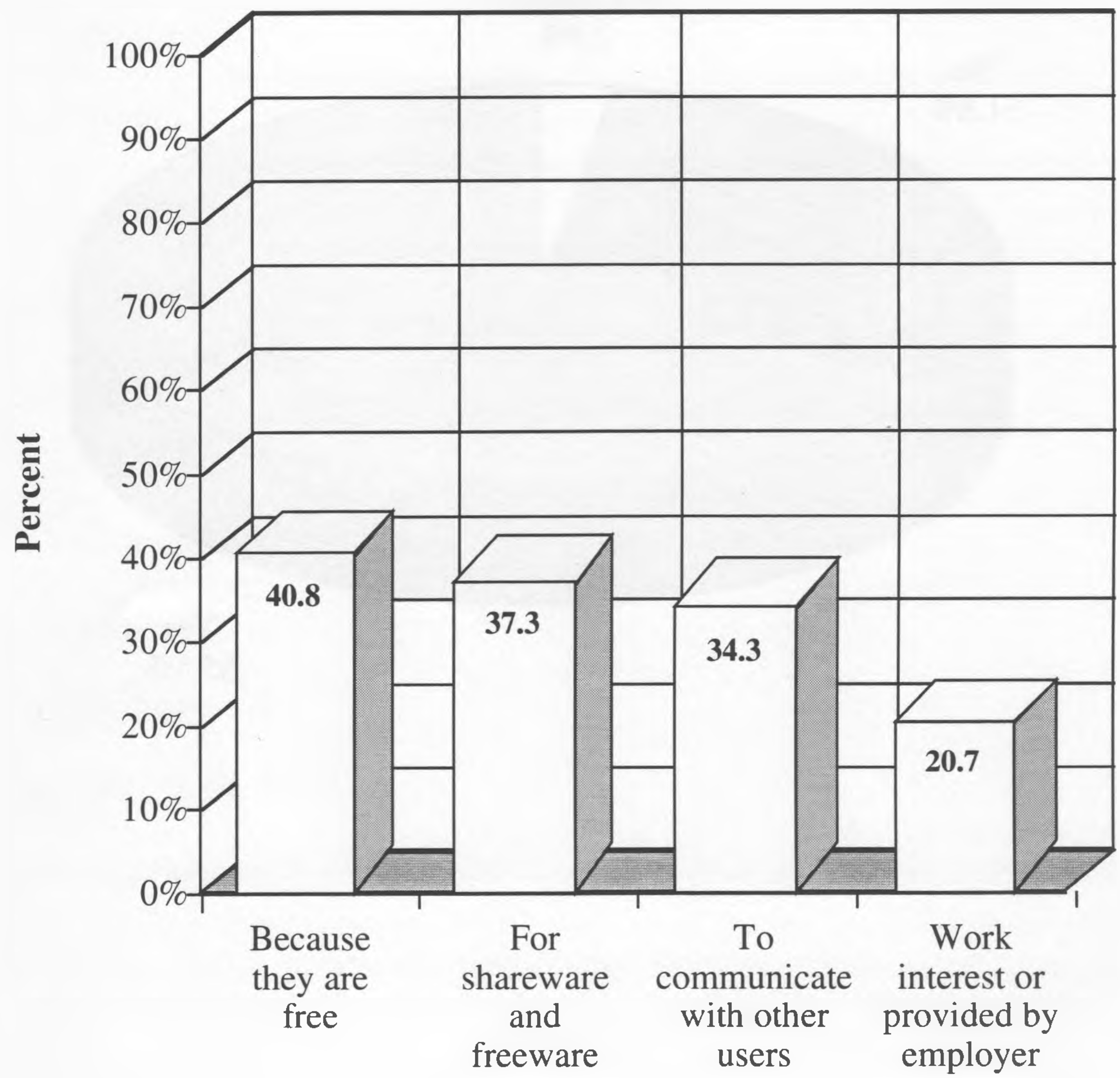


Figure 11

Reasons for Using Bulletin Board Services
(includes multiple responses)



Even with the prevalence of multiple-system use described above, 44.4% of respondents expect to use still more systems, as shown in Figure 12. Again, it seems clear that in the view of online users, even the most established operators have gaps which can be exploited by new providers of quality services.

Most-Used Online Applications

Respondents to the 1992 survey were asked to choose, from a listing of 10 applications, the three that they use the most. "Software downloading" was the application most frequently cited as one of the top three utilized (by 51.2% of the full sample), followed by "communicating with others who share similar interests and hobbies," and "getting help and other information on using your PC and software." Rounding out a "first tier" of leading applications cited by at least one-third of the respondents were "sending and receiving electronic messages with friends and family," and "obtaining current general news."

The less-frequently cited applications included "obtaining current financial information," "obtaining product information and purchasing products," and "obtaining travel information and making reservations," each cited by about one in five respondents. Bringing up the rear were "playing games" and "using educational services for my children," cited by about 13% and 10%, respectively.

Readers should not necessarily conclude that less-used applications are not important to users. Although software downloading might involve hours of usage, while retrieving financial information may only require two minutes, that is not to say that the financial data is seen as less valuable.

As shown in Figure 13, there was considerable difference between the responses to this question of the users of national systems and those of regional system users. Applications used by the latter are much more concentrated within the communications-oriented categories of special interest information sharing, e-mail communications with friends and family, and game playing.

Figure 12

Intention to Use More Services

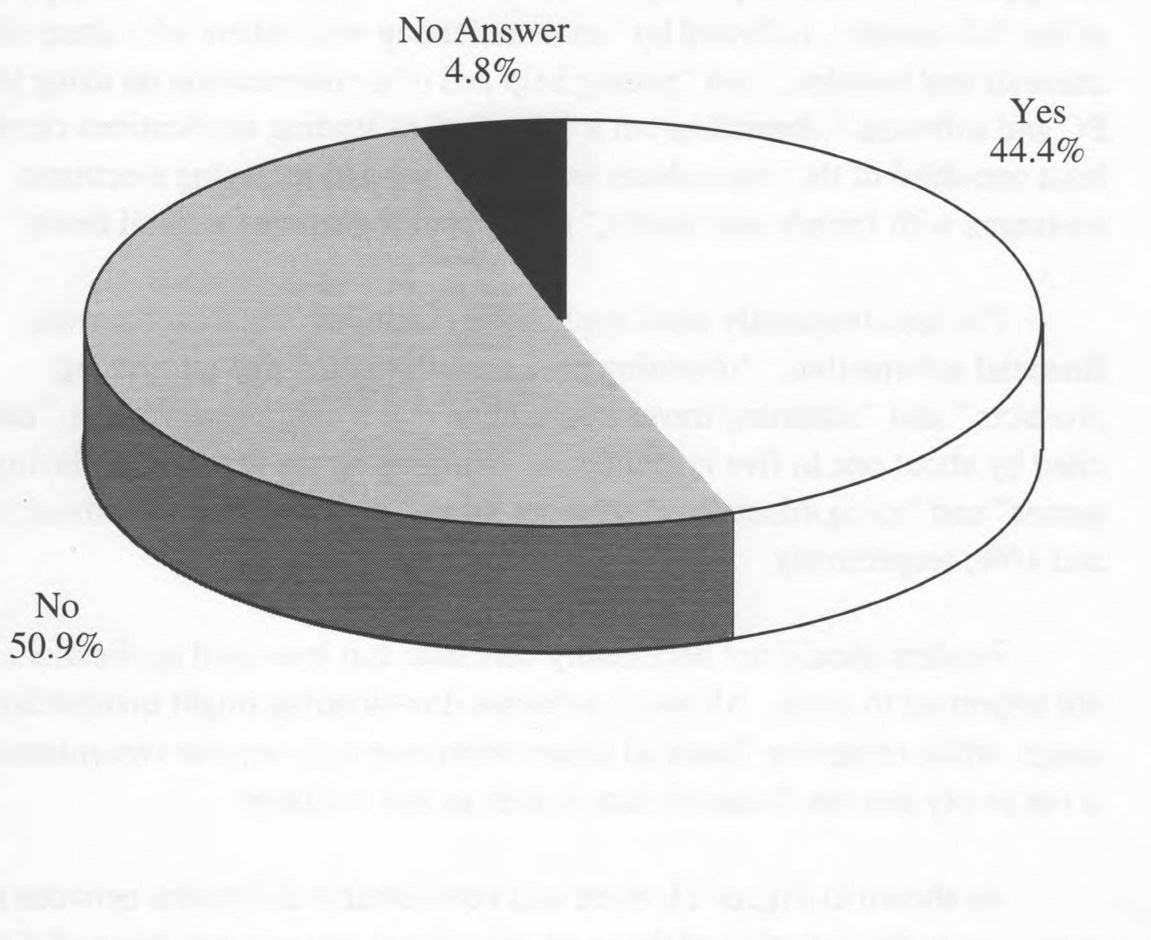
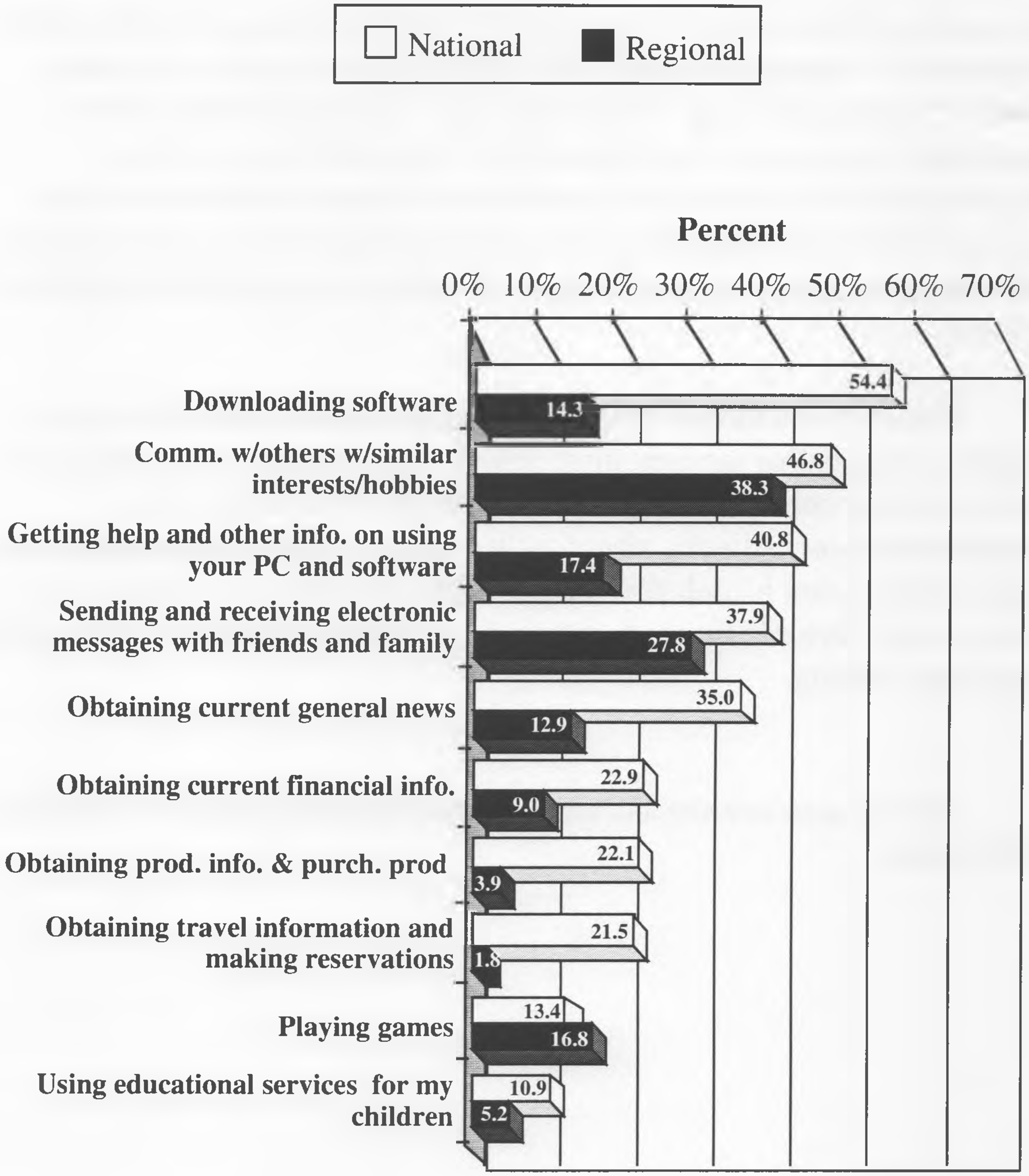


Figure 13

Applications Selected as Among the Three Used Most, National vs. Regional Systems



Regular Use of Online Services by Other Family Members

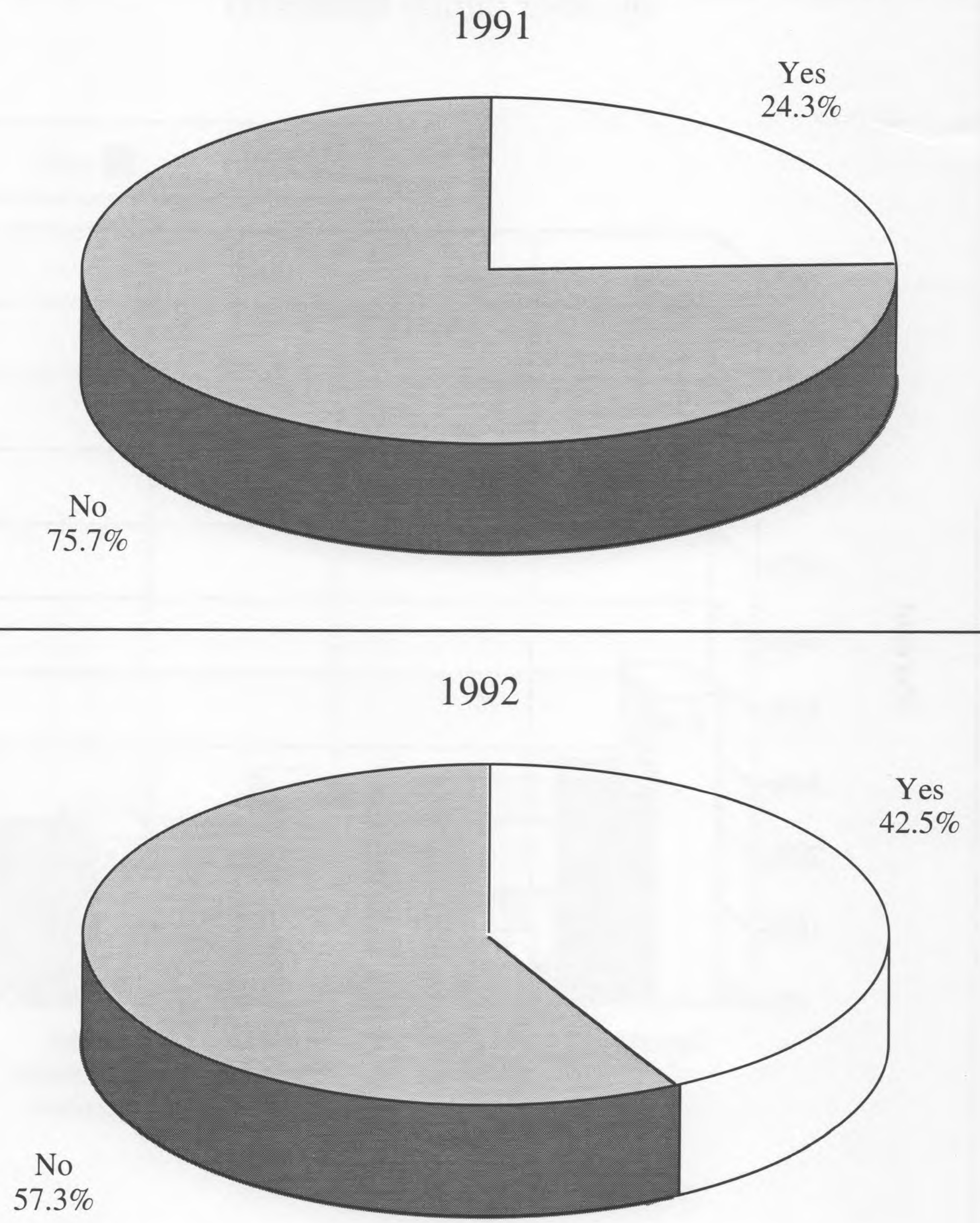
In both the 1991 and 1992 surveys, respondents were asked if other members of their families use online services regularly, "at least a few times a month." The percentage answering in the affirmative rose from 24.3% in 1991 to 42.5% in 1992 (Figure 14). Although the problems associated with comparison of the two years' survey results have been discussed earlier in this document, the substantial change here is likely to be indicative of an actual trend toward broader usage within households. Although Prodigy did not participate in the survey, the likelihood that it is used by many of the respondents who reported use of more than one system is believed to be the principal factor behind this trend toward broader family involvement – along with other new family-oriented features offered by America Online and other systems.

Figure 15 sets forth more detailed findings on the household members regularly using online services; most striking is the finding that children 12 or under are using online services in the households of one in five of the respondents reporting use by other family members – equivalent to almost one in ten of respondent households overall. Again, the presence of Prodigy as a "background" factor in the study is the most probable explanation for this rather remarkable finding.

The full questionnaire and results are provided in Appendix A at the end of this report.

Figure 14

Regular Use by Other Family Members



ANALYSIS OF WRITTEN COMMENTS

As in the previous year, the 1992 survey provided respondents an opportunity to supply written (i.e. typed) responses in an open ended manner. It concluded with questions concerning four key areas of online services use – ease of use and navigation; cost; hardware/software support; and services and applications – and a final topic of "other."

America Online, CompuServe, DELPHI, GEnie, and Ziffnet accounted for 90% of the written comments. Costs and user interface issues elicited the most reaction from users. Although the largest percentage of written responses came from CompuServe users, the percentage of responses made to each individual question was distributed fairly evenly among four of the five major services for which such individual analysis was available. These four major services provided 78% of the total written comments. GEnie comments were not furnished by individual question.

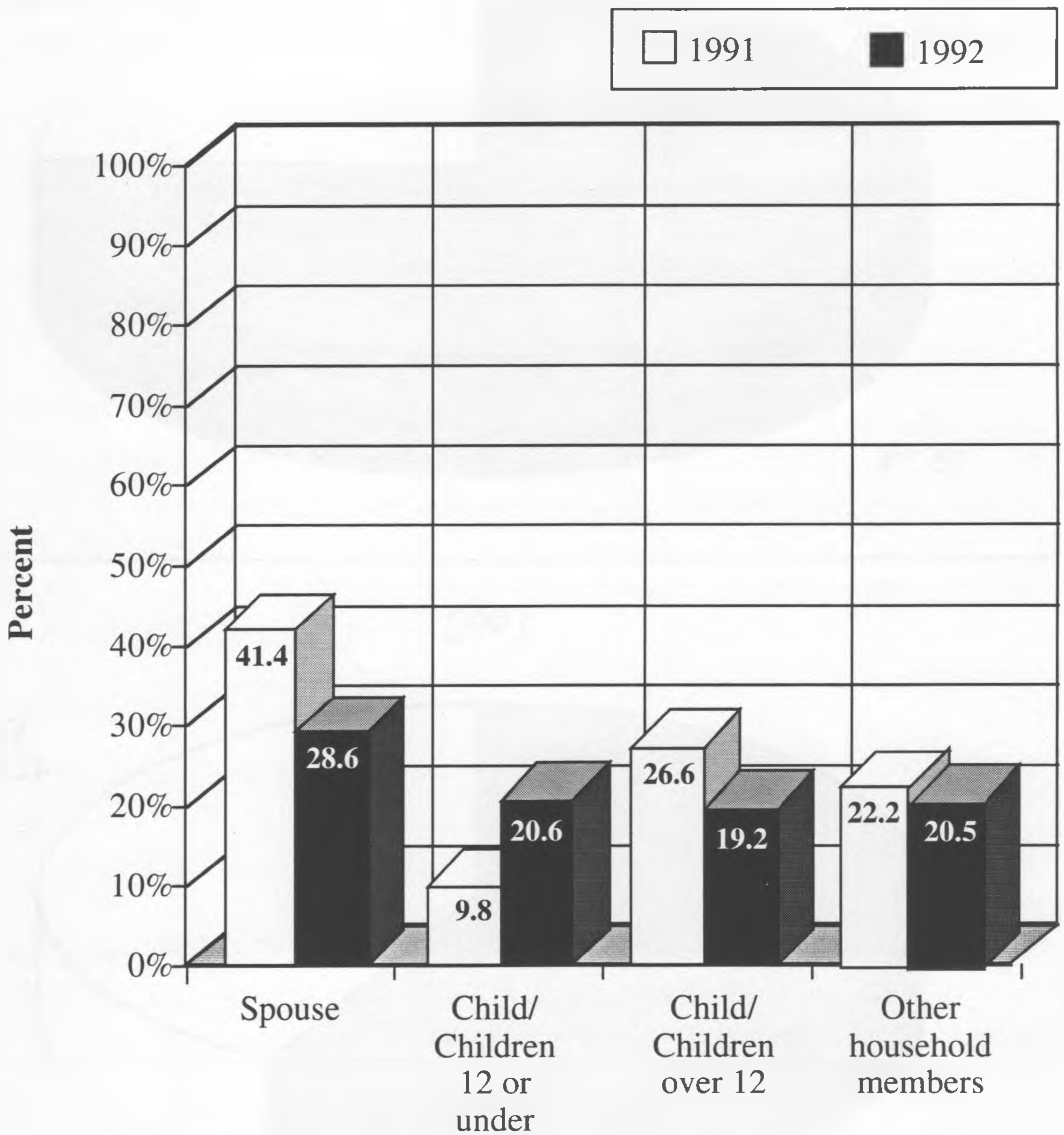
Comments regarding the Internet were also well distributed, with DELPHI, CompuServe, and GEnie each representing close to 30% of the comments.

In terms of ease of use and navigation, the use of a GUI was commented on fairly evenly across the board among all the services except AOL. Users of AOL tended to comment very little on the interface itself.

In all, 2500 users provided written comments. A great many of the comments were directed toward particular online system operators. These system specific comments were left up to the participating companies to use as they see fit. In the following section, the more general comments offered in response to each of the open-ended questions are characterized, and some recurrent themes within the responses to each question are identified and illustrated with a representative sampling of the verbatim comments.

Figure 15

Other Family Members Who Use Online Services Regularly
(% of respondents indicating use by other family members)



Ease of Use and Navigation

Consistent and meaningful analysis of the qualitative comments regarding navigation and ease of use on the various systems is made difficult due to the range of user experience and expertise among users responding to the survey – from the complete novice to the expert programmer. A great many comments referred to the interface and navigational environment of specific systems, and therefore have been omitted from those listed in the samplings provided, or the identities of the systems have been masked. Nonetheless, the most clearly evident themes to emerge from the answers to this question were:

- Interface: graphical vs. text
- User support and online help
- Different needs of different users

Interface: Graphical vs. Text

The majority of responses concerned with this issue reflected a strong user preference for graphical user interfaces. There seems to be more overwhelming sentiment in favor of GUIs than was expressed in last year's survey.

> "I think that a graphical or menu driven interface is vastly superior to the command line method of accessing a service, especially for novice users."

> "This day and age, every on-line commercial service should offer a graphical user interface."

> "I have found menu driven graphic interface services to be the easiest to use and the most user friendly."

> "I would like to see a "hot" key menu implemented versus the current pathing commands."

"Easy navigation is important but can be achieved with text based interface software. Graphics interfaces are too resource intensive..."

"Command interfaces are way too cryptic – graphic interfaces are better."

User Support and Online Help

As was the case in last year's comments, user support and online help came in for plenty of criticism, though the proportion of positive comments suggests that system operators have improved their performance with users in this area.

"User support is generally good but the navigation commands often make it difficult to find the right areas for help."

"User support is usually pretty good, although I do have to wait several days for an answer from customer service on some on-line services."

"I have found the on-line help too often to be incomplete, not listing the latest features."

"User support is frequently (almost always) less than responsive to user problems! Telephone access is impossible (busy signals), e-mail support and related responses never fully address the problem reported; much less get the problem corrected!"

"User support is an essential element in my choosing an on-line service. For me if there is no one around, by voice or on-line, to help me, I am not going to stick with that service at all. I can go elsewhere for assistance and the services that I am seeking."

"If I knew how to use this service more efficiently I would be happy to use it a lot more. I don't know how to go about learning either."

Different Needs of Different Users

Many users pointed out the fact that sophisticated users and novices have much different needs for help in navigating cyberspace, yet online systems usually adopt a "one map fits all" approach to showing the way.

> "For a programmer, navigating is never a problem; to a divorced mom who wants a little company, it's a major pain."

> "I have no problem with the ease of use or the navigation because I am a computer professional, but I can see how the ease of use and the navigation would be a problem if I was not."

> "As a blind user, the hardest thing is downloading material that works with speech. Some of it does, some of it does not. Most of the software that I download either has graphics or can be used with speech by reading the whole screen. I do not have graphics on my computer and would like to get more stuff to use with speech."

Cost

The aspect of cost and pricing generated a very large number of responses, varying from general complaints to specific suggestions. The main points raised in the comments fell under the following subcategories:

- Flat rate vs. hourly rate
- Long distance connection cost
- Cost in terms of baud rate
- Cost in terms of navigation
- Costs not clearly defined
- Satisfaction with particular pricing approaches

Flat Rate vs. Hourly Rate

A large number of the responses expressed a preference for a flat rate as opposed to an hourly or minute rate. Some users also expressed their inability to understand the gap existing between the costs of the services offering a flat rate and those like CompuServe whose rates vary according to the type of service used. Many users commented on the prohibitive costs of some services employing usage-based pricing. Aside from being seen as too high, the hourly rates were described as a being a source of stress and anxiety for many users, in some cases even affecting the desire to use a particular service at all. Again, this sentiment appears less balanced by usage proponents than in the previous year's comments.

> "The only long term viable pricing structure is flat rate pricing. I will switch to any service which offers flat rate just to support them."

> "I do not like connect charges, flat monthly rate is essential to me!"

> "Flat fees seem to be a better way to go."

> "I prefer flat rate plans. I hate having to beat the clock!"

> "Basic service costs are good. Anything beyond that can be a bit expensive."

> "Per minute costs seem too high."

Long Distance Connection Costs

Many users are dissatisfied with having to pay connection costs in addition to the service costs. Although the number of geographic coverage of system operator and public data networks has continued to expand, clearly many users are still outside the reach of a local access point. They complain, not surprisingly, about having to access services using a long distance call. Here are some of their comments:

> "Costs are too high. I live in a remote, ultra-rural area and have to pay long distance to access the service. To have connect fees and charges for premium services really increases my costs."

"Cost of the service itself is generally reasonable. My biggest cost "choker" is the phone bill."

"Costs seem reasonable to me. My biggest problem is cost of phone calls. Everything is long distance for me. Needs to be lower."

"[The service's] prices are great if you live in the United States. Why am I punished with an outrageous connect fee that surpasses the actual cost of using the service just because I live a few miles north of the American border?'

"The most frustrating thing about using online services is living in a place that doesn't have a local access number."

<u>Costs in Terms of Baud Rate</u>

The fact that services increase cost for accessing at a faster baud rate represents a problem for many users. The comments expressing dissatisfaction with the increased cost of higher baud rates ranged from complaints about the inefficiency of accessing a service at 2400 bps to inquiries as to the reason for charging additionally for a service (9600 bps) that will eventually represent the norm. Although vendors may not agree on the merits of the argument, this strong user sentiment must be recognized.

"9600 baud cost is too high after hours. It should be more in line with the 2400 price."

"There should be no extra charge for connecting at 9600 baud."

"I particularly resent paying a premium for having a faster modem."

"In this day and age a surcharge for 9600 baud vs 2400 is uncalled for."

"The 9600 baud surcharge is ridiculous. I think it is a horrible way to demand more money from the power users (and becoming the normal user very quickly)."

"I believe that higher speed services are overpriced (eg 9600 service)."

Navigation as a Factor in Cost

Navigation is an important issue when it comes to cost. For many users, navigation and the process of becoming familiar with a particular system is extremely time-consuming. On the systems with time-based charges, the acclimation period is costly. Most users expressed a need for some changes in the interface in order to minimize time spent online.

"For a new user like myself the costs appear initially extraordinary because one spends a fair sum attempting to negotiate the labyrinths of the BBS without feeling any benefits!"
"$12/hour is too expensive for chatting, for getting through mazes to get to the next useful part of the conference or help screen or informational material."

"As a relative novice to computer use, I have found your service somewhat confusing. The text interface is somewhat clumsy for a novice, but the price, especially since I plan to take advantage of your 20/20 plan, is very attractive. I would, however, be willing to pay a somewhat higher fee for a more user friendly interface."

"The first month, I spent 100 dollars exploring the service. It takes hours to find your way around."

Costs not Clearly Defined

There were a number of recurring comments regarding billing and the notification of costs on certain systems. Many users remain unaware of specific costs for specific services; for some, this has manifested itself in surprisingly large bills at the end of the month. These are some of the comments:

"My suggestion would be to disclose charges as clearly as possible."

"The costs are not clearly stated for different services."

"I think you have designed your billing methods to confuse people. You should have a way that I can see how many "minutes" I am currently being charged for."

"More cost control information (eg running totals, detailed billing is needed)."

"I find the costs to be "sneaky" I have to spend 10 minutes looking in a catalog how much this is going to cost. Usually I still don't know."

Satisfaction

A significant number of comments regarding cost expressed a good level of satisfaction. The majority of these positive comments were either centered on one system's pricing which generated many positive comments, or on the cost of another system which had recently introduced a flat-rate basic service.

"I am satisfied with the cost of [system's] basic service. I think that I really get my money's worth, plus some."

"[System] is an excellent opportunity to talk and make friends around the nation. For only $1/hour."

"[System] prices are the most reasonable. All too many services charge too much and offer little."

"[System] has an excellent pricing structure. [Pricing plan] is right up my alley."

Hardware/Software Support

As was the case in last year's survey, the responses regarding hardware/ software support were generally positive and reflect the users' satisfaction with these services. For many users, hardware and software support represents an important (if not the main) reason for using a particular system.

> "Great ! This is the biggest reason I'm here and that I plan to stay."

There are, however, some patterns of recurring comments which fall into the following subcategories:

- Cost of obtaining support
- Speed of access and support responsiveness
- System compatibility
- Support services' ease of use/interface

Within each of these subcategories there are some general patterns of either positive or negative responses that seem to be associated specifically with this category.

Cost of Obtaining Support:

For most users, the support services provided on consumer online systems is seen as too costly. As some users stated:

> "I like the support that I find online. My only complaint is the cost of accessing the support."

> "The support is excellent both from specialized forums and other users. Unfortunately, the cost of accessing the information is prohibitive. Ideally, I would access hardware and software forums related to my position as a computer specialist on a daily basis if I were not charged for connect time."

Speed of Access and Support Responsiveness:

Modem speed Many users complain that the service should be upgraded to 9600 baud modem speed in order to facilitate information access.

> "I am mainly frustrated with the slow speed of modems."

> "I think that you are falling behind not offering 9600 baud access. Your interface is very clean, although a little difficult to read and your

commitment to a graphical approach is forward-looking. None of this, however, is all that impressive at 2400 baud...."

Responsiveness of support providers Many users praise the speed and efficiency with which the sysops respond to their questions. They find it to be a nice change from long waiting periods requesting help on the phone.

"This is one of the best areas. The ability to pick the brains off the experts without hanging on the phone for hours listening to bad music is well worth the price of admission."

"My primary use of online services is for support of hardware/software for my clients. Often, it is impossible to get a response from a technical support line, yet an answer to a Forum message is very quick".

System Compatibility

A significant number of users complained that most hardware/software support is centered around IBM PC-compatibles and failed to focus on other systems. Those with PC related questions note positive and efficient responses to their problems.

"Too many online services are PC oriented (DOS machines) and don't take into account the millions of non-IBM type computers that are in use (Mac, Amiga, Atari, Unix, etc)."

"PC hardware/software support is good on most services."

Support Services' Ease of Use/Interface

Many users made some suggestions on how to improve the way in which one accesses the support information of some of the systems. A few expressed their anxiety about the technical difficulties faced when using support services as a beginner.

"There should be a way to track questions, so that if you leave a question and forget exactly the heading under which it was left you can actually find it again!"

"Some kind of menued online help is needed!"

"Useful for second-level support by/for people who already know their way around computers, communications and online services. Not very good for basic/introductory purposes: It's the old problem of no job, no experience; no experience, no job."

Services and Application

Qualitative comments on services and applications range from praise of various services to suggestions for specific changes. The comments generally fall into these sub-categories:

- Variety of services offered and accessing the information
- Reference services
- Cost of applications and services
- Internet related aspects

<u>Variety</u>

Many users expressed a sense of excitement and anxiety regarding the wide variety of information made available to them online. The most important problem expressed in terms of variety was the inability or difficulty of accessing specific information. As some users stated:

"The information is there; getting at it is the problem."

The fact that the information is broad and varied is closely linked to the interface for accessing the information. Many users expressed the desire for more visual cues assisting them to find the type of information suited to them. As one user expressed it:

"Most of the types of services and applications are so buried under menus they are impossible to find. I feel as though I'm missing a lot but don't want to spend several hours and dollars on line trying to find them."

On the other hand, as one user said:

> "The variety of services is the reason I put up with the user interface and cost of using the system."

Reference Services

Many users expressed their interest in reference-oriented services online and quite a few made suggestions for additional services of this type to be made available. The need for research and educational services came up often in the qualitative comments on services and applications.

> "...I would jump in a minute at a service that offered broad access to reference materials [of] as wide a range as possible. Give me quicker access to more information than I can get at the branch library and I'll sign up."

> "There are not enough different databases at low costs. I want access to public and private library catalogs, worldwide television and radio schedules with descriptions and reviews – full text purchase access to books and periodicals from publishers..."

> "Need for more advanced research and educational facilities. Online encyclopedias are very limited. Access to CD-ROMs would be nice."

> "How about more encyclopedias and other reference books."

> "The greatest deficiency I've found is reasonably priced access to research and statistical data."

> "I would like to see more services for research. Access to Library of Congress information databases. I would like to "customize" my accessability to the services. I don't want to know about the singles conference."

Interactive Multimedia/Graphic Interface

In the large variety of comments related to services and applications, quite a few comments expressed the desire for increasingly interactive services. The users demand more control over their access to information. Some mentioned interactivity in relation to reference information services, others simply in relation to a more graphically oriented interface which in turn would give the user more control. Here are some of the comments:

> "On-line service needs to be made more flexible. My ideal of what on-line needs to offer is multimedia information."

> "One thing I would like to see is graphical on-line services, similar to The Sierra Network."

> "I would like to see this system more graphic friendly to the users that use other communication software."

> "I'd like to see educational and interactive services expanded. Also graphic and multimedia aspects added to real time communications with other users."

Cost of Services and Applications

Cost remains the eternal complaint for many users. In terms of services and applications, a large number of users expressed their need to assess the worth of a particular service in terms of its cost:

> "Speed and cost are again the limiting factors. The services are great if you can afford them."

> "I would like to be able to access more at flat rate. I spend more than I should: over $250/month."

> "I think they are great but far too expensive."

"The primary issue becomes whether the cost of obtaining the information matches the value of that information to me."

"I feel there should be more interactive *basic* services [italics added]. I don't see this happening anywhere you should be able to ask questions and get a response online."

Internet Access

Access to the Internet is an important issue in the qualitative comments about services and applications. Although apparent in last year's written responses, its profile has risen considerably. Users this year whose comments were related to Internet access were divided into two general groups: those who expressed satisfaction at having recently gained access to the Internet, and those who expressed the need for access:

"[System] takes the load as far as Internet is concerned and leaves the others in its water."

"I love the Internet access."

"Internet access is important."

"Internet is the most useful service for me."

"[System] recently introduced Internet access for its users. Why this important feature is missing from [another system] escapes my comprehension."

"Not enough services have full Internet access."

Other

It is difficult to extract trends and general themes from the responses generated by users in the question referring to "other comments." These comments are extremely general and varied. However, they can be divided into three general categories:

- Praise
- Complaints, and
- Suggestions

In the first type, the users took the opportunity to express their various feelings of satisfaction for the services. In the second type, many users simply decided to vent their complaints. A large number of them seemed to have confused the source of the survey for the actual system they were using. The third type of comments falls into suggestion type responses where users express some ideas for changes in the services. Here are representative comments extracted form the file according to the type of responses:

<u>Praise</u>

> "I am very pleased with online communication. I am new to it and am still learning my way around in these services. The possibility of communicating with others of similar interests, helpful tips, etc., is tremendous. This is the way to go."

> "In all, I'm very happy with the services...especially all of the E-mail networks which are supported. A directory of online files in each forum which is always in the same location zipped so as to be able to be viewed offline and reasonably up to date would be the feature I desire most."

> "Online services are like a multi-million volume library in the comfort of my own home. It opens the whole world to the user. I spend lots of money on online services but it is worth every penny!"

> "Online is great. It's a great value in my job (I do computer support for a newspaper newsroom). I also correspond regularly with my daughters who are at college 2,500 miles away, via the [System] Internet Gateway."

> Sure seems more cerebral than tvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv"

"Thanks for the survey. I really like on-line services and want them to grow in size (but not in cost) so that more people can be afforded this opportunity. I think this is the communicative link of the future – it's the way we ought to communicate around the country and around the globe. Please keep the on-line networks strong and growing. It's our future that depends upon it!!!! Hope you guys agree – and I hope to see improvements in the future! Let's get on-line access for schools, local governments, politicians (limited!) So we can all learn from each other!"

Complaints

"Charging for time (cost per minute) for an online service is a major turn-off for the majority of small computer users who in turn represent the majority of the information consumption in the US."

"I think online services will continue to have a restricted user base until they become easier to use."

"I'm much more likely to use a service that does everything possible to reduce my online costs. I don't mind paying for information but when I end up paying for mail that the system has lost, or for time spent finding information when I know exactly what I want, I get mad."

"None of the services seem very good at their own customer support if having problems. No one answers the phone when you call and some have very limited support hours."

"I enjoy MAC computers tremendously and technology in general. I am always reminded/amazed at how difficult this modem stuff is. We've put men on the moon, but making a modem connection is out of this world when it comes to ease of use. I figured that by the time I was interested in online services all of this stuff would be hashed out. 75 char. line limits. CR and LF or just CR. Local echo. 9600bps and up need hardware handshaking cable. Second Sight BBS software needs a special DCD wire that should be in every cable. AutoClock needs setup string ATB1X4 but Second Sight need &C1 in there. Microphone II needs something else. This should be much easier for the consumer. Me."

"...tonight I learned that my daughter (11) has been getting people on the talk-areas asking her questions like "Are you developed yet?" and "what is your phone number?" and guys, I don't need that. Get cracking on spending the money to monitor the service and the flow. This is not the phone company. It's a private-line group of people who freely associate. And my family is no longer part of the service."

"New topic: I am very concerned about access to this new world for those who cannot afford it – usually just those people who would be most helped by the resources, services, and freedom from (social or physical) constraints."

Suggestions

"Make things easier, more graphical, more automated, cheaper with more information online. On Sundays, I'd like to be able to get as much news and information as in the Sunday paper."

"The ideal service would be a gateway to all of the other services and bulletin boards with a windows Mac like interface and a single hourly rate."

"[System] needs to expand local telephone access in the areas less densely populated (e.g. Oregon)."

"I believe that the deaf/blind community should have very low cost access to all of the character based systems in the US."

"Expand, expand, expand! Make these services available to everyone."

"Help the consumer use the tool properly so that both the vendor and the user can get the most out of the service."

"However, I DO wish that national online services that insist on an 18-or-older age requirement for the account holder would stop being so preoccupied with being "family" oriented, to the detriment of reasonable and mature discussion on serious topics."

"I am a fan of these services. I don't utilize them near their potential. Offer regional classes as many software packages do. Educate the users better ways to use the system. Both sides will be rewarded."

"I believe the following areas need to be dealt with to significantly improve the importance of online services: (1) increase the link between these services - ideally through the internet, although I know there are restrictions on commercial uses of such services. (ii) increase significantly the proportion of users who are not computer people – after all, there's a lot more of them about. You'll have to do some inventive marketing, as I'm sure you realize, but it could make online activities so much richer."

"I don't know how many new users quit in the first three months, but I believe that online services are the wave of the future and the company that makes it really user friendly and not a hackers paradise, will be the eventual winner."

"I just wish that online services got more involved in the education of our young people through the schools. Going online is such a fantastic use of the computer and it is going to be more and more valuable as more and more people use computers, unless the online people price themselves out of the market. There is so much to learn from going online, I hope that some of the services will see fit to begin to offer the schools special package rates for teaching students how to use the online services."

"K-12 connectivity needs to be promoted (sponsored?) We need the virtual classroom. We need privacy and first amendment rights clearly extended to electronic communications. We need access to those assets paid for with dollars."

"The most desperately needed service, is one that is a true cyberspace; a service charging a flat monthly rate, and allowing users to set up their own sub-systems within the network, design their own front end software (if any), and choose the content of their sub-systems. This would allow an evolving, continuously improving environment, while proving quite profitable to the corporation that provides the network."

"The on-line service is an open-ended media that can, with advances in computing, become the most exciting medium of all. First, let's keep the censors, the mind-police and the GOV out of controlling us! Second never lose touch with who the real market is."

1992 Consumer Online Survey Questions and Results

1) How long have you been using online services?

1991	1992	National	Regional	
28.78%	36.50%	36.93%	29.91%	a) Less than one year
36.98%	30.75%	30.12%	40.43%	b) 1-3 years
34.00%	32.75%	32.95%	29.67%	c) > 3 years

2) How frequently do you use an online service?

1991	1992	National	Regional	
22.16%	30.74%	29.76%	45.86%	a) At least once a day
39.43%	40.62%	40.95%	35.58%	b) Several times each week
32.89%	17.51%	17.71%	14.30%	c) Once a week, or a few times each month
4.72%	13.66%	14.33%	3.31%	d) Less frequently than once a month.

3) What percentage of your online use is for business and personal use?

1991	1992	National	Regional	
	11.44%	11.51%	10.28%	a) More than 50% for business use
	64.79%	64.27%	72.81%	b) More than 50% for personal use
	16.22%	16.28%	15.25%	c) Equal use between business and personal use

4) Who is paying your online services fees?

1991	1992	National	Regional	
	86.40%	86.92%	75.52%	a) You pay personally
	4.73%	4.28%	14.33%	b) Your employer pays all fees
	7.97%	8.03%	6.76%	c) You pay some and your employer pays some of the fees

4a) What is the size of your company?(of those answering employers pay all or some of fees)

1991	1992	National	Regional	
	45.88%	46.51%	33.96%	a) More than 50 employees
	25.14%	24.98%	28.30%	b) Less than 50 employees
	28.98%	28.52%	37.74%	c) Self employed

APPENDIX A

1992 Consumer Online Survey Questions and Results

5) Do you use any other online services besides this one?

1991	1992	National	Regional	
67.75%	61.76%	61.75%	61.94%	a) Yes
31.16%	37.98%	38.21%	34.40%	b) No

5a) How many other services like this one are you using?

1991	1992	National	Regional	
	45.81%	47.03%	31.19%	a) 1 more
	28.83%	29.39%	22.11%	b) 2 more
	10.83%	10.43%	15.51%	c) 3 more
	14.54%	13.15%	31.19%	d) 4 or more

5b) Which of the following describe your reasons for using more than one online service? Choose all that apply.

1991	1992	National	Regional	
63.17%	63.51%	63.56%	62.87%	a) No one service provides all the features I want to see
45.14%	48.81%	51.65%	14.85%	b) The cost of some features is cheaper on other services.
45.34%	49.51%	51.06%	30.86%	c) Some services are easier, or more fun to use, than others.

6) Do you use bulletin boards (BBS) in addition to commercial services such as the one you are using now? Bulletin boards are defined as online services that are usually free to the user and are local.

1991	1992	National	Regional	
	65.80%	65.61%	68.79%	a) Yes
	31.80%	32.07%	27.54%	b) No
	2.40%	2.32%	3.66%	Did not answer

6a) Which of the following reasons best describe why your using bulletin boards. Choose all that apply.

1991	1992	National	Regional	
	40.75%	41.00%	36.88%	a) Because they are free
	37.32%	38.10%	25.41%	b) Because they provide shareware and freeware
	34.32%	34.39%	33.22%	c) To communicate with the other users on the board
	20.72%	21.26%	12.40%	d) Because the board covers my work interest or is provided by my employer

1992 Consumer Online Survey Questions and Results

7) Do you intend to use any more online services, in addition to what you already use?

1991	1992	National	Regional	
42.92%	44.37%	43.43%	58.75%	a) Yes
54.73%	50.85%	51.78%	36.52%	b) No
	4.78%	4.78%	4.73%	Did not answer

8) Please choose the three online applications you use the most.

1991	1992	National	Regional	
	21.74%	22.94%	8.98%	a) Obtaining current financial information
	39.38%	40.81%	17.38%	b) Getting help and other information on using your PC and software
	13.60%	13.39%	16.78%	c) Playing games
	33.12%	35.02%	12.88%	d) Obtaining current general news
	10.50%	10.85%	5.20%	e) Using educational services for my children
	46.26%	46.77%	38.30%	f) Communicating with others who share similar interests and hobbies
	51.91%	54.35%	14.30%	g) Downloading software
	37.26%	37.88%	27.78%	h) Sending and receiving electronic messages with friends and family
	19.80%	21.49%	1.77%	i) Obtaining travel information and making reservations
	20.57%	22.14%	3.90%	j) Obtaining product information and purchasing products

9) Do other members of your family use online services regularly, that is at least a few times a month?

1991	1992	National	Regional	
24.26%	42.25%	42.92%	32.74%	a) Yes
75.67%	57.32%	57.00%	61.94%	b) No

9a) Which other family members use online services regularly? (Of those who answered yes to #9)

1991	1992	National	Regional	
41.35%	28.57%	29.73%	12.06%	a) Spouse
9.83%	20.56%	21.67%	4.73%	b) Child or children age 12 or under
26.61%	19.21%	19.71%	12.06%	c) Child or children over age 12.
22.21%	20.52%	21.16%	11.47%	d) Other household members