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COIN

The Emerging
Internet:
Executive Summary

Submitted For: Coin Inc. Research Committee
Submitted By: Jim Brisimitzis & Paul Kirchner
Date: December 11, 1998

Executive Summary

It was in our determination to begin to understand the Internet in its entirety. When we began our research we were faced with overwhelming amounts of information which we felt like we had to understand the world; in essence that's what we had to do. The Internet, also referred to as the World Wide Web (WWW), is a vast network of the world. We have termed it the "virtual marketplace" for the world, as the WWW knows no boundaries. This vast network is unique in that it has no legislation, no governance. To many it is a free-for-all with no limitations. Perhaps it will remain this way because of dissimilarities among nation leaders who each hold different agenda's. Nevertheless, the WWW has provided new opportunities to users of different capacities. A quote taken from the Financial Post Magazine CEO Annual 1998 stated the following about the role of CEO's and the Internet;

The Internet has preoccupied CEO's in different industries and companies to varying degrees. For some, the Internet is a force that increasingly rears its ugly head, a nemesis to be avoided as long as possible. For others, especially those in the high-tech and information based sectors, the Internet has become the basis for company transformation-whether they like it or not. (FPMagazine, CEO Annual 98)

Some businesses have seen the Internet as new opportunity to expand wealth and enter new markets. Others have utilized the vast capabilities of the WWW to redesign more traditional methods of doing businesses (i.e., marketing, distribution, sales, research, etc) into more efficient and effective tools of operations. These new operations have in turn helped businesses to streamline their cost structures while at the same time explore markets that they could not have before. Since the WWW knows no boundaries, the possibility of entering and profiting from new markets is enormous.

Consumers on the other hand have also profited from the Internet through many ways. From an E-Commerce (Electronic Commerce) perspective, they have been given

the capability to research and explore new products and services offered by manufactures around the world. They have also used the Internet as a communication tool to reach people across the world in mere seconds. Other capabilities include Internet conferencing, T.V and radio broadcast, voice transmission, researches and of course shopping on-line.

We have organized this summary around the topics we chose to investigate. Each subheading will introduce a new area of study and general depictions of what we have learned as a result of our research. It is important for us to state that this Executive Summary is a summary of the general research we have done. Due to the large nature of the Internet, we have not been able to fully encompass all that comprises this large network; therefore, we apologize if there is information that we may have missed over the course of our research.

Introduction to the Internet:

The Internet is a worldwide collection of interconnected networks. It is comprised of commercial users, business enterprises, government agencies and other organizations. The size of the Internet and its capacity is enormous; the Internet connects over 1 million networks worldwide with over 35,000,000 host servers in the world. The Internet is expected to expand to 180 million people by the year 2000.

The US military originally started the development of the Internet in the 1960's. The US government was attempting to create a networked system whereby computers could communicate with one another if an attack was made on their central computer. The system was tested in 1969 and was successful allowing two computers to communicate and effectively talk to one another, it became known as the Internet.

The government soon added a national computer network after the Internet became successful for the US military, research institutions, government agencies and

educational institution that connected to this computer system. Once the Internet was established more users joined in and commercialization of the net flourished.

When the World Wide Web (WWW) was developed in 1989 the Internet took off. The Internet's commercialization has now grown ten times its original size. The Internet now has become a vital link in communications and technology.

The Web is enormous and encompasses a vast array of networks and resources. The WWW use is doubling every 5 months and commercial activity through the Web has increased dramatically. Almost all companies now have a Web site; in June of 1995 there was in 1 in every 270 machines on the net is a Web server. The number is probably even greater than it is now. Web TV has now been introduced and this will allow user's to access the Web through their television set. Video-conferencing can also be done through the web and on line conversations as well. Even radio stations are beginning to use the Web to broadcast their music and station information.

Other features of the Internet include telnet, gopher, e-mail and newsgroup. Each of these features are unique, however, it is the WWW that is the most popular and driving the Internet's integration.

Demographics:

Generally the Internet is growing by leaps and bounds. New users are introducing themselves to the versatility of the Internet everyday. What we have found is that there are approximately 78 to 100 million users currently on the Internet. Of those numbers there tends to be more men than women who are "surfing the Net". Surprisingly, our sources of research all claim that of the two genders, women are more likely to purchase products on line than men. The products most commonly purchased on-line are books, software, hardware, music tapes and CD's, and some cloths. Bigger priced items, we found, are more researched on the Net for follow-up purchasing. For instance, our sources have shown that new car buyers are more likely to research a new vehicle on the

Internet before they go ahead and visit their local dealership. Another increasing trend that we found is that there is more of a push by educational organizations to put students of all ages on the Internet for researching. Current signs of this are Bill Gate's continuous support of Internet in the classroom for learning children.

Of the people currently on the WWW, approximately 60% are men between the ages of 35 to 65 who have an estimated income between \$50,000 to \$80,000 dollars. They range from men who are single to men in families. From these users, we found that a large percentage gain accesses from both at home and at their work. Females are generally the same, however, some of our research showed that there are more single females on the Internet over females in families. In general, access to the Internet for the majority is from connections at home through an ISP (Independent Service Provider). However, consumers are being introduced to new access methods on the Internet like the common Internet Café. Web TV, and institutions of work or education.

Internet Statistics:

- 50 million people use the internet everyday in over 50 countries and by the year 2000 this could reach 180 million
- of those that use the internet 34% use it weekly, 34% use it more than once a week and 35% use it daily
- Furthermore to understand Internet penetration by age group some other statistics show interesting results; 2% of people are between 18 to 24, 37% are from 25 to 39 and 28% are from 40-54. Furthermore 55+ compromise 13% of the population who use the internet
- estimates predict that by the year 2000 internet commerce would compromise approximately 40% of all commerce world-wide Internet access is growing at an annual rate of 5-10 percent each month

Search Engines:

Often associated with the World Wide Web are search engines. Search engines are information resource links that assist users on the Web to find information and various Internet sites. There are specialty search engines; directory based search engines and a series of other search engine available. Search engines make money on the Internet by selling advertising on the Web. The problem with search engines is that there is a multitude of information available on the Internet, however, that information is difficult to find.

Consumer Uses:

Consumers have benefited from the Internet in similar ways as businesses have. E -mailing has changed the way people communicate to friends and family around the world. In many cases, people have been able to verbally communicate over the Internet through voice modems. Internet conferencing has also given consumers the ability to conference among friends and family through access to the Internet.

The WWW has given many new opportunities for consumers. On-line shopping is seen as a convenience item that allows consumer instant access to shopping sites, suppliers, and manufactures. This in turn frees up time for consumers and no longer requires them to physically go to a shopping center to buy their goods. Much of our research has predicted that in a short time consumers will be given more of an opportunity to shop on-line with stronger security. Currently, security over the Internet has been an issue not only for consumers but also for the entire community.

Business Uses:

The Internet has in many ways transformed businesses. It offers new ways of conducting business, communication, selling, marketing, and growth. The biggest impact

that the Internet has on businesses is its communication and marketing capability among others. Communicating over the Internet has allowed businesses to reduce the amount they used to spend on long distance telephone charges. Through E-mail, people within organizations have been able to communicate to others on an almost immediate basis. In addition to this, people can attach documents, files, or anything else to transmit to the receiver at a significantly lower cost. This in turn has enabled businesses to save on postage fees and long distance fax charges.

Since the Internet encompasses the whole world, businesses are in a position to market their products or services to potential buyers at a lower cost. In essence, the Internet has wiped out the more traditional market boundaries and given marketers a larger playing field in which to profit from. In addition, producers have also been able to access their consumers directly without having to go through the traditional distribution links. This translates into wider profit margins for producers and potentially lower costs for consumers.

In another respect, the Internet allows new businesses to establish virtual stores, which requires no physical store, inventory, or employees. These new types of businesses simply act as the middleman between producers that do not want direct contact with consumers and the consumers themselves. These new entrepreneurs profit from a significant reduction in their expenses and a better profit position.

Electronic Commerce:

By far the most effective tool that has helped facilitate company sales on the Internet is E-commerce. The transfer of money between individuals and companies electronically is known as electronic commerce. E-commerce doesn't involve cash exchange but rather the transferring of money via an electronic exchange system. The Internet has integrated E-commerce within its network.

E-commerce over the net generally functions in a similar manner as mail order purchasing. Customers, buy a product or service through their credit cards, while companies send the product to the intended customer. All commercial transactions through the Internet require a credit card number, expiry date, and authorization from the customer.

E-commerce over the Internet has changed the way consumers and businesses interact. It has changed the role of the intermediary and has effectively created a virtual market. The main purchases that are currently being bought through E-commerce include software, books, hardware, music, gifts, travel clothing, consumer electronics and food products. Generally, it is small items that make up the majority of sales in the business to consumer marketplace.

One could say that the Internet is a digital store where businesses can advertise their products while consumers can search for the best possible price. One only needs to look at the following statistics to see the phenomenal potential of E-commerce on the Internet.

- Internet related sales are projected to grow to 57.7% this year to an estimated 28.2 billion.
- Business to business commerce, accounted for 16 billion dollars accounting for 67.3% of the electronic marketplace's sales.
- By the year 2004 40% of all commerce will flow through the Internet business to business commerce on the Internet will reach 66 billion. Clearly E-commerce is growing on the internet and is changing the way we do business .

Trends of the Internet:

The trends of the Internet are ever changing. Our research has uncovered many significant trends that hold a true promise for the success of the Internet and WWW. The most likely trend that we have come across is the increase interest of businesses and consumers. Both parties have had some part in transforming the Internet into a virtual

marketplace to what it is today. Businesses have seen a more viable future on the Internet because of its speed potential and links to world markets. On the other hand, consumers have seen an increase in their use because of the many features and advantages the WWW offers them. In general, it is a teasing task to bring together all of the trends the Internet maybe experiencing because of its ever-changing state.

As discussed earlier, the strong trend for businesses has been to move some of their operations on-line to capture potential savings and profit. Most businesses have been keen on selling their products over the Internet because of the direct to customer advantage the WWW offers. By selling directly to the consumer, both the consumer and producer are saving on costly distribution or 'middle man' charges associated with more traditional market structures. As well, advertising on-line, although in many cases expensive, has been advantageous because of its international impact not limiting advertisers to specific markets.

Government Regulation of the Internet:

The original objective was to communicate without a central computer. Therefore, the ability to restrict its activity is almost impossible because there is no central command post to regulate it from. Furthermore, with its enormous size and dominance it is almost impossible to regulate, as it crosses international borders and cultures.

The regulation over the Internet is currently self regulated advisory boards, task forces and system administrators all are equally responsible for the implementation of rules and regulations. The US government the leader on the Internet wishes to support a self-regulating system.

Security Issues:

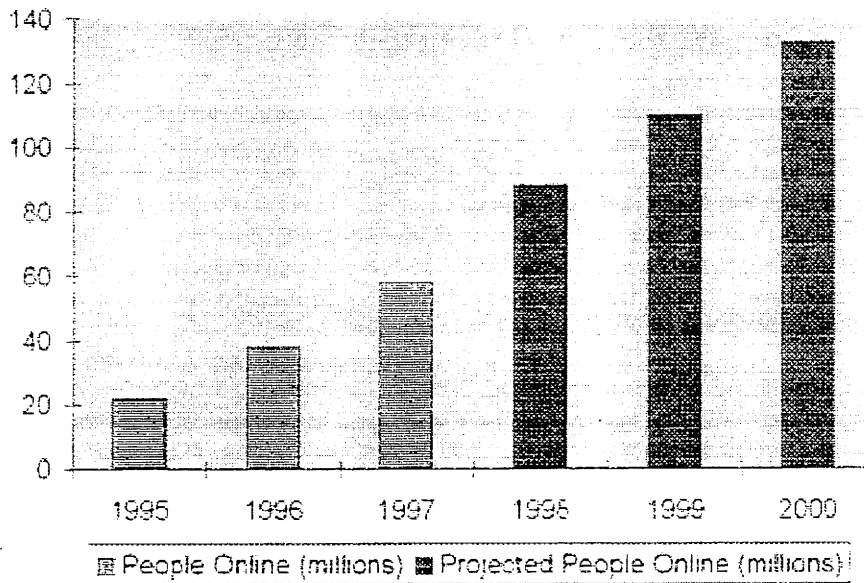
Currently, forty three percent of all commercial sites have been broken into. Therefore, consumers are reluctant to give their credit card numbers over the Internet. In

fact recent survey's have indicated that consumer's are using the 1-800 numbers available on commercial Web pages to access information and purchase products. Customers prefer this buying process because of the concern over privacy issues. There have been recent developments to increase security over the Internet, however, the regulating groups must market the Internet as a safe and effective to conduct business.

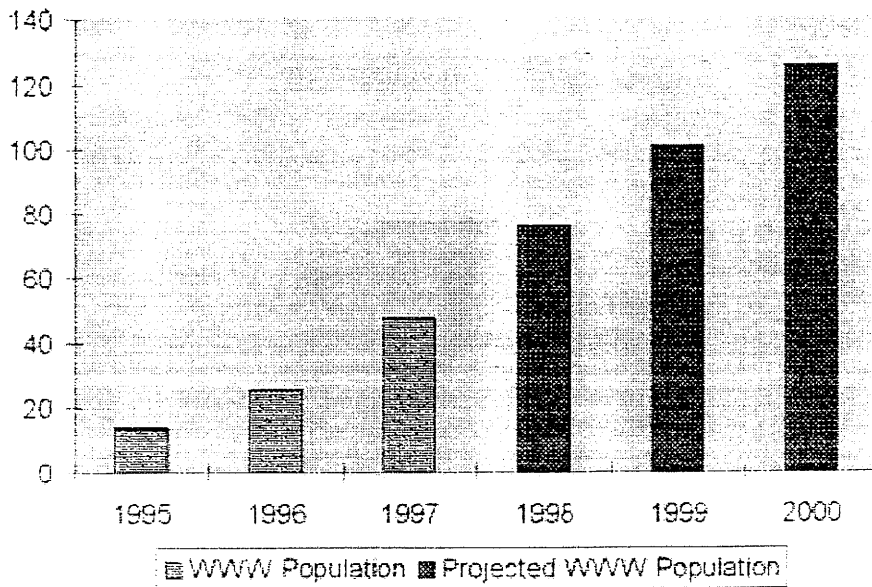
Supplementary Statistics:

The following statistics are taken from CommerceNet (www.commercenet.com) to illustrate the size and density of the Internet population.

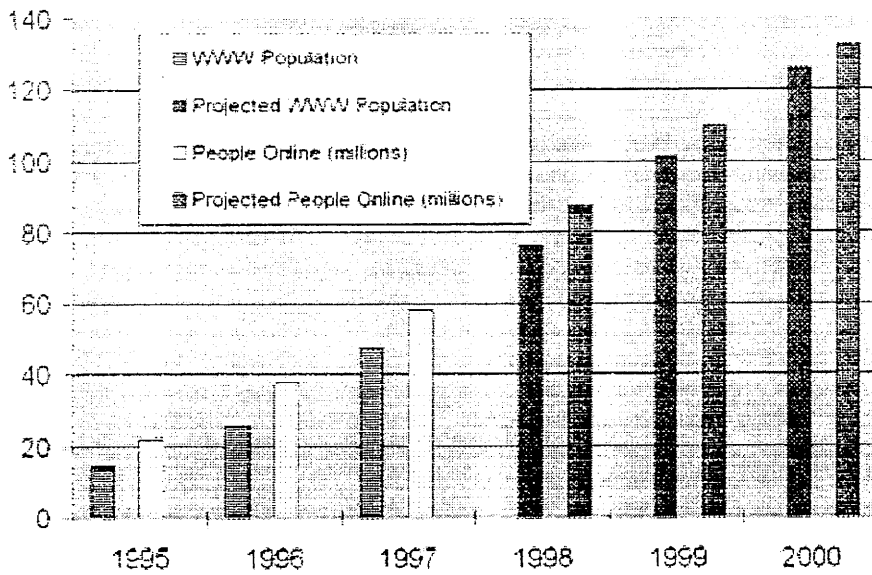
Internet Population Chart



World Wide Web Usage Chart

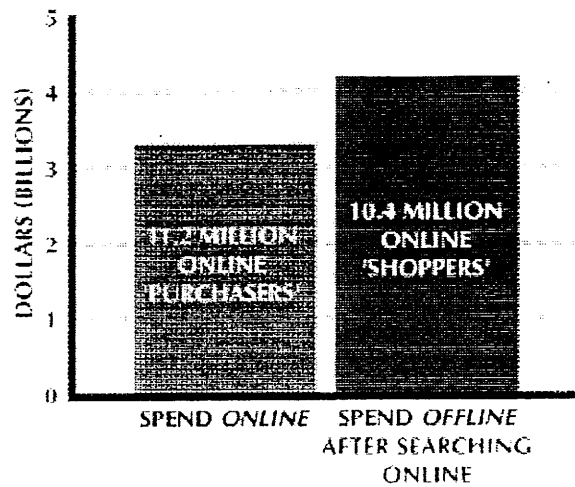


Combination of WWW and the Internet

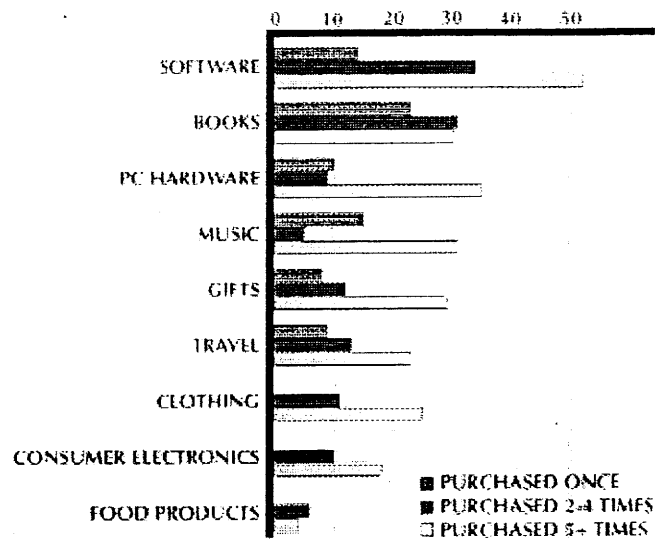


The following statistics are taken from Cyber dialogue (www.cyberdialogue.com) to illustrate the size and density of the Internet population.

OnLine/OffLine Spending



Products Purchased By Purchasing Frequency



The following statistics are taken from Headcount.com (www.headcount.com) to illustrate the size and density of the Internet population.

E-Commerce forecasts for The US	1998	2002
Users buying goods and services over the Web (M)	18.6	64.6
Year-end commerce revenue (in US M)	\$26,469.36	\$268,816.9

Source: IDC, *The Global Market Forecast for Internet Usage and Commerce* (June, 1998).

Leading E-commerce Purchase Categories		
Category	Millions*	Percent
Software	22	29%
Hardware	18	25
Books	16	23
Travel	12	16
Music	10	14
Clothing	7	10

According to Iconocast: The trend is definitely favoring non-technology items. Books and travel are growing fastest, each up four points from 19% and 12% respectively, compared to their last analysis. The fact that clothing is consistently showing up in fifth position bodes well for such new entrants as Pivot Rules, which recently launched its E-commerce site, Bluefly.com [Bluefly uses a catchy ad headline: "your fly is open"]. The results would have been stellar if more women were online -- Nielsen reports 18% of all female users bought clothing online, compared to 11% of male users.

Additional Reference Information

www.headcount.com

www.cyberdialogue.com

www.nua.com

<http://strategis.ic.gc.ca/>

www.statcan.ca

www.internet.com

<http://www.brint.com/Elecomm.htm>

http://info.isoc.org/guest/zakon/Internet/History/Brief_History_of_the_Internet

<http://www.dfc.org/>

www.commerce.net

Supplementary Information of Recent Articles

theglobe.com Signs 74 New Advertisers in 4th Quarter

[December 10, 1998]

Community site theglobe.com said it has signed 74 new advertisers since the fourth quarter began Oct. 4, including AT&T, American Express, Bell Atlantic, Kodak, Intuit, MBNA, Lego, Kellogg's, CNN/SI and Bank of America. Other new advertisers are TCI's @Home Network, U.S. Army, Navy, Hewlett Packard, Office Max, Philips Electronics, Hilton Hotels, Netscape and Hearst-HomeArts. "theglobe.com's differentiator continues to be our strength in attracting major mainstream advertisers," said Stephan Patemot, co-CEO of theglobe.com. "We believe that the marriage of content with member interaction is what advertisers are looking for to sell their products." theglobe.com claims 7.5 million users in the United States and abroad and offers outside and member content for 10 themes of interest (Art, Business, Entertainment, Life, Metro, News, Romance, Sports, Technology & Travel).

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Closing The Gap?

WEBDEX Led By Excite, MSN-HotMail, Infoseek

By [Steve Harmon](#)

Senior Investment Analyst

Internet.com

"Where Wall Street Meets The Web"

On a value per user basis this week's WEBDEX shows Yahoo (NASDAQ:YHOO) trading at a 4x premium to the average user value for the top 10 Web sites. Kind of puts things in context when you consider that even with a 27% rise since December 2, Infoseek's user base trades at 16% of Yahoo, and still a slight discount to the other peers. SEEK popped on the anticipated debut of its venture with new pal Disney (NYSE:DIS) called Go.com, which could be the litmus test for if the new DisneySeek makes sense. For despite doing the Mickey Mouse chant to the tune of \$430 million for 43% of SEEK, Disney's majority option rights take SEEK out of the mix from another buyer, we believe. In other words, Disney should consider its options here and ways to increase SEEK shareholder value.

Internet.com's	October	Dec 2	Dec 9	Dec 2	Dec 9	Percent
WEBDEX	Users	Market cap or PMV*	Market cap or PMV*	User	User	change
	(millions)	(millions)	(millions)	Value	Value	
Yahoo	25.21	\$19,448	\$19,528	\$771	\$775	0.4%
AOL.com*	24.38	\$4,035	\$4,200	\$165	\$172	4.1%
Microsoft.com*	20.55	\$2,650	\$2,750	\$129	\$134	3.8%
Lycos	18.31	\$2,332	\$2,332	\$127	\$127	0.0%
MSN.com/Hotmail*	17.84	\$2,500	\$2,750	\$140	\$154	10.0%
Netscape.com*	15.71	\$2,350	\$2,350	\$150	\$150	0.0%
Excite	15.52	\$2,548	\$2,889	\$164	\$186	13.4%
GeoCities	14.87	\$1,034	\$1,115	\$70	\$75	7.8%
AltaVista	11.13	\$750	\$700	\$67	\$63	-6.7%
Infoseek	10.87	\$1,064	\$1,354	\$98	\$125	27.3%
TOTAL	174.4	\$38,711	\$39,968	\$1,882	\$1,960	4.2%
AVERAGE	17.4	\$3,871	\$3,997	\$188	\$196	4.2%
AVG. without Yahoo	16.6	\$2,140	\$2,271	\$123	\$132	6.8%

Ironically, from the documents we've seen, Disney holds the right to buy SEEK control for \$50 per share, the way the document looked to us. With its equity position "effectively" giving it control, however, it may not have to. In that scenario you have to wonder if both Disney and Infoseek were privately held, combined forces, and then went public, that the perception on Wall Street may be a bit bigger than the \$1.3 billion market cap. We're waiting for Disney's famed leverage to emerge here...and waiting...just waiting for the go in Go.com. We're shaving some value off Compaq's (NYSE:CPQ) Altavista unit which it inherited when Compaq acquired Digital. A yawner so far. We think Inktomi (NASDAQ:INKT) owns search with its sleek wholesale styling and snazzy design vs. Altavista's pure RPM or horse power-is-king model. Compaq has the chance to turn Altavista into something powerful or it can divest the traffic to another large Web player. We're generous with the \$700 million here and think

an actual deal may fetch much less. About the only undervalued (compared to the group) one we see looks like GeoCities (NASDAQ:GCTY) which just completed its buy of Webring.

The thing about communities that casual observers miss is that its users are much more attached to using them than a directory or Web hub in some ways. Why? Users have their own personal creations up there for the world to see. While GeoCities and other ad-based Websteaders may not have found the ultimate business model they have found a better user model in our opinion. We don't think the last iteration on communities' business models has been sounded and expect these sites to evolve rapidly to leverage their user bases and relationships. Microsoft's (NASDAQ:MSFT) best buy on the Web it ever made was HotMail we believe. HotMail now adds something like 1 million users per week. I recall when founder Sabeer Bhatia presented at my investment conference at Spring Internet World in Spring 1997. Yes, the usual "hockey stick" growth projection slide was used. But HotMail has more than hockey sticked, it's been more moonshot. Here's one take on how to realize the value for Microsoft, satisfy some of the anti-trust brigade, and unleash some capital flow: why doesn't Microsoft spin off MSN/HotMail/Expedia/CarPoint in an IPO? We think it could be a \$6 billion combined entity already and find legs that may take it north of \$15 billion in short order once public. Plus, it would make it easier for Microsoft to not dilute its shares further with options to the Internet firms in its fold, give it a tracking stock as currency for deals, and also not dilute demands on future earnings if/when options are converted. Maybe Bill and Greg (CFO) will consider that?

Accolades for Internet Stock Report:

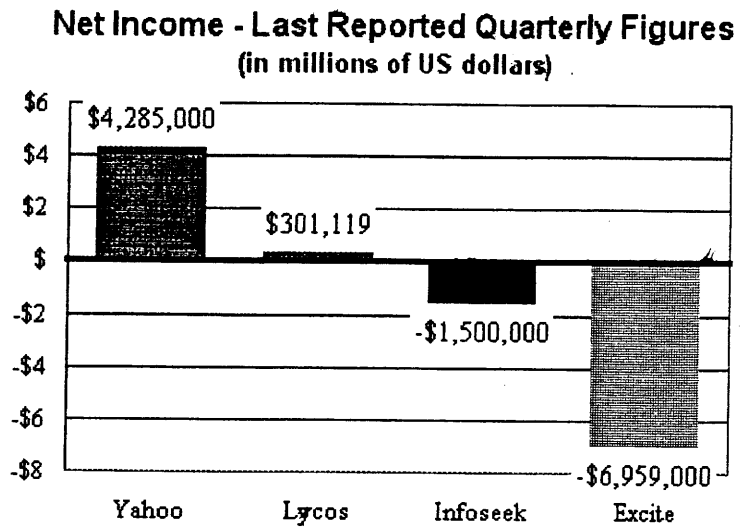
"Fresh and provocative." -CBS Marketwatch, who named Steve Harmon one of the top Internet stock analysts and only independent one honored.

EBay.com → On line auction house.

About 1 million items for sale in over 1 thousand categories! Over 34 million items for sale on eBay since inception! Over 127 million bids made since inception! Over 600 million page views per month!

Comparisons Charts

The chart below shows the latest profits or losses of each search engine. Lycos figures are as of Jan. 31, 1998. All others are as of March 31, 1998.



Content-type: text/plain; charset="iso-8859-1"

Hi Paul,

Attached is a breakdown of our audience demographics.

Here is the Yahoo! Canada advertising information you requested.

Yahoo! Canada is the only comprehensive directory of Canadian sites on the Web, reaching an audience in every province and territory. Yahoo! Canada receives approximately 30 million page views per month.

All advertising on Yahoo! Canada must link to a web page (generally on your web site). Yahoo! Canada has only one banner advertiser per page and banner ads always appear at the top of the page.

Yahoo! Canada Rates
Minimum buy - \$1,000

Front page of Yahoo! Canada
Reserved for mass customized promotions, product or web site launches, contests, etc. Limited to 4 consecutive weeks maximum duration due to high demand.

Approximately 800,000+ impressions per week.
\$11,765 gross / \$10,000 net per week

Run of Yahoo! Canada
Banners scheduled across directory pages based on availability.
Cost Per Thousand Impressions- \$29.4 gross / \$25 net
Sample Campaign
800,000 impressions over 3 months
\$23,530 gross / \$20,000 net

3.Run of Category
Banners scheduled through specific categories. Yahoo! Canada's 14 categories are packaged into 7 for advertising purposes.

Regional
Business and Economy
Entertainment and Arts & Humanities
Recreation & Sports and Health
Computers & Internet & News & Media
Reference, Education, Science
Society & Culture, Government, Social Science
Cost Per Thousand Impressions - \$44 gross / \$37.5 net
Sample Campaign
400,000 impressions
\$17,648 gross / \$15,000 net

Key word(s)
Sold on an exclusive basis - ad banner appears when the keyword is entered by a yahoo.ca user.
\$588 gross / \$500 net per keyword per month (flat fee).

Combination Buy
Cost savings offered when a run of Yahoo! Canada or a run of category

and
keyword(s) are chosen.
Sample Combination Packages
1. Run of Yahoo! Canada - 800,000 impressions plus 3 (three) exclusive key words for 3 months
\$27,056 gross / \$23,000 net
2. Run of Category - 400,000 impressions plus 3 (three) exclusive key words for 3 months
\$21,765 gross / \$18,500 net

Editorial/Promotional pages
Banner or button ads on seasonal, topical, or contest pages (i.e. RSP Spotlight, NHL Playoffs, Tax Time feature).
Price dependant on duration and nature of pages.
Contact a Yahoo! Canada sales representative.

Fixed Category pages
Banner ads are fixed on specific pages in the directory.
Cost Per Thousand Impressions- \$61 gross / \$52 net
Sample Campaign
200,000 impressions
\$12,235 gross / \$10,400 net

Yahoo! Canada Merchant Partner Program
Button ads are placed on relevant pages in Yahoo! Canada.
Contact Yahoo! Canada sales representative for price details.

Production Specifications
Advertisers may use up to 6 banners in at once in rotation.

File Size Limits: LESS THAN 10K
Banner dimensions 468 x 60 pixels (6.5 x .0833 inches)
File Format: GIF or JPEG format
Alt Text: no more than 30 characters
Tag Line: no more than 30 characters
Target URL: URL must be live when banner is scheduled. Users must be able to click anywhere on the banner to reach the target URL.
Animated Banners: banners NOT to animate for more than 4 seconds before stopping.
Java banners accepted on a case by case basis. Prior approval from Yahoo! Canada is necessary.
Image Maps: accepted on a case by case basis. Prior approval from Yahoo! Canada is necessary.
Yahoo! Canada reserves the right to reject any banner ad or advertiser.

**Smaller banner dimensions apply to front page banners ads. Additional requirements apply to promotions pages. Contact Yahoo! Canada for additional information.

Give me a call after you've had time to review this. I'm available to come out and talk to you about this opportunities as well.

Regards,
Paula

Paula McQuarrie
Yahoo! Canada
paula@yahoo.ca
P-416-340-2348
F-416-340-6542

Message contains multiple parts. Press return to read the next part...

EMAIL>

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1998 09:10:14.79

23-NOV-

Content-type: application/msword; name="Y!C USER PROFILE3.DOC"
Content-disposition: attachment; filename="Y!C_USER PROFILE3.DOC"

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Extract to a file with the EXTRACT command

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