Internet Service Providers:
A Method for Selection

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Reviewed Article

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Introduction

The Internet and the World Wide Web (WWW) can most accurately be described as a network of networks. Computers worldwide are individually connected to local area networks (LAN) within institutions. These LANs are then connected by telephone with each other - hence "network of networks." Using a computer and modem or a network terminal, a person can communicate with people on any of the Internet networks by typing electronic messages. A person can also login to a variety of computer services that reside on the Internet.

In order to "surf the net", an individual needs to contract with a company that will provide a "gateway" to the Internet. These companies are called Internet Service Providers or ISPs for short. These ISPs furnish the Internet access and often the software necessary to connect.

Purpose

Selecting the best ISP involves understanding the specialized terminology, identifying the options really needed, and avoiding unwanted hidden charges. New ISPs appear and disappear regularly. CompuServe and the Microsoft Network, once major ISPs have either "faded away or morphed into something different" (Willmott, 1998, p. 34). The purpose of this article is to provide the reader with the tools to competently evaluate and select the optimal ISP for their needs.

Review of Literature

Several of the ISPs have an interesting history. Earthlink was begun about five years ago in the Los Angles area. Today they have joined forces with Sprint and are consider one of the top Internet access providers. They provide unlimited Internet access packages, networking help, Web hosting services, e-commerce, and the latest business news (Earthlink, 1999).

Mindspring was started in 1994 by Charles Brewer in Louisville. Frustrated by attempts to get on-line he realized "the need for a software package that installed easily and configured itself, for a graphical front end that made the software easy to use, for a technical support staff that was accessible, friendly and competent, and for a reliable connection" (About Us, 1999, p. 1). In November, 1994, ITC Holding invested in Mindspring and in March 1996, Mindspring became a public company traded on the NASDAQ (About Us, 1999).

Prodigy began back in 1984 when IBM and Sears signed a partnership agreement. The original name, TRINTEX, was changed to Prodigy in June of 1988 and was launched into the California markets (Prodigy, 1999). In 1990, Prodigy was launched nationally and in 1993 added an "e-mail gateway, its first link of any kind to the Internet" (Prodigy, 1999, p. 2). Since that time Prodigy has been a leader in Windows-based software, online shopping, news coverage, unlimited access to the WWW, personal web pages, HTML programming, and a new user interface system (Prodigy, 1999).

Table One presents a comparison of the nations largest ISPs. It is important to compare their costs and services to the many local ISPs that are appearing in most regions. These six ISPs are: AT&T WorldNet; MCI Internet; EarthLink; MindSpring; Prodigy Internet; and America Online.

Evaluation criteria for the comparison included: basic monthly fees; number of hours; charge for extra hours; available options; setup fees; and technical support. Notice how similar these ISPs appear. Other factors, such as a local dial-up phone number in your area and specialized options such as newsgroups and file transfers may be the deciding factor in selecting the ISP best suited to your needs.

Significance

The Internet is the world's largest library. Computers connected to the Internet normally make some of their files available to the public. As a result, the Internet is the world's largest storehouse of information. It is, in essence, the world's first international forum with very few restrictions on who may participate. For the first time in human history, masses of people can communicate with each other without (almost) censorship across political and physical boundaries. Wealth, social standing, clothes, culture, and other barriers to communication become less important over the Internet. Thus, it may become known as the great equalizer of the 21st century.

Today, the Internet includes more than 5,000 regional, state, federal, university and corporate networks. Also included are networks in Canada, Europe, Japan, Australian, Central America and South America. There are more than 750,000 computers and workstations directly connected to the Internet, with millions of users. Utilization continues to increase at a phenomenal rate. During the past three years, the number of web sites has increased from 10,000 to 650,000 (Gray, 1997). This rate of growth is expected to continue, with no projected end in sight.

Individuals and organizations have created hundreds of thousands of web sites or "home pages". These sites

serve a variety of functions. Some focus on retail shopping, others may promote a cause, distribute information, or provide business services. Using WWW graphical search tools (called Browsers), the user can search for, and connect to, mountains of information, photos, and graphic images. "Surfing the Net" has grown at an explosive rate and new surfers are logging on daily.

Method

Most individuals must contract with an Internet Service Provider (ISP) who will provide the necessary software to connect to their hardware. Communication is normally through a dial-up telephone connection and a modem. One of the quickest ways to access the Internet is with America Online (AOL). You insert the CD or floppy disk and away you go. AOL, however, is more than a basic ISP. It offers many "bells and whistles" that may not be needed if you are an experienced surfer. If, however, these extras do appeal and have potential value, AOL may be the ISP for you. Giants such as AOL may have some drawbacks. AOL, for example, has experienced service problems over the years. There is a danger of encountering busy signals during prime time and receiving electronic junk mail. Subscribers to the large ISPs also seem to be more frequent targets of Internet scams and frauds. In addition, it may be difficult to cancel an ISP if you do not find their services appropriate or wish to move services. Therefore, a user should be aware of several important factors when considering the selection of an ISP.

Internet Service Provider Selection Criterion

In order to make an effective connection to the Web, the subscriber needs to select a Service Provider that meets their overall needs. An analysis of offerings and costs enables one to make a confident and well thought-out decision. "You don't really choose an ISP by price (alone), because most offer similar basic services and unlimited access for about $20 per month" (Willmott, 1998, p. 37).

Many local ISPs, not discussed in computer magazines, may be a better choice based on the users needs. An understanding of options such as *user ratio*, *local call*, and *baud rate* will help you make an informed decision. In addition, one may also wish to evaluate special features such as *guaranteed technical support*, *storage space* for personal web page, *fast modem access* at no additional charge, and *adequate e-mail addresses* for all family members. Also helpful is an understanding of the specialized technical terminology that is required to evaluate the various ISP offerings. Table Two presents terminology and services one should understand and consider when arriving at the most appropriate and cost effective provider.

Once the subscriber has decided which options are needed, they must then look at what the different ISPs offer. As one enters this highly competitive market, you may feel as though you're being asked to choose a long-distance telephone company. In fact, many long distance telephone companies are starting to offer ISP abilities, and include the billing on your telephone bill. It is not difficult to sign up with an ISP, they usually will walk you through the process. You do need to compare your alternatives. "To make a good decision, evaluate your needs. If you know people who subscribe to a particular ISP ask them for an evaluation. Then try to get a free trial connection. Most reputable ISPs are glad to give you a short free sample" (National Network of Libraries of Medicine, 1998, p. 4).

Conclusion

Industry analysts estimate Americans currently can take their pick from more than 1,400 ISPs (MCI Telecommunications, 1998). Before settling down with an Internet provider, check to see whether the company has experience and a reliable track record. Use the information presented in this article to conduct an analysis before signing up with an ISP. While conducting your comparison, be sure to compare "apples to apples" - don't compare no-frills, low speed service with a full-service, high-speed pro-

vider. Determine the differences in service levels. Consider the hidden costs of a no frill service with limited customer service and technical support. Inquire about hidden charges such as a browser software fee or a "connection" fee. Table Three is an Internet Service Provider Comparison Check List that will enable you to compare the technical benefits of local providers to the national giants. For many individuals a local phone number, a fast communication rate, E-mail ability, dependable access, and low costs are the most important considerations. The Internet and the World Wide Web offer many exciting and educational opportunities and makes them available at your finger's touch. Careful selection when choosing an ISP will maximize your options while minimizing your costs.

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Table 1. Comparison of Internet Service Providers

	AT&T Worldnet	MCI Internet	Earth Link	Mind Spring	Prodigy Internet	America Online
Phone Number	800-967-5363	800-550-0927	800-395-8425	800-719-4660	800-776-3449	800-827-6364
WWW Address	att.com/worldnet	mci.com	earthlink.net	mindspring.com	prodigy.com	aol.com
Basic Monthly Fee	19.95	19.95	19.95	19.95	19.95	21.95
Number of Hours	150	150	Unlimited	Unlimited	Unlimited	Unlimited
Extra Hour	0.99	0.99	n/a	n/a	n/a	n/a
Options	Yes	Yes	Yes	Yes	Yes	Yes
Setup Fee	None	None	$25	$25	None	None
Free Tech Support	Yes	Yes	Yes	Yes	Yes	Yes
24 Hrs/Day	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Important Technical Vocabulary and Services

Local Access -   indicates no long distance phone bills. Be sure to check if your area is covered.

Flat Rate   -   no hidden or unexpected fees. Be sure hourly charges, E-mail expenses, and Internet access fees are all included.

E-mail -   allows letters and files to be sent and received around the world; often in seconds, without postage or phone charges.

Telnet -   allows remote computer to computer connection.

FTP -   (File Transfer Protocol) allows the uploading and downloading of files from remote computers. Universities, libraries, governments, and personal providers make available mountains of information, on a vast array of subjects.

Internet Chat -   allows instantaneous and simultaneous conversations. Chat one on one or within groups from around the world, all displayed on your screen.

News Groups -   allows the reading of posts from over 15,000 news groups on the Internet. Whether your interests are business or personal, there is something for everyone.

WWW -   (World Wide Web) allows search and access to mountains of information, photo and graphic images, has caused an explosion in the use of the WEB. Retail shopping and other business applications are becoming prevalent.

Table 3. ISP Comparison Checklist

		ISP # 1	ISP # 2	ISP # 3
Company Name				
Local Phone #	Is it a free call?			
Max Speed	14.4 Kbps is poor, 28.8 is adequate			
	33.6 and 56 is much faster & more fun!			
Services	E-mail & Net Surfing are mimimums.			
	Free Technical Support?			
	Do they provide a Web "Browser"?			
User Ratio	This comparison (# of users per dial-in lines) provides insight to frustrating bottlenecks.			
	Wait times during peak periods?			
Fee Structure	Compare the various plans offered.			
	Many offer a free trial period.			
	Personal Web Page Space Included?			
	Discount if long distance phone carrier same as ISP?			
	Is there a Setup Fee?			