

Equity Research
North America

Industry

Internet

Mary Meeker
+1 (1)212 761 8042
Mary.Meeker@morganstanley.com

Brian J. Pitz
+1 (1)212 761 4133
Brian.Pitz@morganstanley.com

Brian Fitzgerald
+1 (1)212 761 4276
Brian.Fitzgerald@morganstanley.com

Industry Overview

February 10, 2004

February 2004 — An Update From the Digital World

GICS SECTOR INFORMATION TECHNOLOGY	
US Strategist Weight	15.2%
S&P 500 Weight	17.7%

- We update our Internet Ecosystem Framework**
We compile what we believe are the most relevant publicly available metrics that represent key market trends in various parts of the Internet usage/user spectrum.
- Overall Internet usage and user growth trends remain strong**
As of CQ4:03, there were an estimated 751MM global Internet users (up 23% Y/Y) and 87MM global broadband subscribers (up 55% Y/Y).
- Market proxies illustrated impressive CQ4 growth**
Yahoo! visitor growth rose 23% Y/Y, while page view growth was up 32%, demonstrating strong usage trends. VeriSign Internet merchant transactions rose 71%. PayPal payments ramped 74%. And, WiFi user growth was estimated to be near 72%. We believe these numbers support our expectation of very strong, still early-stage, momentum for Internet growth in 2004. See Exhibit 1 for specifics — as we believe the numbers tell the story.
- Our Internet & PC Applications Software Industry view is Attractive**
We continue to believe that, at the margin, online is gaining share from offline, and this should occur for some time to come, benefiting the Internet leaders. The outlook for strong revenue and operating margin growth in 2004 appears to be in place for the Internet leaders.

Morgan Stanley does and seeks to do business with companies covered in its research reports. Investors should consider this report as only a single factor in making their investment decision.

Please see analyst certification and other important disclosures starting on page 8.

Exhibit 1

Internet Ecosystem Framework — Global Internet Usage and User Metrics

	Est. Metric Share	C2001				C2002				C2003				Comments	
		Q1:01	Q2:01	Q3:01	Q4:01	Q1:02	Q2:02	Q3:02	Q4:02	Q1:03	Q2:03	Q3:03*	Q4:03*		
Overall Internet Market Data															
Global Internet Users (MM)	100%	--	--	--	485	--	--	--	609	--	--	--	751	While user growth rates are slowing, absolute rates remain healthy. Page view growth (usage) is key to monitor.	
Y/Y Growth		--	--	--	42%	--	--	--	26%	--	--	--	23%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
North America	26%	--	--	--	156	--	--	--	176	--	--	--	198		Market at 56% penetration in 2002...
Y/Y Growth		--	--	--	28%	--	--	--	13%	--	--	--	12%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
Europe	28%	--	--	--	136	--	--	--	169	--	--	--	210		Market at 29% penetration in 2002...
Y/Y Growth		--	--	--	34%	--	--	--	24%	--	--	--	24%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
Japan	9%	--	--	--	42	--	--	--	53	--	--	--	64		Market at 42% penetration in 2002...
Y/Y Growth		--	--	--	49%	--	--	--	26%	--	--	--	21%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
Asia-Pacific	25%	--	--	--	100	--	--	--	141	--	--	--	187		Market at 5% penetration in 2002... Asia-Pacific will likely remain fastest growing large market.
Y/Y Growth		--	--	--	80%	--	--	--	41%	--	--	--	33%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
Latin America	5%	--	--	--	24	--	--	--	32	--	--	--	41	Market at 7% penetration in 2002...	
Y/Y Growth		--	--	--	58%	--	--	--	36%	--	--	--	28%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
Rest of World	7%	--	--	--	27	--	--	--	38	--	--	--	51	Market at 2% penetration in 2002...	
Y/Y Growth		--	--	--	49%	--	--	--	42%	--	--	--	34%		
Q/Q Growth		--	--	--	--	--	--	--	--	--	--	--	--		
Global Broadband Subscribers (Primarily Residential) (000's) (a)	100%	17,665	21,979	26,491	32,493	38,047	42,968	48,779	56,328	64,614	72,395	79,907	87,292	Nearly 90MM global broadband subs (up 50%+ Y/Y). Sub/user multiplier could be 2+ times. Broadband users more active than narrowband users.	
Y/Y Growth		380%	347%	315%	142%	115%	95%	84%	73%	70%	68%	64%	55%		
Q/Q Growth		31%	24%	21%	23%	17%	13%	14%	15%	15%	12%	10%	9%		
North America	34%	8,782	10,413	12,036	13,930	15,609	17,182	19,104	21,310	23,453	25,150	27,244	29,499		
Y/Y Growth		164%	145%	123%	95%	78%	65%	59%	53%	50%	46%	43%	38%		
Q/Q Growth		23%	19%	16%	16%	12%	10%	11%	12%	10%	7%	8%	8%		
Europe	18%	1,722	2,279	3,198	4,771	5,747	6,498	7,718	9,620	11,470	12,835	13,992	15,942		
Y/Y Growth		1153%	567%	504%	272%	234%	185%	141%	102%	100%	98%	81%	66%		
Q/Q Growth		34%	32%	40%	49%	20%	13%	19%	25%	19%	12%	9%	14%		
Japan	17%	855	1,259	1,805	2,836	3,861	4,996	6,138	7,806	9,397	10,940	12,269	14,420		
Y/Y Growth		296%	283%	290%	354%	351%	297%	240%	175%	143%	119%	100%	85%		
Q/Q Growth		37%	47%	43%	57%	36%	29%	23%	27%	20%	16%	12%	18%		
Asia-Pacific	30%	6,245	7,906	9,272	10,707	12,532	13,871	15,335	16,999	19,582	22,640	25,448	26,350		S. Korea is most penetrated global broadband market and serves as model market for what may occur with ramp.
Y/Y Growth		--	--	--	146%	101%	75%	65%	59%	56%	63%	66%	55%		
Q/Q Growth		44%	27%	17%	15%	17%	11%	11%	11%	15%	16%	12%	4%		
Latin America	1%	62	122	180	248	298	421	484	593	712	831	955	1,081		
Y/Y Growth		--	--	--	505%	385%	245%	169%	139%	139%	98%	97%	82%		
Q/Q Growth		50%	98%	48%	38%	20%	41%	15%	23%	20%	17%	15%	13%		

Source: Company reports, Morgan Stanley Research. We believe that metrics highlighted in grey represent the best market proxies for Internet trends.

* Italicized values represent Morgan Stanley Research estimates.

(a) Morgan Stanley estimates updated 01/14/04; R. Bilotti, S. Flannery, S. Simon, P. Marsch, Y. Motoyama, M. Kim, N. Sebrell, B. Swinburne, L. Choi.

Exhibit 2

Internet Ecosystem Framework — Global Internet Usage and User Metrics (continued)

	Est. Metric Share	C2001				C2002				C2003				Comments
		Q1:01	Q2:01	Q3:01	Q4:01	Q1:02	Q2:02	Q3:02	Q4:02	Q1:03	Q2:03	Q3:03*	Q4:03*	
Internet User Data Points														
Yahoo! (Meeker/Pitz) - Global														
Global Monthly Unique Visitors (000's) (a)	--	167,000	172,000	177,000	188,000	201,000	196,000	201,000	213,000	232,000	236,000	245,000	263,000	Yahoo! may be best quarterly proxy for global Internet user growth. Y/Y growth rates have accelerated for four quarters.
Y/Y Growth	--	15%	10%	7%	4%	20%	14%	14%	13%	15%	20%	22%	23%	
Q/Q Growth	--	-7%	3%	3%	6%	7%	(2%)	3%	6%	9%	2%	4%	7%	
VeriSign (Meeker/Pitz) - Global														
Global Registry (000's) (b)	-95%	28,600	29,400	30,200	28,800	27,300	27,300	27,500	25,800	26,600	27,500	28,700	29,000	Global domain name growth has begun to accelerate but absolute number is still below CQ3:01 peak.
Y/Y Growth	--	104%	52%	25%	8%	-5%	-7%	-9%	-10%	-3%	1%	4%	12%	
Q/Q Growth	--	8%	3%	3%	-5%	-5%	0%	1%	-6%	3%	3%	4%	1%	
SBC+Verizon+BellSouth (Flannery) - U.S.														
Digital Signal Lines, Level 0 (DS-0) (000's) (c)	83%	134,741	144,116	152,685	162,213	166,681	171,858	177,550	182,044	186,675	190,827	196,307	201,578	Measures rising use of high capacity circuits by ILEC customers for their broadband needs.
Y/Y Growth	--	60%	50%	45%	32%	24%	19%	16%	12%	12%	11%	11%	11%	
Q/Q Growth	--	10%	7%	6%	6%	3%	3%	3%	3%	3%	2%	3%	3%	
Time Warner (Bilotti) - U.S.														
Average AOL Brand Subscribers (000's)	33%	22,121	23,061	23,799	24,715	25,646	26,290	26,593	26,569	26,337	25,769	25,002	24,459	Narrowband user count appears to be eroding at an accelerating rate. AOL may be best proxy for this trend.
Y/Y Growth	--	23%	21%	20%	18%	16%	14%	12%	8%	3%	-2%	-6%	-8%	
Q/Q Growth	--	6%	4%	3%	4%	4%	3%	1%	0%	-1%	-2%	-3%	-2%	
Internet Usage Data Points														
VeriSign (Meeker/Pitz) - Global														
Average Daily DNS Queries (MM) (d)	-95%	3,329	3,800	4,800	5,300	6,500	7,200	7,100	7,500	7,500	9,000	10,100	10,000	Domain Name System (DNS) query growth remains strong.
Y/Y Growth	--	102%	120%	128%	117%	95%	89%	48%	42%	15%	25%	42%	33%	
Q/Q Growth	--	36%	14%	26%	10%	23%	11%	(1%)	6%	0%	20%	12%	(1%)	
Yahoo! (Meeker/Pitz) - Global														
Average Daily Page Views (MM)	<5%	986	1,015	1,055	1,122	1,372	1,457	1,504	1,598	1,865	1,914	2,041	2,114	Yahoo! may be best quarterly proxy for global Internet usage growth. 30%+ Y/Y growth is impressive, in our view. And page views growing faster than visitors indicates expanded site usage.
Y/Y Growth	--	58%	49%	35%	25%	39%	44%	43%	42%	36%	31%	36%	32%	
Q/Q Growth	--	10%	3%	4%	6%	22%	6%	3%	6%	17%	3%	7%	4%	
Online Advertising Data Points														
Internet Advertising Bureau (Meeker/Pitz) - Global														
Internet Advertising Revenue (\$MM)	-100%	1,872	1,848	1,773	1,641	1,520	1,458	1,451	1,580	1,632	1,660	1,718	1,919	Online advertising growth rate has accelerated for 5-6 quarters and trend could continue. And total could surpass CQ4:00 high (\$2.1B) within a few quarters.
Y/Y Growth	--	-3%	-12%	-9%	-23%	-19%	-21%	-18%	-4%	7%	14%	18%	21%	
Q/Q Growth	--	-12%	-1%	-4%	-7%	-7%	-4%	-1%	9%	3%	2%	3%	12%	
Overture (Meeker/Pitz) - Global														
Estimated Paid Clicks (MM)	--	318,000	327,000	338,000	442,000	587,000	515,000	500,000	563,000	608,000	646,000	680,000	712,000	Search trends remain impressive, in our view
Y/Y Growth	--	261%	252%	196%	94%	85%	57%	48%	27%	4%	25%	36%	26%	
Q/Q Growth	--	39%	3%	3%	31%	33%	(12%)	(3%)	13%	8%	6%	5%	5%	

Source: Company reports, Morgan Stanley Research. We believe that metrics highlighted in grey represent the best market proxies for Internet trends.

* Italicized values represent Morgan Stanley Research estimates.

(a) Yahoo! stopped including Yahoo! Japan in Monthly Unique Visitors & Avg. Daily Page Views in CQ3:02; Historicals were only provided back to CQ1:01 accounting for the Q/Q decrease in Q1:01.

(b) VeriSign is the exclusive global registry for .com and .net domain names; The registry does not include the 7 new TLDs (.biz, .pro, .name, .info, .museum, .aero, and .coop) approved by ICANN. Starting in CQ3:02, .org is not included in VRSN registry.

(c) Represents Top 3 U.S. suppliers.

(d) VeriSign stopped processing queries for the .org domain in November 2003, accounting for the CQ4:03 decline.

Internet – February 10, 2004

Please see analyst certification and other important disclosures starting on page 8.

Exhibit 3

Internet Ecosystem Framework — Global Internet Usage and User Metrics (continued)

	Est. Metric Share	C2001				C2002				C2003				Comments
		Q1:01	Q2:01	Q3:01	Q4:01	Q1:02	Q2:02	Q3:02	Q4:02	Q1:03	Q2:03	Q3:03*	Q4:03*	
eCommerce Data Points														
VeriSign (Meeker/Pitz) - Global														
Internet Merchant Transactions (\$MM)	-30%	--	2,100	2,200	2,600	3,100	3,400	3,700	4,500	5,200	5,800	6,900	7,700	Data from VeriSign's 100K online retail partners demonstrates strong demand for eCommerce.
Y/Y Growth	--	--	--	--	--	--	62%	68%	73%	68%	71%	86%	71%	
Q/Q Growth	--	--	--	5%	18%	19%	10%	9%	22%	16%	12%	19%	12%	
Amazon.com (Meeker/Pitz) - Global														
Total Units Shipped (MM)	--	33	32	31	53	42	41	43	72	57	58	58	96	30%+ Y/Y unit growth for six quarters demonstrates market strength.
Y/Y Growth	--	20%	17%	5%	18%	28%	28%	39%	36%	35%	42%	36%	33%	
Q/Q Growth	--	(27%)	(3%)	(4%)	74%	(21%)	(3%)	5%	69%	(21%)	2%	0%	66%	
eBay (Meeker/Pitz) - Global														
Gross Merchandise Sales (\$MM)	--	1,980	2,248	2,355	2,735	3,107	3,395	3,766	4,600	5,317	5,635	5,775	7,052	50%+ Y/Y GMS growth without ever printing a down Q/Q quarter is unusual especially given scale.
Y/Y Growth	--	72%	74%	74%	69%	57%	51%	60%	68%	71%	66%	53%	53%	
Q/Q Growth	--	23%	14%	5%	16%	14%	9%	11%	22%	16%	6%	2%	22%	
eBay (Meeker/Pitz) - Global														
Estimated Units Traded (MM) (a)	--	46	53	56	64	71	76	84	100	113	119	121	147	40%+ estimated Y/Y unit growth is very impressive, in our view.
Y/Y Growth	--	--	--	72%	68%	54%	43%	51%	57%	58%	56%	43%	47%	
Q/Q Growth	--	22%	15%	5%	14%	12%	7%	11%	19%	13%	5%	2%	22%	
PayPal (Meeker/Pitz) - Global														
Total \$ Volume (MM)	--	643	747	925	1,206	1,460	1,615	1,787	2,138	2,628	2,843	3,044	3,711	
Y/Y Growth	--	1289%	200%	119%	122%	127%	116%	93%	77%	80%	76%	70%	74%	
Q/Q Growth	--	18%	16%	24%	30%	21%	11%	11%	20%	23%	8%	7%	22%	
PayPal (Meeker/Pitz) - Global														
Total Payments (MM)	--	14	15	18	22	27	29	31	39	51	54	57	68	PayPal's ramp on and off the eBay platform remains robust as demand for online payments rises.
Y/Y Growth	--	1218%	176%	91%	81%	97%	91%	74%	76%	90%	86%	83%	74%	
Q/Q Growth	--	10%	11%	20%	24%	19%	8%	9%	25%	29%	6%	7%	19%	
CheckFree (McVey) - Global														
Estimated Average Transactions Processed Per Month (MM)	--	21	22	23	25	27	29	32	35	37	40	42	46	
Y/Y Growth	--	38%	38%	36%	33%	32%	32%	39%	40%	36%	38%	31%	32%	
Q/Q Growth	--	10%	6%	5%	8%	9%	6%	11%	9%	7%	7%	5%	10%	
Yahoo! (Meeker/Pitz) - Global														
Fee Paying Customers (000's)	--	--	--	--	375	625	1,025	1,550	2,200	2,900	3,500	4,200	4,900	Strong growth for Yahoo!'s fee paying customers has surprised many on the upside -- primary services include broadband access, e-mail and SMB services...
Y/Y Growth	--	--	--	--	--	--	--	--	487%	364%	241%	171%	123%	
Q/Q Growth	--	--	--	--	--	67%	64%	51%	42%	32%	21%	20%	13%	
RealNetworks (Meeker/Pitz) - Global														
Paid Subscribers (000's)	--	200	300	400	500	600	750	850	900	1,000	1,000	1,150	1,300	Online demand for video (news, sports, entertainment) remains impressive, in our view. Broadband ramp is key...
Y/Y Growth	--	73%	123%	160%	190%	200%	150%	113%	80%	67%	33%	35%	44%	
Q/Q Growth	--	16%	50%	33%	25%	20%	25%	13%	6%	11%	0%	15%	13%	
iTunes (Runkle/Gross) - Global														
Songs Downloaded (MM)	--	--	--	--	--	--	--	--	--	--	5.5	6.4	18.6	Apple's iTunes growth serves as key proxy for strength of demand for compelling broadband content.
Y/Y Growth	--	--	--	--	--	--	--	--	--	--	--	--	--	
Q/Q Growth	--	--	--	--	--	--	--	--	--	--	--	16%	191%	
Yahoo! Japan (Motoyama) - Japan														
Total eCommerce Transactions Enabled (#MM)	--	--	--	--	--	--	--	85,100	103,000	108,500	119,300	125,200	148,100	
Y/Y Growth	--	--	--	--	--	--	--	--	--	--	--	47%	44%	
Q/Q Growth	--	--	--	--	--	--	--	--	21%	5%	10%	5%	18%	
U.S. Department of Commerce														
Total U.S. Retail eCommerce Transactions	--	8,009	7,904	7,894	10,788	9,470	9,761	10,465	13,770	11,928	12,477	13,291	--	Online share gains from offline continue in commerce. Penetration still quite low.
Y/Y Growth	--	40%	26%	12%	17%	18%	23%	33%	28%	26%	28%	27%	--	
Q/Q Growth	--	-13%	-1%	0%	37%	-12%	3%	7%	32%	-13%	5%	7%	--	
eCommerce as a % of Retail Sales	--	1.1%	1.0%	1.0%	1.3%	1.3%	1.2%	1.3%	1.6%	1.5%	1.5%	1.6%	--	

Source: Company reports, Morgan Stanley Research. We believe that metrics highlighted in grey represent the best market proxies for Internet trends.

* Italicized values represent Morgan Stanley Research estimates

(a) Based on estimated ASP from Morgan Stanley Research eBay notes.

Internet – February 10, 2004

Please see analyst certification and other important disclosures starting on page 8.

Exhibit 4

Internet Ecosystem Framework — Global Internet Usage and User Metrics *(continued)*

	Est. Metric Share	C2001				C2002				C2003				Comments
		Q1:01	Q2:01	Q3:01	Q4:01	Q1:02	Q2:02	Q3:02	Q4:02	Q1:03	Q2:03	Q3:03*	Q4:03*	
WiFi/WLAN & Wireless Data Points														
Access Points/Bridges, NICs & Client Devices (Basu) - U.S.														
802.11b, 802.11g, 802.11a, Multimode - (000's)	-89%	1,140	1,526	1,753	2,391	2,543	2,877	3,688	4,404	4,756	5,196	6,845	7,566	WiFi growth remains compelling and early stage.
Y/Y Growth	--	390%	299%	162%	185%	123%	89%	110%	84%	87%	81%	86%	72%	
Q/Q Growth	--	36%	34%	15%	36%	6%	13%	28%	19%	8%	9%	32%	11%	
NTT DoCoMo (iMode) (Tanaka) - Japan														
Wireless Data Subscribers (000's)	62%	21,695	24,989	27,769	30,182	32,156	33,493	34,883	36,209	37,758	38,648	39,739	40,335	Asia-Pacific is leader in wireless trends.
Y/Y Growth	--	287%	201%	120%	76%	48%	34%	26%	20%	17%	15%	14%	11%	
Q/Q Growth	--	26%	15%	11%	9%	7%	4%	4%	4%	4%	2%	3%	1%	
Mobile Data Association - SMS Messaging (Werner) - UK														
SMS Messages (MM)	--	2,626	2,790	3,095	3,680	3,976	4,010	4,190	4,652	4,900	5,015	5,100	5,480	
Y/Y Growth	--	149%	103%	88%	78%	51%	44%	35%	26%	23%	25%	22%	18%	
Q/Q Growth	--	27%	6%	11%	19%	8%	1%	4%	11%	5%	2%	2%	7%	

Source: Company reports, Morgan Stanley Research. We believe that metrics highlighted in grey represent the best market proxies for Internet trends.

* Italicized values represent Morgan Stanley Research estimates.

Updates from the Digital World — An Overview

Since our first "Digital World" report, published in 2002, we have used this series to discuss some major events and inflection points related to the Internet that we thought were underappreciated. Below, you will find a list of our "Digital World" reports to date. In this report, we update our Internet Ecosystem Framework and review current trends for key Internet usage and user metrics.

- **Who Has the Momentum?**

November 2003: To determine which Web sites are supporting the greatest growth momentum, we reviewed multi-factor rankings aggregating absolute and sequential trends for visitors, page views, and usage minutes at 1,217 leading properties/sites (using US Media Metrix data). Growth trends for advertising, commerce, content, and community continue to look encouraging.

- **Microsoft, it's the Sound of Online Music?**

June 2003: In our view, the day (May 29, 2003) that Microsoft agreed to pay AOL Time Warner \$750MM to settle the lawsuit related to Microsoft's Netscape-targeted business practices marked an end, and a beginning, for the evolution of the Internet. To put this event in a historical context in our report, we told a short story of the evolution of the commercial Internet to date. Recent data related to online music — a natural SFO business — gave us the sense that music could, finally, become a catalyst that changes the rules of the game in the evolution of the Internet. We also focused on Microsoft's front- and back-end Internet-related initiatives with forthcoming releases of Internet Explorer, MSN, and Windows (Longhorn), and ongoing developments to the company's Web services (.NET) efforts.

- **What's New at Yahoo!?**

April 2003: We focused on the positive core secular trends in Internet advertising and drilled down on Yahoo! as a proxy and driver of these trends. In addition, we touched on what we saw as an impressive list of improvements by Yahoo! to provide a better experience for users and more effective marketing for advertisers.

- **Who's Keeping the Customer Satisfied — and How?**

Late-March 2003: Internet leaders such as Amazon.com, eBay, and Expedia had just scored strong relative results in customer satisfaction in the highly regarded American Customer Satisfaction Survey. Convenience, low (and transparent) prices/pricing, uniquely strong 24x7 customer service, and extensive selection had long been key factors behind the growth for leading online commerce (and information) sites. These attributes were becoming increasingly apparent to us (and measurable). Owing in part to the power of their technology platforms, Internet leaders were raising the bar on customer satisfaction and loyalty.

- **What Brought on the Strong Momentum of CQ4:02?**

March 2003: In addition to improvements in the SFO experiences of the Internet, a key part of the answer may have been the scale and ramp of residential broadband usage, which made possible the emergence of what we saw as a group of Internet-enabled "power consumers."

- **The Great Online Migration — Is eBay a Replay of New York City's 18th Century?**

February 2003: We focused on the relevance and magnitude of sellers and buyers migrating online, as illustrated by eBay's momentum, and we drew some historical analogies to the dynamics of the settlement and growth of New York City.

- **Is Search/Find/Obtain (SFO) Becoming the Internet's Third Killer Application?**

December 2002: Our first "Digital World" report examined online vs. offline momentum related to expanded global distribution, lower relative pricing related to transparency and the ramp in the sale of used goods, and the rising impact of replacement products.

All of Morgan Stanley's equity research technology reports are available on the Internet through Client Link on www.morganstanley.com. If you wish to receive this service, please contact your institutional sales representative. All of the above reports (along with other technology overview reports) also can be downloaded from www.morganstanley.com/techresearch. For our thoughts on companies mentioned in these reports, see our company-specific reports.

Investment Thesis — Internet & PC Applications Software — Mary Meeker & Brian Pitz (2/04)

We continue to believe that the Internet is still in the early stages of becoming a central communications, information, commerce, and entertainment medium.

We estimate there are 750MM+ Internet users worldwide using the Internet for 30-45 minutes per day. We expect the number of Internet users to grow at 15% annually for the next several years, with stronger growth in non-US markets (especially the Asia-Pacific region). And we believe that usage growth (in part because of ongoing broadband adoption) should continue to be higher, thus demonstrating compelling underlying growth trends.

Given this relatively robust underlying growth, we continue to believe that the leading Internet companies should, over time, be able to generate strong double-digit top-line growth, and as the financial models scale toward higher long-term margins, should be able to generate even stronger earnings growth — AKA leverage. If the leaders execute to their opportunities, we believe that the leaders could continue to demonstrate classic growth-stock undervaluation characteristics.

In general, near term, we remain focused on what we consider to be key underlying positive trends:

- 1) **The Internet should prove to be the growth distribution channel of the decade** — Companies that benefited from leveraging the PC as their distribution channel — like Microsoft and America Online — created significant new businesses and shareholder wealth. We believe an emerging group of still relatively early-stage companies should do the same with the Internet.
- 2) **Search/Find/Obtain (SFO) is becoming a global reality and may be the next ‘killer application’ of the Internet** — Google, eBay, Amazon.com, Yahoo!, Expedia, Microsoft and Overture have driven this, and it benefits users/vendors as it helps reduce friction and makes markets more efficient. And strong SFO momentum for music & digital media is becoming increasingly apparent.
- 3) **Residential broadband (with an estimated 87MM+ global subscribers as of CQ4:03, up 55% Y/Y) has hit critical mass** — The early stage of consumer broadband adoption, and the powerful usage patterns of broadband (vs. narrowband) users, at work and home, should help pace strong growth for leading beneficiaries.
- 4) **Underlying growth rate for global Internet usage remains strong** — in spite of (and, perhaps, in part, because of) a very challenging economic and social environment, growth rates for global Internet usage/users remain strong.
- 5) **Online continues to gain share from offline** — Note Expedia in travel, eBay in collectibles, Yahoo! in news. e-commerce accounts for only 1.6% (and rising) of retail sales in the US.
- 6) **“Mind share” well above “market share” demonstrates growth opportunity** — an estimated 750+ million Internet users and, for example, only 39MM active Amazon.com customers?
- 7) **Internet momentum/opportunity is compelling compared to other media** — Per a Spring 2002 US survey by SRI, consumers spent 13% of media usage on the Internet (up 23% Y/Y) vs. slower growth for TV (48% of media usage), radio (31%), newspapers (5%) and magazines (3%).
- 8) **The consumer appears to be alive and well for key technology-related purchases** — Internet, digital cameras, MP3 players, WiFi, video games...the consumer has been driving a key portion of technology-related growth. In addition, we believe that many **small to medium-size businesses (SMBs) have benefited** from the increased usage of the Internet as vendors/users/sellers. A positive turn in IT spending should bolster what has been a lagging enterprise market.
- 9) **Technology platform-driven convenience, low (and transparent) prices/pricing, uniquely strong 24x7 customer service, and extensive selection have been key factors behind growth** in leading online commerce (and information) sites and should continue to spur growth for the leaders. In addition, we believe that positive trends for the ramps in *used* and *replacement* goods continue to be quite strong, assisted by rising user confidence (in part, through customer ratings and feedback) in obtaining these types of goods/services.
- 10) **Online advertising trends could surprise on the upside & online premium services have begun to ramp.** In the next 6–12 months we believe the compelling ROI will become more apparent to advertisers. We believe online advertising (including search) could continue to support accelerating growth of 20+% Y/Y.
- 11) **Handful of industry leaders gaining share with less competition on almost all fronts and operating leverage with inherently scalable models is powerful** — for example, Amazon.com got big fast, spent lots of money, now what? Fixed costs and operating leverage, in our view.
- 12) **Positive earnings surprises can be, more often than not, followed by more of the same...**

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Mary Meeker, Brian Pitz.

Important US Regulatory Disclosures on Subject Companies

The information and opinions in this report were prepared by Morgan Stanley & Co. Incorporated and its affiliates (collectively, "Morgan Stanley").

The research analysts, strategists, or research associates principally responsible for the preparation of this research report have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues.

Global Stock Ratings Distribution

(as of January 31, 2004)

Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight	589	33%	240	39%	41%
Equal-weight	823	46%	285	46%	35%
Underweight	396	22%	96	15%	24%
Total	1,808		621		

Data include common stock and ADRs currently assigned ratings. For disclosure purposes (in accordance with NASD and NYSE requirements), we note that Overweight, our most positive stock rating, most closely corresponds to a buy recommendation; Equal-weight and Underweight most closely correspond to neutral and sell recommendations, respectively. However, Overweight, Equal-weight, and Underweight are not the equivalent of buy, neutral, and sell but represent recommended relative weightings (see definitions below). An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations. Investment Banking Clients are companies from whom Morgan Stanley or an affiliate received investment banking compensation in the last 12 months.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

More volatile (V). We estimate that this stock has more than a 25% chance of a price move (up or down) of more than 25% in a month, based on a quantitative assessment of historical data, or in the analyst's view, it is likely to become materially more volatile over the next 1-12 months compared with the past three years. Stocks with less than one year of trading history are automatically rated as more volatile (unless otherwise noted). We note that securities that we do not currently consider "more volatile" can still perform in that manner.

Unless otherwise specified, the time frame for price targets included in this report is 12 to 18 months. Ratings prior to March 18, 2002: SB=Strong Buy; OP=Outperform; N=Neutral; UP=Underperform. For definitions, please go to www.morganstanley.com/companycharts.

Analyst Industry Views

Attractive (A). The analyst expects the performance of his or her industry coverage universe to be attractive vs. the relevant broad market benchmark over the next 12-18 months.

In-Line (I). The analyst expects the performance of his or her industry coverage universe to be in line with the relevant broad market benchmark over the next 12-18 months.

Cautious (C). The analyst views the performance of his or her industry coverage universe with caution vs. the relevant broad market benchmark over the next 12-18 months.

Stock price charts and rating histories for companies discussed in this report are also available at www.morganstanley.com/companycharts. You may also request this information by writing to Morgan Stanley at 1585 Broadway, 14th Floor (Attention: Research Disclosures), New York, NY, 10036 USA.

Other Important Disclosures

For a discussion, if applicable, of the valuation methods used to determine the price targets included in this summary and the risks related to achieving these targets, please refer to the latest relevant published research on these stocks. Research is available through your sales representative or on Client Link at www.morganstanley.com and other electronic systems.

This report does not provide individually tailored investment advice. It has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The securities discussed in this report may not be suitable for all investors. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives.

This report is not an offer to buy or sell any security or to participate in any trading strategy. In addition to any holdings that may be disclosed above, Morgan Stanley and/or its employees not involved in the preparation of this report may have investments in securities or derivatives of securities of companies mentioned in this report, and may trade them in ways different from those discussed in this report. Derivatives may be issued by Morgan Stanley or associated persons.

Morgan Stanley is involved in many businesses that may relate to companies mentioned in this report. These businesses include specialized trading, risk arbitrage and other proprietary trading, fund management, investment services and investment banking.

Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in this report change apart from when we intend to discontinue research coverage of a subject company.

Reports prepared by Morgan Stanley research personnel are based on public information. Facts and views presented in this report have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

The value of and income from your investments may vary because of changes in interest rates or foreign exchange rates, securities prices or market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in your securities transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized.

This publication is disseminated in Japan by Morgan Stanley Japan Limited; in Hong Kong by Morgan Stanley Dean Witter Asia Limited; in Singapore by Morgan Stanley Dean Witter Asia (Singapore) Pte., regulated by the Monetary Authority of Singapore; in Australia by Morgan Stanley Dean Witter Australia Limited A.B.N. 67 003 734 576, a licensed dealer, which accepts responsibility for its contents; in certain provinces of Canada by Morgan Stanley Canada Limited, which has approved of, and has agreed to take responsibility for, the contents of this publication in Canada; in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that this document has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the United States by Morgan Stanley & Co. Incorporated and Morgan Stanley DW Inc., which accept responsibility for its contents; and in the United Kingdom, this publication is approved by Morgan Stanley & Co. International Limited, solely for the purposes of section 21 of the Financial Services and Markets Act 2000 and is distributed in the European Union by Morgan Stanley & Co. International Limited, except as provided above. Private U.K. investors should obtain the advice of their Morgan Stanley & Co. International Limited representative about the investments concerned. In Australia, this report, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act.

The trademarks and service marks contained herein are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data. The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property of MSCI and S&P.

This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Additional information on recommended securities is available on request.

The Americas

1585 Broadway
New York, NY 10036-8293
United States
Tel: +1 (1)212 761 4000

Europe

25 Cabot Square, Canary Wharf
London E14 4QA
United Kingdom
Tel: +44 (0)20 7425 8000

Japan

20-3, Ebisu 4-chome
Shibuya-ku,
Tokyo 150-6008, Japan
Tel: +81 (0)3 5424 5000

Asia/Pacific

Three Exchange Square
Central
Hong Kong
Tel: +852 2848 5200