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**INTERNET**

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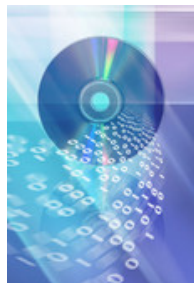
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**SEARCH: A MEDIA OR TECHNOLOGY PLAY? OUR BET IS ON TECHNOLOGY; LAUNCHING COVERAGE OF THE INTERNET SPACE**

**Investment Conclusion:** *To truly generate excess returns in the Internet, we believe investors should focus on the intersection of advertising, media and technology and the new technology-driven markets they are creating.*

*Today, investing in the Internet is not all about ecommerce. We believe Internet-focused investors need to examine the underlying core technology and the market drivers enabling new business growth. The next generation platforms, applications and infrastructure the Internet has subsequently created offer unique opportunities for emerging companies to drive these new market opportunities. Clearly, these changes are technology-driven, and our bet is that the owners of this technology will have the most market leverage. The Internet is a complicated “web” of a market space, but we believe investors can succeed by picking stocks with strong fundamental technologies which drive these markets and their subsequent applications.*

- **Positioning the Space: The Internet Technology Landscape and Our Long-Term Investment Strategy**
- **Categorizing the Investment Landscape**
- **Time to Reassess the Internet Space, It’s Not All About eCommerce**
- **Media is Evolving; Is Your Internet Investment Strategy?**
- **Enter the Search Solution**
- **Rules to Invest By...Our Investment Guidelines**
- **Conclusion: Internet Investing 101**
- **Our Stock Calls Include:**

**Google, Inc. – Buy Rating; Market Cap \$124,281; Aggressive Growth**

*We are assuming coverage of Google, Inc. (GOOG) with a Buy rating and are establishing a 12-month price target of \$480. This is derived by calculating the net present value of the company assuming normalized growth of 20% starting in 2012 and a discount rate of 12%. We believe this methodology serves as the best way to value the company, given the high growth and relative immaturity of the search market.*

**Yahoo! Inc. – Hold Rating; Market Cap \$58,906; Aggressive Growth**

*We are initiating coverage of Yahoo! Inc. (YHOO) with a Hold rating and are establishing a 12-month price target of \$40, which is calculated using both a discounted cash flow and sum-of-the-parts analysis. Our discounted cash flow assumes a free cash flow CAGR of 26% to 2014 and a discount rate of 11.2%. Our sum-of-the-parts analysis averages the equity values of forward EV/Sales, P/E, and free cash flow multiples using valuations of other comparable companies. Given Yahoo!’s business structure, including a sizeable NOL and 34% ownership interest in Yahoo! Japan, in addition to its high growth but relative maturity in the Internet space, we believe these methodologies best reflect the value of the company.*

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## INITIATING COVERAGE OF THE INTERNET SPACE

We are initiating coverage of the Internet space with two leaders in search. We assume coverage of Google, Inc. (GOOG) with a Buy rating and initiate coverage of Yahoo! Inc. (YHOO) with a Hold rating as summarized below. For a detailed review of our analysis, please refer to the company profiles, beginning on page 20.

### **Google, Inc. – Buy Rating, Market Cap \$124.28B, Aggressive Growth**

We are assuming coverage of Google, Inc. (GOOG) with a Buy rating and are establishing a 12-month price target of \$480. This is derived by calculating the net present value of the company assuming normalized growth of 20% starting in 2012 and a discount rate of 12%. We believe this methodology serves as the best way to value the company, given the historical high growth and relative youth of the search market.

We believe Google will benefit from strong growth in advertising revenues through 2006 and beyond because of its superior search technology, advertising innovations and dominant brand. It is this technology that has allowed Google to capture 57% share in the search market, up from 28% just two years ago. For this reason, we are very bullish on Google in the short-term, expecting the stock to increase by at least 14% to \$480 because of its ability to continue to capture a large share of the growing Internet advertising market. Long-term, we believe Google remains well-positioned as a technology software and services provider to benefit from the convergence of media platforms and changing consumer media consumption trends as we currently see this future market developing, and leverage this beachhead into numerous other platforms and technologies.

### **Yahoo! Inc. – Hold Rating, Market Cap \$58.91B, Aggressive Growth**

We are initiating coverage of Yahoo! Inc. (YHOO) with a Hold rating and are establishing a 12-month price target of \$40, which is calculated using both a discounted cash flow and sum-of-the-parts analysis. Our discounted cash flow assumes a free cash flow CAGR of 26% to 2014 and a discount rate of 11.2%. Our sum-of-the-parts analysis averages the equity values of forward EV/Sales, P/E, and free cash flow multiples using valuations of other comparable companies. Given Yahoo!'s business structure, including a sizeable NOL and 34% ownership interest in Yahoo! Japan, in addition to its historical high growth but relative maturity in the Internet space, we believe these methodologies best reflect the value of the company.

Yahoo! is the "next generation" media company of the future, leveraging technology to deliver content and services that meet consumers' changing demands. Consumers like Yahoo!, and the media and advertising markets are clearly evolving towards its new distribution platform. Yahoo! has aggregated the right content, services, tools and relationships to provide us with a fairly clear view of its future as a technology-driven media company. While we are bullish on the future of Internet media as outlined in our investment thesis, we would like to see Yahoo! make the following changes to better position itself to be the future media market leader:

- Improvement in its core search technology;
- Increase in higher value, rich media advertising;
- Increase in fee-based revenue.

Although we believe in the potential of Yahoo!'s products, state of the art advertising technology, and other leading initiatives such as its looming phone service, we believe this is more or less reflected in the current share price and therefore rate YHOO shares a Hold.

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Our current initiation is focused on search technology, but we remind investors that search is part of a larger Internet market that requires specific investment strategies to keep in mind.

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## **POSITIONING THE SPACE: THE INTERNET TECHNOLOGY LANDSCAPE AND OUR LONG-TERM INVESTMENT STRATEGY**

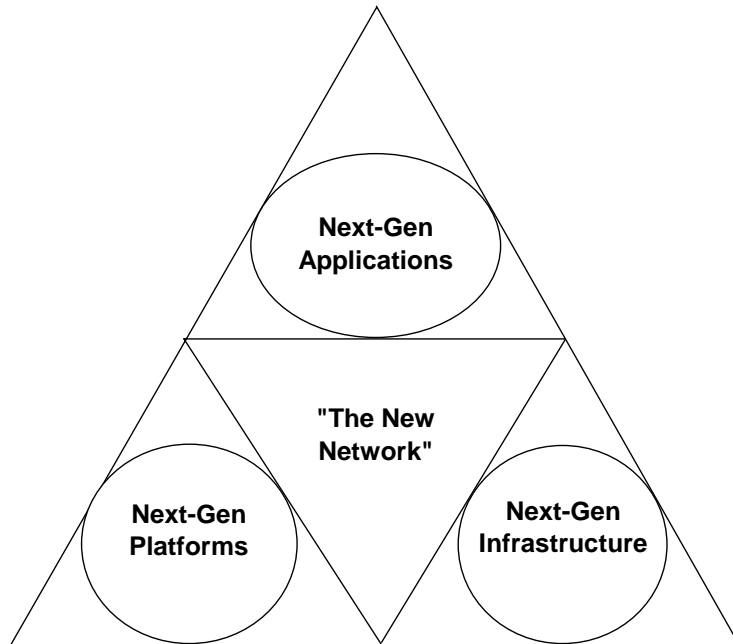
It should not come as a surprise to most investors that the term “Internet” is very broad and tends to impact all aspects of our lives, both professionally and personally. We believe that a clear and measurable investment strategy needs to be developed and fully understood before taking that first step into the “Internet Investing Pond.” Our hope is that this initiation report will attempt to frame the Internet landscape, particularly search, to help investors find and invest in stocks that provide the required rate of returns for the risk taken.

Our investment thesis is rooted in understanding emerging Internet companies that automate and/or change traditional business processes. We believe the best investment ideas are based on technology innovations born out of new markets that were unable to exist due to limitations and cost constraints in the areas of hardware, software, and the networking/communication infrastructure. We strongly believe that Internet search, advertising, ecommerce, distribution strategies, web measurement application and Web 2.0 software integration have created the “Next Generation of Technology.” Moreover, we believe the Internet investor needs to start viewing (and valuing) Internet companies by their underlying technology and how this technology differentiates each company. More specifically, the technology must create barriers to entry while providing a technology platform (i.e., The Stack) that allows for seamless integration in and among various competitors. We believe the new world of “co-opetition” is interesting but extremely complex and thus creates an environment of enormous opportunity (assuming our assumptions are correct) for the investor seeking exceptional returns and having the courage to shoulder the additional risk.

To help investors better understand the “Next Generation of Technology” we have created the “New Network” as illustrated in the diagram below.

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## EXHIBIT 1: THE “NEW NETWORK”



Source: WR Hambrecht + Co

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### CATEGORIZING THE INVESTMENT LANDSCAPE

The evolution of technology is and will continue to create new market opportunities in many industries, particularly as they are impacted by the Internet. We focus on the intersection of three key market segments—advertising, media and software—that, because of the Internet’s profound impact, have created new market opportunities that we find particularly exciting for today’s investors. As these markets react to the change in Internet technology, new markets are created, as follows:

- Next Generation Applications
- Next Generation Infrastructure
- Next Generation Platforms

#### Next Generation Applications

We define “Next Generation Applications” as a new set of architectures and related business models designed specifically to leverage the Internet Protocol (IP) environment. For example, companies like Salesforce.com (CRM: Buy), LivePerson (LPSN), RightNow Technologies (RNOW: Buy), and Ultimate Software (ULTI: Buy) have built their applications to leverage IP. These applications and subsequent business models leverage the powerful distribution capabilities of the Internet.

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Currently, many existing applications built by traditional enterprise software vendors such as Microsoft are not designed from the ground-up to take advantage of an Internet architecture. Instead, these capabilities have been layered on to legacy architectures over time. We believe the next generation will force Microsoft and other traditional applications providers to rethink their architecture and business models in order to meet the market's evolving needs.

#### **Next Generation Infrastructure**

As part of this next generation, many core infrastructure components and services, such as storage and security, will be embedded in the Internet itself. This evolution will increase users' mobility, essentially using the Internet as a virtual PC. The PC becomes a dumb terminal through which users access the Internet, their "virtual" PC. The next generation infrastructure is propelling the growth of companies such as Akamai (AKAM: Buy) and NeuStar (NSR: Buy), who appear to be winning the stock performance prize in 2005.

#### **Next Generation Delivery Platforms**

Enter the triple play, Internet architectures have enabled a next generation of platforms such as IPTV and VoIP. We believe the ability of IP technology to carry voice, data and digital media creates opportunities for new delivery platforms once tied to a specific distribution method, i.e., cable to TV or copper to Telecom can now be freely distributed via IP-based platforms.

Search, which resides in the Next Generation Applications area, is the focus of this report.

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## **TIME TO REASSESS THE INTERNET SPACE; IT'S NOT ALL ABOUT ECOMMERCE**

As noted previously, the Internet market is complex. Companies that would seem to compete directly may also partner behind the scenes. The Internet is literally a web of connections, "co-opetition" and pure competition. This makes it difficult to compare one company to another. Moreover, many of yesterday's public companies may have merged with other, larger conglomerates or have evolved to include new services that are simply online extensions of core business. That said, we have attempted to select the most appropriate Internet-based public companies to define our market space. We outline these investment segments and their 2005 stock growth rates as follows:

- Search (+24.0% YTD)
- Advertising (+41.6% YTD)
- Services (+92.6% YTD)
- Media (+17.3% YTD)
- Commerce (0.0% YTD)

As previously indicated, it is in the areas where technology is impacting media and advertising where we see the most consistent growth and related investment opportunities.

## EXHIBIT 2: HOW WE DIVIDE THE INTERNET SPACE

Company	Ticker	Rating	Price Target	Price 12/20/05	EV (\$MM)	Mkt. Cap. (\$M)	Revenue (\$M)			Rev Growth		EV / Rev			EPS			EPS Growth		Price / Earnings			5 YR Gr. (%)		PEG	
							CY04A	CY05E	CY06E	04-05	05-06	'04A	'05E	'06E	CY04A	CY05E	CY06E	04-05	05-06	'04A	'05E	'06E	'05	'06		
<b>Internet Search</b>																										
Google	GOOG	BUY	\$480.00	\$ 429.74	119,500	127,009	1,961	4,032	6,430	106%	59%	61.0x	29.6x	18.6x	3.20	5.93	8.72	85%	47%	134x	72x	49x	36%	2.0x	1.4x	
Yahoo	YHOO	HOLD	\$40.00	\$ 40.68	57,659	57,714	2,590	3,697	4,762	43%	29%	22.3x	15.6x	12.1x	0.37	0.59	0.75	60%	26%	110x	69x	55x	28%	2.4x	1.9x	
InfoSpace Inc.	INSP			\$ 26.52	459	822	244	339	368	39%	9%	1.9x	1.4x	1.2x	1.28	1.49	0.85	17%	-43%	21x	18x	31x	25%	0.7x	1.2x	
Looksmart	LOOK			\$ 3.99	42	91	80	41	42	-49%	2%	0.5x	1.0x	1.0x	(2.31)	(0.82)	(0.78)	NM	NM	NM	NM	NM	20%	NM	NM	
												<b>MEDIAN:</b>	<b>12.1x</b>	<b>8.5x</b>	<b>6.7x</b>				60%	26%	<b>109.9x</b>	<b>68.8x</b>	<b>49.3x</b>	27%	2.0x	1.4x
												<b>AVERAGE:</b>	<b>21.4x</b>	<b>11.9x</b>	<b>8.2x</b>				54%	10%	<b>88.3x</b>	<b>53.0x</b>	<b>45.0x</b>	27%	1.7x	1.5x
<b>Internet Advertising Services</b>																										
Valueclick	VCLK			\$ 18.28	1,519	1,834	162	303	493	87%	63%	9.4x	5.0x	3.1x	0.32	0.45	0.58	41%	29%	57x	41x	32x	26%	1.6x	1.2x	
aQuantive	AQNT			\$ 24.84	1,733	1,626	152	303	377	99%	25%	11.4x	5.7x	4.6x	0.26	0.46	0.55	77%	20%	96x	54x	45x	27%	2.0x	1.7x	
Digitas	DTAS			\$ 12.82	973	1,147	251	352	392	40%	11%	3.9x	2.8x	2.5x	0.42	0.47	0.60	12%	27%	31x	27x	22x	19%	1.5x	1.2x	
Marchex	MCHX			\$ 25.40	926	636	NA	94	130	NA	38%	NA	9.9x	7.1x	(0.08)	0.35	0.53	NM	49%	NM	72x	48x	39%	1.8x	1.2x	
24/7 Real Media	TFSM			\$ 7.58	337	348	84	136	183	62%	34%	4.0x	2.5x	1.8x	0.05	0.18	0.32	251%	72%	144x	41x	24x	40%	1.0x	0.6x	
Miva	MIVA			\$ 5.18	123	160	174	194	190	12%	-2%	0.7x	0.6x	0.6x	0.62	0.15	0.12	-76%	-15%	8x	36x	42x	20%	1.8x	2.1x	
												<b>MEDIAN:</b>	<b>3.9x</b>	<b>2.8x</b>	<b>2.5x</b>				45%	27%	<b>63.2x</b>	<b>41.1x</b>	<b>41.6x</b>	27%	1.8x	1.2x
												<b>AVERAGE:</b>	<b>5.0x</b>	<b>4.3x</b>	<b>3.3x</b>				66%	31%	<b>69.8x</b>	<b>46.0x</b>	<b>36.0x</b>	29%	1.6x	1.3x
<b>Internet Commerce</b>																										
eBay	EBAY			\$ 44.14	60,960	61,521	3,268	4,509	5,894	38%	31%	18.7x	13.5x	10.3x	0.61	0.84	1.01	38%	20%	72x	52x	44x	30%	1.8x	1.5x	
Amazon	AMZN			\$ 48.14	20,502	19,953	6,812	8,582	10,154	26%	18%	3.0x	2.4x	2.0x	0.98	0.77	1.00	-21%	29%	49x	62x	48x	22%	2.8x	2.2x	
Blue Nile	NILE			\$ 42.80	663	740	166	210	259	27%	23%	4.0x	3.2x	2.6x	0.53	0.75	0.96	41%	28%	80x	57x	45x	29%	2.0x	1.5x	
Overstock.com*	OSTK	HOLD	\$37.00	\$ 34.25	735	661	483	837	1,226	73%	46%	1.5x	0.9x	0.6x	(0.35)	(0.87)	(0.49)	NM	NM	NM	NM	NM	41%	NM	NM	
RedEnvelope*	REDE	HOLD	\$10.00	\$ 11.09	88	100	93	118	141	27%	19%	0.9x	0.7x	0.6x	(0.54)	(0.49)	0.26	NM	NM	NM	NM	44x	24x	NM	1.8x	
												<b>MEDIAN:</b>	<b>3.0x</b>	<b>2.4x</b>	<b>2.0x</b>				38%	28%	<b>72.2x</b>	<b>57.2x</b>	<b>44.2x</b>	29%	2.0x	1.6x
												<b>AVERAGE:</b>	<b>5.6x</b>	<b>4.1x</b>	<b>3.2x</b>				19%	26%	<b>67.2x</b>	<b>57.3x</b>	<b>44.8x</b>	29%	2.2x	1.7x
<b>Internet Services</b>																										
Blackboard Inc.	BBBB			\$ 29.26	712	794	110	135	159	23%	17%	6.5x	5.3x	4.5x	0.44	0.93	0.83	111%	-10%	67x	32x	35x	25%	1.3x	1.4x	
Bankrate Inc.	RATE			\$ 30.98	450	490	39	49	80	25%	63%	11.5x	9.2x	5.7x	0.58	0.57	0.86	-2%	51%	53x	54x	36x	28%	2.0x	1.3x	
eCollege.com	ECLG			\$ 18.76	410	411	90	103	123	15%	19%	4.6x	4.0x	3.3x	0.41	0.50	0.67	21%	35%	46x	38x	28x	27%	1.4x	1.1x	
Housevalues Inc.	SOLD			\$ 13.43	258	345	47	87	132	86%	51%	5.5x	2.9x	2.0x	0.35	0.51	0.72	46%	43%	39x	27x	19x	33%	0.8x	0.6x	
Knot Inc.	KNOT			\$ 13.21	264	304	NA	51	63	NA	23%	NA	5.2x	4.2x	NA	0.15	0.36	NM	140%	NM	88x	37x	25%	3.5x	1.5x	
												<b>MEDIAN:</b>	<b>6.0x</b>	<b>5.2x</b>	<b>4.2x</b>				33%	43%	<b>49.7x</b>	<b>37.9x</b>	<b>35.3x</b>	27%	1.4x	1.3x
												<b>AVERAGE:</b>	<b>7.0x</b>	<b>5.3x</b>	<b>3.9x</b>				44%	52%	<b>51.2x</b>	<b>47.7x</b>	<b>30.9x</b>	27%	1.8x	1.2x
<b>Internet Media</b>																										
IAC/InterActiveCorp	IACI			\$ 27.64	7,620	8,828	6,189	5,882	6,848	-5%	16%	1.2x	1.3x	1.1x	0.92	1.33	1.48	45%	11%	30x	21x	19x	16%	1.3x	1.1x	
CNET Networks Inc.	CNET			\$ 14.64	2,267	2,174	291	353	419	22%	18%	7.8x	6.4x	5.4x	0.08	0.22	0.40	171%	78%	177x	65x	37x	31%	2.1x	1.2x	
WebMD Health Corp.	WBMD			\$ 29.91	1,727	1,677	NA	169	217	NA	29%	NA	10.2x	8.0x	NA	0.29	0.47	NM	63%	NM	104x	64x	33%	3.2x	2.0x	
iVillage Inc.	IVIL			\$ 8.19	557	594	67	89	107	33%	21%	8.3x	6.3x	5.2x	0.04	0.13	0.26	250%	103%	223x	64x	31x	50%	1.3x	0.6x	
TheStreet.com Inc.	TSCM			\$ 6.93	139	175	35	32	36	-8%	12%	3.9x	4.3x	3.8x	(0.10)	0.22	0.27	NM	23%	NM	32x	26x	30%	1.1x	0.9x	
												<b>MEDIAN:</b>	<b>5.9x</b>	<b>6.3x</b>	<b>5.2x</b>				171%	63%	<b>177.0x</b>	<b>63.7x</b>	<b>31.3x</b>	31%	1.3x	1.1x
												<b>AVERAGE:</b>	<b>5.3x</b>	<b>5.7x</b>	<b>4.7x</b>				155%	56%	<b>143.4x</b>	<b>57.1x</b>	<b>35.3x</b>	32%	1.8x	1.2x

\* Covered by Craig Bibb

Source: CapitalIQ; WR Hambrecht + Co

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## **MEDIA IS EVOLVING; IS YOUR INTERNET INVESTMENT STRATEGY?**

Thanks to technology, consumers are no longer passive media targets. Consumers are creating their own content, watching what they want to watch *when* they want to watch it, and rapidly adopting new technologies that have far-reaching consequences for traditional media business models.

Consumers' rapid adoption of the Internet and broadband technology has forced media companies to create their own Internet media distribution platforms. No new news here. But, what started as yesterday's experiments have quickly become a serious focus of most media conglomerates, particularly as major advertisers are shifting their TV advertising activity online. As consumers begin substituting the Internet for classified advertising, direct marketing and yellow pages activities, the advertising for these markets will likely also migrate online. As consumers adopt broadband and the availability of broadband content increases online, monies once earmarked for television will likely also be shifted to online media. Advertisers with multi-million dollar advertising budgets, like Ford, McDonald's and Unilever have publicly announced their changing media mix, increasing their budget allocation for online while decreasing budgets for traditional media, such as print and television.

Digital video recorders are close behind, altering prime-time—the most lucrative advertising slot for media—and enabling consumers to record their favorite shows and watch at their convenience. As if this weren't bad enough for the TV advertising market, consumers can (and do) use the same technology to fast-forward through TV commercials. It is no secret that this technology is forcing media to establish new business practices. Traditional media is scrambling, as new technologies increasingly threaten their traditional business models. In fact, Apple launched its video iPod and announced deals with NBC and video content suppliers as we wrote this piece.

So, what does this mean for search? Opportunity, of course. We believe that as content proliferates, the need for search tools increases. We believe search opportunity will scale beyond Internet to television, wireless and other media platforms, further expanding the opportunities for growth.



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### EXHIBIT 3: PRICE PERFORMANCE OF TRADITIONAL VS. INTERNET MEDIA CO'S



Source: CapitalIQ; WR Hambrecht + Co

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Changes in media force changes in advertising, as the two depend on each other. Without question, a major driving force behind Internet advertising's growth is the critical mass of Internet users that advertisers can no longer ignore. Sixty-eight percent of American adults—137 million people—use the Internet. What's more, 53% of Internet users have a high-speed connection at home. The Internet as a medium has indeed reached critical mass.

What's not as obvious is the far-reaching influence technology has had on advertisers and their agencies. As a result, market needs have changed. The advertising market, including advertisers and advertising agencies, has quietly evolved as media and technology markets have changed. Most notably, the advertising market has:

- Increased its adoption of new technologies, such as CRM;
- Increased its accountability and performance measurement;
- Welcomed new tech-savvy market entrants.

**Marketing and advertising have become more technology-driven.** Technology-driven new business process solutions such as customer relationship management (Chordiant (CHRD: Buy), Salesforce.com, Siebel (SEBL: Not Rated) have changed the way many departments work within an organization, particularly marketing and advertising. These departments are less art and more science and in the process have changed their communications' focus from mass to the individual. These changes have helped to drive the increased popularity of Internet advertising and email because of their powerful targeting capabilities.

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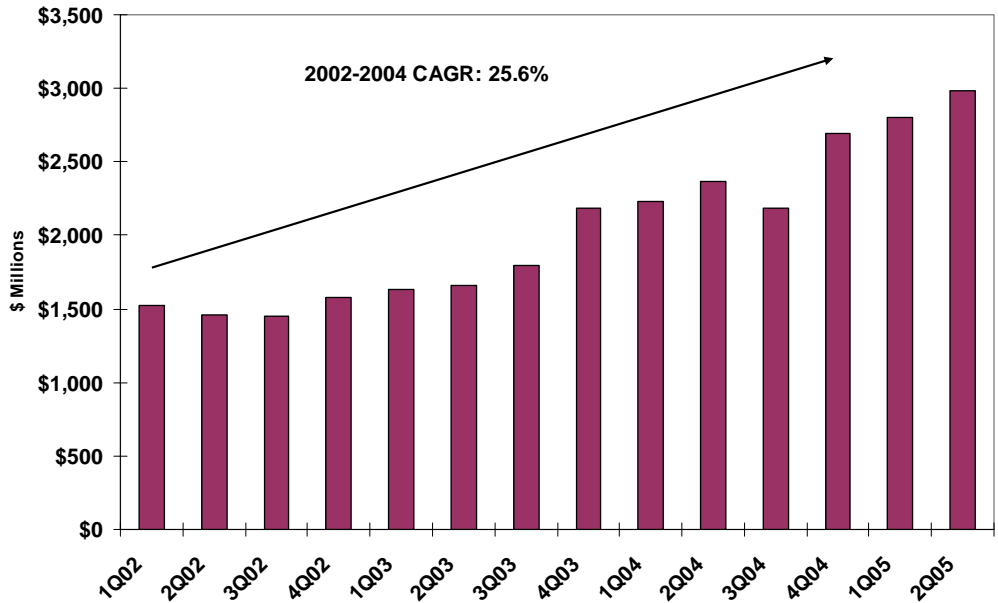
**New technologies bring new tools.** The shift to a more structured, technology-driven marketing organization has paved the way for analytics tools and measurement technologies. (LivePerson, WebSideStory, Unica) These technologies have increased the accountability and awareness of marketing's performance. In turn, these new tools have put pressure on advertisers' agencies and media outlets to make their advertising solutions more efficient and measurable. These trends are drawing marketers towards media and marketing solutions that can easily integrate into their already highly personalized, targeted and measurable marketing efforts.

**New entrants are changing the market landscape.** Interactive agencies, such as aQuantive and Digitas, once posed a greater threat to the traditional advertising market, but the threat diminished with the downturn in Internet advertising. Even so, many holding companies realized their competitive threat and acquired interactive shops in an attempt to capture these new market revenues. Technology-driven innovation continues today. For example, SEMs (search engine marketers), agencies that provide search engine strategy and marketing/advertising tactics, are the latest entrants to threaten traditional market players who fail to innovate or embrace technology. SEMs have taken nearly half a billion dollars from an industry that cannot afford to lose the revenue. Once again, technology start-ups have proven themselves to be savvier than traditional agencies, forcing the industry to change.

It is not surprising then, given these changes to the advertising market, that the Internet is currently the fastest growing advertising sector, expecting to increase by 30% this year while the traditional ad market is growing at less than 5% per year. Internet media seems a perfect answer for today's advertising issues because of its detailed advertiser activity reports, powerful targeting capabilities and efficiencies.

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## EXHIBIT 4: INTERNET ADVERTISING REVENUE



Source: IAB/PriceWaterhouseCoopers

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And search, with its powerful targeting capabilities and an efficient, measurable pricing model, is the fastest growing Internet advertising sector.

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### ENTER THE SEARCH SOLUTION

While new technologies are changing advertising and threatening media, they are opening the door to search's success. Rather than innovate, these traditional markets have instead struggled to keep their existing business models alive. Meanwhile, search engines have been quietly building applications to meet the changing demands of today's consumer. Consumers' rapid adoption of new technology-based media tools creates a market ripe for solutions that help consumers discover, create and manage the content proliferating from their various media sources and platforms. Some phenomena include:

- Digital music services allow consumers to download music, create their own CDs;
- DVRs empower consumers to create their own prime-time line-up;
- Portable entertainment centers such as the video iPod enable consumers to watch or listen to music or video not only when they want, but where they want;
- Wireless keeps consumers connected to voice, email, and 3G is quickly enabling video and rich media content access real-time;
- Cellular phones with digital cameras allow consumers to send picture and now video mail;
- Blogs, quickly becoming popular alternative media sites, are promoting "citizen journalism" and the popularity of RSS feeds.

**Content is proliferating at an unstoppable rate.** Where will consumers turn to help them organize, manage and create their digital content? Search, the simple media manager, becomes the new media powerhouse of tomorrow. Search engines such as Google and Yahoo! that provide robust searching capabilities, cross-platform organizational tools, email and communications applications will likely be best positioned to take advantage of these consumer and technology trends as they affect both US and International markets. These highly customizable and personal applications not only strengthen the search engine's relationship with consumers, they also increase targeting opportunities for advertisers and offer new fee-based revenue streams.

**It is important to take a brief look at the structure of search advertising that, coupled with media and advertising trends, are contributing to its success.** Increased targeting options and a competitive pricing structure are keys to search's growth. Why? Successful targeting increases an advertisement's relevancy, making it more relevant to the content and interests of the intended audience. Increasing an ad's relevancy increases the likelihood that a user will click on it. The more clicks an advertisement receives, the more likely the advertiser will experience an increase in sales. The more sales an advertiser gets from an ad and each click, the more efficient the advertisement. Unlike impressions-based advertising, cost per click pricing charges the advertiser only for the clicks their ads receive. With click-through rates on many sites less than .25%, advertisers may buy thousands of impressions without obtaining one click on their ad, thus decreasing the efficiency of their advertising. Let's look at an example of a CPC campaign vs. a CPM campaign as follows:

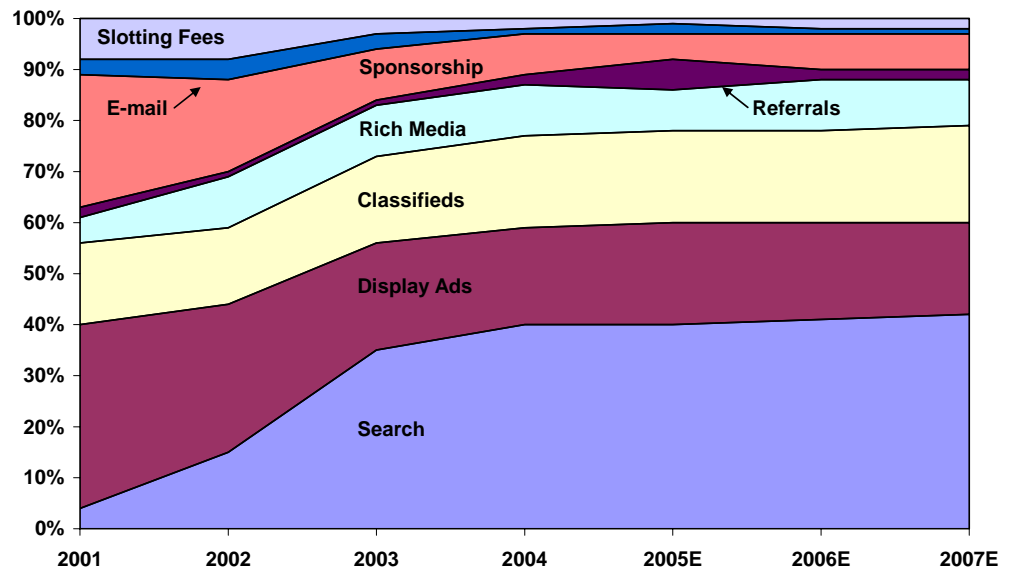
<b>EXHIBIT 5: COMPARISON OF ONLINE PRICING MODELS</b>		
	<b>CPC Advertising Campaign</b>	<b>CPM Advertising Campaign</b>
<b>Price</b>	\$0.05/click	\$1.00/thousand impressions
<b>Click-through Rate</b>	0.29%	0.29%
<b>Budget</b>	\$1,000	\$1,000
<b>Total Impressions</b>	6,896,552	1,000,000
<b>Total Clicks</b>	20,000	2,900
<i>Source: WRHambrecht + Co. estimates</i>		

The more efficient that search engines can make advertisers' ads, the more advertising revenue it should secure. Cost per click pricing is a key component to search's popularity. In a nutshell, more precise targeting and cost per click pricing effectively lowers the CPM (eCPM) of advertising and increases its efficiencies.

These market forces and search-specific pricing components have made search an Internet advertising must-have—and the numbers speak for themselves. Since 2001, search has grown from 4% of Internet advertising share to 40% in 2005, according to IAB/PWC.

Accordingly, we believe investors seeking to capture the growth in the Internet market and market changes in media and advertising, should invest in search.

**EXHIBIT 6: INTERNET AD REVENUES BY ADVERTISING VEHICLE**



Source: IAB/PriceWaterhouseCoopers, WR Hambrecht + Co estimates

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## RULES TO INVEST BY...OUR INVESTMENT GUIDELINES

Valuing companies in emerging technology markets can be tricky. We believe it is important that investors combine traditional investment metrics with a strategic understanding of how companies plan to execute in the evolving landscape described above. Accordingly, our investment thesis on Internet focuses on those companies that possess a large majority of the following attributes:

- **Rule #1) Keep your eyes on the prize.** Just as Google was able to enter a crowded market with an improved search tool, new market entrants could, too. As we have described in our thesis, search tools will likely only increase in importance as content proliferates. Too much diversification and not enough attention to the core technology will cause users to go elsewhere. We believe search technology is the prize possession, attracting users who in turn attract revenue. We measure a company's focus on search by the amount reinvested in search-specific R&D, growth in unique users, and share of search among other ratings and stats.
- **Rule #2) You gotta dance with the one who brought you.** They may not be pretty, but until new revenue streams are developed, advertising is still the belle of this ball. While there is much talk and, indeed, much focus in our thesis on new products and new revenue streams, and their potential, the fact is that search's primary revenue stream remains advertising. Second only to a focus on its core technology, advertising must remain a key focus for search. We measure this guideline by advertising share and activity including revenue and share growth, number of advertisers, and spend per advertiser among other metrics. In addition, we like to see new advertising programs and technologies integrated into existing advertiser options.
- **Rule #3) Paid search is losing the popularity contest.** We believe there is a trend in the market towards bringing the paid-search function in-house, particularly among larger publishers. Yahoo! was the first to kick-off this trend with its acquisition of Overture, followed by MSN's creation of the MSN AdCenter and consequent dissolution of its relationship with Overture; IAC's acquisition of AskJeeves is likely a step in the same direction. We believe the revenue share agreements with large sites are around a 40:60 split, but much less with small sites and blogs which are likely closer to a 90:10 split. We believe smaller sites have less negotiating power and leverage given their smaller traffic sizes and reduced brand recognition. Although this trend may result in a reduction in overall traffic, we believe it will be offset by the resulting reduction in traffic acquisitions costs (TAC). We look for a reduction in TAC and less dependence on the network-based advertising revenue as a percentage of total advertising revenue.
- **Rule #4) Break down borders...set sail overseas.** Given the reduced popularity of paid-search, we like to see an increase in International traffic and advertising. We believe the maturity of the US Internet market will make it difficult to steal significant share from competitive sites. If these users have not already switched their search provider, we believe any future US-based share shift will be slight. Any losses in traffic numbers are more likely to be made up from developing markets as these users are just starting to determine their search brand preference.
- **Rule #5) This baby needs a bigger play pen.** Given the rapid changes in the advertising and media markets and the relatively small size of the Internet advertising market, we get really excited when these companies expand their space and subsequent revenue opportunities, particularly from existing advertising markets such as the yellow pages, print classified, and direct mail. We look for new advertising developments that shift share from these larger markets.

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- **Rule #6) Show me the money.** Investors are still feeling burned by the downturn in Internet advertising in 2000/2001, so we like to see diversified revenue streams. New product developments that make us laugh at silly college pranks caught on video or wow our Mom with satellite views are fun, but we say, "Show me the money!" before we can get really excited. We look for fee-based revenue streams and solid plans for growth in areas outside of advertising.

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## **CONCLUSION: INTERNET INVESTING 101**

To truly generate excess returns (alpha) in the Internet space, we believe investors should focus on the intersection of advertising, media and technology and the new technology-driven markets they are creating.

Today, investing in the Internet is not all about ecommerce. We believe Internet-focused investors need to examine the underlying core technology and the market drivers enabling new business growth. The next generation platforms, applications and infrastructure the Internet has subsequently created offer unique opportunities for emerging companies to drive these new market opportunities. Clearly, these changes are technology-driven, and our bet is that the owners of this technology will have the most market leverage. The Internet is a complicated "web" of a market space, but we believe investors can succeed by picking stocks with strong fundamental technologies which drive these markets and their subsequent applications.

So going forward, what is our recommendation and how will investors need to adopt their investment strategy to secure out-performance in Internet? We believe the best way to look at the Internet will require investors to:

- 1) Understand the individual sub-sectors within the broader Internet universe as the growth rates associated with these next generation markets should outpace others. The goal here is to identify key new growth trends that can provide exceptional future returns.
- 2) Identify companies that drive these growth trends through proprietary technology or benefit from the evolution of new business requirements that these trends provide.
- 3) Apply a consistent set of investment criteria to the sector to determine which will ultimately garner the greatest returns to investors. This means incorporating financial, fundamental and strategic positioning of companies into the overall investment analysis, including a company's strengths, weaknesses and product strategy, among other considerations.

In the next few sections, we put our investment methodology into practice. We outline key trends we believe will drive the industry over the next 12-18 months and lay out our investment case for each company based on fundamental analysis.

## SEGMENTING THE INTERNET SPACE; FROM THEORY TO STOCK SELECTION

We compare five sectors within the Internet market and their relative performance to illustrate our investment thesis. We selected the following sub-sectors: Internet advertising, commerce, media, search and services. We believe that advertising, media and search are inter-related and that the success of any one in the “next generation” group propels the success of the others. Given the market dynamics in media, advertising and their subsequent reliance on search, we believe this ecosystem will continue to evolve. Moreover, the success of ecommerce and services will likely depend primarily on the popularity and subsequent demand of those individual products and services, irrelevant of the Internet. Accordingly, we also believe that as these two sectors promote and market their goods and services online, they also feed into our next generation ecosystem and have included them in our index for that reason. We also believe that these Internet services and commerce companies, while Internet-based, do not need to have proprietary technology which forms the basis of our long-term recommendations and sector selections. Please note performance below.

### EXHIBIT 7: INTERNET SUB-SECTOR PERFORMANCE CAN VARY WIDELY

<u>Date</u>	<u>Internet Advertising</u>	<u>Internet Commerce</u>	<u>Internet Media</u>	<u>Internet Search</u>	<u>Internet Services</u>	<u>High vs. Low Diff.</u>	<u>HII Internet Index</u>
<b><u>2001 (CY)</u></b>	<b><u>106.8%</u></b>	<b><u>49.8%</u></b>	<b><u>9.5%</u></b>	<b><u>-55.3%</u></b>	<b><u>53.0%</u></b>	<b><u>162.1%</u></b>	<b><u>45.0%</u></b>
1Q	-8.5%	-3.2%	-7.3%	-57.7%	33.1%	90.8%	-5.9%
2Q	13.6%	69.9%	17.1%	42.6%	48.7%	56.3%	32.6%
3Q	-18.0%	-40.8%	-41.1%	-58.6%	-34.7%	40.6%	-34.2%
4Q	142.9%	54.0%	71.1%	79.4%	18.3%	124.5%	76.5%
<b><u>2002 (CY)</u></b>	<b><u>20.2%</u></b>	<b><u>33.2%</u></b>	<b><u>-3.0%</u></b>	<b><u>-36.1%</u></b>	<b><u>193.9%</u></b>	<b><u>230.0%</u></b>	<b><u>41.2%</u></b>
1Q	15.0%	8.0%	31.6%	-14.4%	41.2%	55.6%	19.5%
2Q	8.6%	16.0%	-33.3%	-42.4%	-3.0%	58.3%	-8.6%
3Q	-18.5%	-24.9%	-18.7%	-25.8%	44.1%	69.9%	-5.9%
4Q	18.1%	41.5%	35.9%	74.7%	48.9%	56.6%	37.4%
<b><u>2003 (CY)</u></b>	<b><u>248.9%</u></b>	<b><u>101.7%</u></b>	<b><u>134.7%</u></b>	<b><u>158.2%</u></b>	<b><u>346.2%</u></b>	<b><u>244.5%</u></b>	<b><u>204.8%</u></b>
1Q	22.8%	9.8%	-5.6%	29.4%	20.5%	35.0%	14.2%
2Q	111.5%	35.1%	86.7%	31.5%	164.4%	132.9%	92.9%
3Q	20.9%	15.9%	12.5%	26.8%	50.6%	38.0%	27.2%
4Q	11.1%	17.3%	18.4%	19.6%	-7.0%	26.6%	8.8%
<b><u>2004 (CY)</u></b>	<b><u>32.5%</u></b>	<b><u>35.0%</u></b>	<b><u>48.1%</u></b>	<b><u>112.5%</u></b>	<b><u>-9.8%</u></b>	<b><u>122.3%</u></b>	<b><u>6.2%</u></b>
1Q	11.0%	-3.3%	54.3%	34.8%	27.5%	57.6%	-8.1%
2Q	6.3%	29.7%	-5.3%	18.6%	-32.7%	62.4%	2.9%
3Q	-16.3%	-10.4%	-8.5%	10.9%	-11.2%	27.2%	-1.2%
4Q	34.2%	20.2%	10.7%	19.9%	18.4%	23.5%	13.7%
<b><u>2005 (YTD)</u></b>	<b><u>41.6%</u></b>	<b><u>0.0%</u></b>	<b><u>17.3%</u></b>	<b><u>24.0%</u></b>	<b><u>92.6%</u></b>	<b><u>92.7%</u></b>	<b><u>37.4%</u></b>
1Q '05	-12.2%	-24.2%	-6.7%	-11.7%	14.0%	38.3%	-8.1%
2Q '05	13.6%	5.6%	1.8%	15.5%	19.3%	17.5%	11.9%
3Q '05	24.2%	9.6%	2.1%	-3.4%	22.6%	27.6%	14.1%
4Q '05 (QTD)	14.4%	14.0%	20.9%	25.8%	15.5%	11.8%	17.1%
				<b>Yearly Average:</b>		<b>170.3%</b>	<b>66.9%</b>
				<b>Quarterly Average:</b>		<b>52.6%</b>	<b>14.8%</b>

Source: CapitalIQ; WR Hambrecht + Co



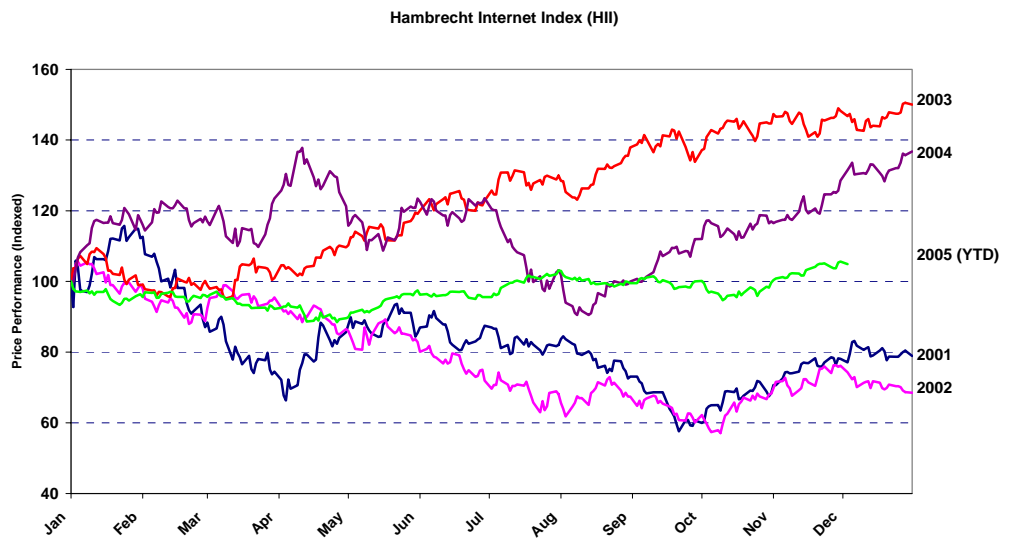
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## A HISTORICAL PERSPECTIVE...BEFORE MOVING FORWARD

Examining the historical returns of the Hambrecht Internet Index (HII), which is comprised of companies in each of the Internet sub-sectors noted above, we note several emerging trends. 2003 marked a significant re-acceleration in the Internet sector, as companies began to recover from the vestiges of the dot-com doldrums. More specifically, Internet advertising recovered from declines in growth as traditional advertisers began to embrace the medium. Like traditional advertising, we have noticed seasonal patterns in Internet advertising, particularly in the fourth quarter. Investors should note that the majority of the calendar year gains between 2001 and 2004 are concentrated in the fourth quarter of each year. We expect 2005 and beyond to follow suit.

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### EXHIBIT 8: HII PERFORMANCE BY YEAR



Source: CapitalIQ; WR Hambrecht + Co

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## **DIGGING A LITTLE DEEPER INTO INTERNET ADVERTISING**

Let's drill deeper and look at returns for each quarter over the last five years. The fourth quarter of each year is the only quarter that returns for the index were all positive. Additionally, barring the Q4 numbers of 2001, which was buffeted by the waves of the dot-com perfect storm, the high-low disparity between Internet sub-sectors returns for Q4 was the lowest of any other quarter. What does this mean? The best bet historically in the Internet space has been to buy heading into Q4.

Clearly, historical returns are not an indicator of future performance, and we are not advocating that investors get into the business of timing the market. We believe investors should be focused more on identifying emerging trends and/or drivers of technology that can allow companies to outperform the group going forward.

Internet advertising revenues have been growing at a steady clip since the bursting of the dot-com bubble, as companies continue to discover new and more effective ways of reaching out to potential customers. Internet advertising revenues grew at a CAGR of 25.6% from 2002-2004. We expect growth to range from 20-25% going forward, as the market expands and matures.

Given that we believe the Internet space will experience higher-than-expected growth rates of the broader indices, the question for investors becomes, "What is a fair valuation method?" We believe that it is nigh impossible to fairly value a company that is at the leading edge of emerging technology. We believe it is more prudent to value a company by discounting from its implied share price once it reaches a normalized growth rate. Clearly, there are several assumptions to be made, including but not limited to growth rate, share count creep, P/E multiplier, and discount rate. We detail our assumptions in each company-specific section.

The bottom line is that trying to value high-growth companies like Google and Yahoo! requires a different way of thinking until normalized growth appears. In our view, investors should be thinking of what the long-term growth potential is for these companies, rather than multiples of near-term growth expectations.

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## OUR STOCK PICKS

Applying the investment philosophy outlined above, we are assuming coverage of Google, Inc. (GOOG) and initiating coverage of Yahoo! Inc. (YHOO), as summarized below. For a detailed review of our analysis, please refer to the company profiles, beginning on page 20.

### **Google, Inc. – Buy Rating; Market Cap \$124.28B; Aggressive Growth**

We are assuming coverage of Google, Inc. (GOOG) with a Buy rating and are establishing a 12-month price target of \$480. This is derived by calculating the net present value of the company assuming normalized growth of 20% starting in 2012 and a discount rate of 12%. We believe this methodology serves as the best way to value the company, given the historical high growth and relative youth of the search market.

We believe Google will benefit from strong growth in advertising revenues through 2006 and beyond because of its superior search technology, advertising innovations and dominant brand. It is this technology that has allowed Google to capture 57% share in the search market, up from 28% just two years ago. For this reason, we are very bullish on Google in the short-term, expecting the stock to increase by at least 14% to \$480 because of its ability to continue to capture a large share of the growing Internet advertising market. Long-term, we believe Google remains well-positioned as a technology software and services provider to benefit from the convergence of media platforms and changing consumer media consumption trends as we currently see this future market developing, and leverage this beachhead into numerous other platforms and technologies.

### **Yahoo! Inc. – Hold Rating; Market Cap \$58.91B; Aggressive Growth**

We are initiating coverage of Yahoo!, Inc. (YHOO) with a Hold rating and are establishing a 12-month price target of \$40, which is calculated using both a discounted cash flow and sum-of-the-parts analysis. Our discounted cash flow assumes a free cash flow CAGR of 26% to 2014 and a discount rate of 11.2%. Our sum-of-the-parts analysis averages the equity values of forward EV/Sales, P/E, and free cash flow multiples using valuations of other comparable companies. Given Yahoo!'s business structure, including a sizeable NOL and 34% ownership interest in Yahoo! Japan, in addition to its historical high growth but relative maturity in the Internet space, we believe these methodologies best reflect the value of the company.

Yahoo! is the "next generation" media company of the future, leveraging technology to deliver content and services that meet consumers' changing demands. Consumers like Yahoo!, and the media and advertising markets are clearly evolving towards its new distribution platform. Yahoo! has aggregated the right content, services, tools and relationships to provide us with a fairly clear view of its future as a technology-driven media company. While we are bullish on the future of Internet media as outlined in our investment thesis, we would like to see Yahoo! make the following changes to better position itself to be the future media market leader:

- Improvement in its core search technology;
- Increase in higher value, rich media advertising;
- Increase in fee-based revenue.

Although we believe in the potential of Yahoo!'s products, state of the art advertising technology, and other leading initiatives such as their looming phone service, we believe this is more or less reflected in the current share price and rate YHOO shares a Hold.

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## GOOGLE, INC. (GOOG)

Google, Inc., headquartered in Mountain View, California, is an Internet search, advertising services, and web-based applications provider. The company's consumer services and products include Internet and desktop search, communications tools such as email, IM, and Talk, content applications such as Blogger and Picasa, and mobile search and SMS services. Advertiser services include AdWords and AdSense. Advertisers use AdWords to purchase keywords and terms on Google.com websites. AdSense matches advertisers' ads with keywords and content on third-party sites. Google's search appliance and the Google Mini offer large and small business search solutions for their intranet or external website. Google also offers desktop search for the enterprise. Google was founded by Larry Page and Sergey Brin in 1998 with the mission "to organize the world's information and make it universally accessible and useful."

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## INVESTMENT THESIS

We are assuming coverage of Google, Inc. (GOOG) with a Buy rating and are establishing a 12-month price target of \$480, which is derived by calculating the net present value of the company assuming normalized growth of 20% starting in 2012 and a discount rate of 12%. We believe this methodology serves as the best way to value the company, given the high growth and relative youth of the search market.

We believe Google will benefit from strong growth in advertising revenues through 2006 because of its superior search technology and advertising innovations. It is this technology that has allowed Google to capture 57% share in the search market, up from 28% just two years ago. For this reason, we are very bullish on Google in the short-term, expecting the stock to increase by at least 14% to \$480 because of its ability to continue to capture a large share of the growing Internet advertising market. Long-term, we believe Google remains well-positioned, as a technology software and services provider, to benefit from the convergence of media platforms and changing consumer media consumption trends as we currently see this future market developing.

Earlier in this report, we outlined several strategies we believe investors should follow when investing in Internet search. Google demonstrates positive signs in every area except one—diversification of revenue and monetization of new products. While this concerns us, we are granting Google some time given the recent birth date of their new products and what we believe are their larger, trail-blazing objectives as a technology software provider. For now, however, Google is following the rest of our investment guidelines quite closely, as outlined below:

- **The Search Innovation Continues.** Most notably, Google demonstrates a clear commitment to its core products—search and advertising. Google's 70-20-10 rule serves as a guide for Google engineers in how to allocate their time: 70% on core products, 20% on related products and 10% on whatever they choose. While the slightly more off-beat products that are produced in 10% of time spent generally get the most publicity, we agree that the majority of time must be committed to their core products in order for Google to maintain its key competitive advantage. Search is still a new market, with new applications and search technologies constantly evolving, creating additional opportunities for investors. While it may seem that the field is dominated by only a few players, there are opportunities in vertical search, particularly local and shopping where upstarts may gain ground. Shopping.com, recently acquired by eBay, is a good example. Google's focus on its core technology has led to innovations that expand its market opportunities in the following markets:

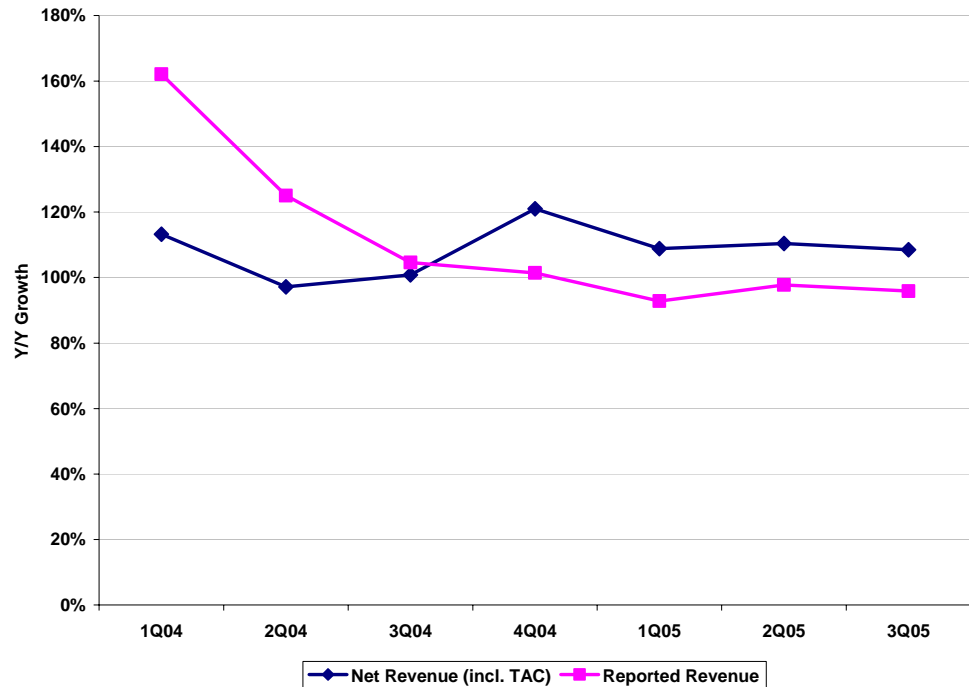
- 
- Google Base—local and classifieds search
  - Froogle Local—local shopping search
  - Desktop Search—search on the desktop
  - Blog Search—search for the rapidly growing blogging content market
  - Personalized Search—enhancement to core search, enabling users to find information faster based on their profile of previous searches.
  - Mobile Web Search—search for the growing wireless web market.

We believe these innovations will help Google maintain its competitive edge by developing better technology faster than new market entrants and by strengthening its relationships with users as they increasingly rely on Google for all of their search needs.

As market opportunities are expanding in search, advertising technologies are creating similar threats and opportunities. Advertising technologies that improve advertising's effectiveness through more specific targeting opportunities, advanced measurements, or increased optimization capabilities are gaining traction with advertisers. These technologies could pose a competitive threat to Google if they improve advertising performance on competitive media sites or platforms over search. They could also expand Google's market opportunity by improving search advertising, thus attracting additional advertisers or expanding relationships with existing advertisers. For these reasons, we like Google's enhancements to its advertising options, including site specific targeting, AdSense for RSS feeds, and free web analytics software for advertisers.

- **Untapped International opportunity.** Google's International revenue growth has increased an impressive 121% from Q3:04 to Q3:05 overall. Growth for Google's own websites' grew 115% internationally. This is particularly nice to see, because Google doesn't have TAC associated with this revenue. We believe that Google's strong brand and vast base of advertisers has enabled it to enter these markets with minimal costs and limited TAC. Because of this, we are bullish on growth in international advertising markets, because of the adoption of the Internet in these markets is outpacing the U.S.. Currently, international represents 40% of Google's total revenue. We see tremendous opportunity for international expansion, especially in the UK which accounts for only 15% of total revenue today.
- **Brand strength provides increased leverage in the model.** As our thesis suggests, we expect large sites to decrease their outsourced paid search services to companies like Google and Yahoo!. This trend will likely reduce Google's TAC because we believe its revenue share agreements with larger sites are less favorable than with smaller ones and therefore have higher traffic acquisitions costs. However, having fewer larger publishers as clients will also decrease Google's overall revenue because their larger base of unique users theoretically provide more clicks to drive Google's CPC-based revenue model. Growth among Google's own sites increased an average of 20% quarter-to-quarter from Q1:04 to Q3:05, while quarterly growth among the network has decreased from 31% to 7% in the same time period. We believe this has had a significant impact on increasing Google's gross revenue excluding TAC, which has grown over 200% in the same time period.

## EXHIBIT 9: MODEL LEVERAGE INCREASES PROFORMA REVENUE



Source: CapitalIQ; WR Hambrecht + Co

- AOL...You've got a deal?** Upon drafting this report, Microsoft was in discussions with AOL to forge a partnership that would create a combined MSN and AOL advertising entity. This potential "MSN/AOL" arrangement would have replaced Google as AOL's paid search provider. However, a few days later (not taking the announcement sitting down) Google countered the MSN/AOL announcement. Google agreed to invest 5% in AOL (roughly \$1 billion) and is offering technical assistance to boost the prominence of AOL search results. Moreover, Google will extend and deepen the advertising partnership which we believe will result in shared advertising sales opportunities. Based on Google's statements earlier this year in which they disclosed that 11% of their 1H:05 gross revenue came from AOL, we estimate the current relationship with AOL contributes approximately 1% of Google's net revenue, or roughly \$0.08 per year on an EPS basis.
- Our estimates provide for an 80/20 revenue share agreement in AOL's favor.** We believe Google's previous agreement with AOL reflected Google's desire to increase its audience reach and advertiser base when the agreement was created in 2002 and broadened in 2003, resulting in higher TAC for AOL clicks. Given the trend in Google's reduction in TAC and increase in revenue from other sources, we estimate AOL's contribution to gross revenues to be less than 10% by Q4:05. If the agreement were closer to a 50/50 revenue share agreement, our estimates indicate an impact on net revenue as high as 3-4% of net revenue. While the net value of the current AOL relationship is fairly small, the proposed expanded relationship could increase its value.

EXHIBIT 10: AOL IMPACT

	Q1/05 A	Q2/05 A	Q3/05 A	Q4/05 E
Gross Revenue	657.0	737.2	884.7	1,076.7
AOL % Contribution	11%	11%	10%	8%
AOL Total Contribution	72.3	81.1	88.5	86.1
Google's Share	14.5	16.2	17.7	17.2
AOL Contribution to Net	1%	1%	1%	1%
Impact on EPS	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.02

Source: WR Hambrecht + Co estimates

- Playing with the Big Boys...Taking Madison Avenue by Storm.** As our guidelines point out, Internet advertising is still a small portion of the larger advertising market, although it is the fastest growing advertising sector growing at 30% last year in a market that is growing between 4-6% per year. Internet advertising's approximate \$12 billion market represents just 4% of the \$278 billion U.S. advertising market. Given Internet advertising's small but growing size, we like to see Google create products that can capture share from the larger advertising market. How do they do this? By creating products that accomplish the same advertising objective online with search as they might offline so that advertisers can reasonably substitute one for the other. Google Base was a significant development that we believe will enable Google to garner advertising revenue from the \$12 billion dollar yellow pages market, while Google Local may reap additional revenues from the \$40 billion local newspaper market. Google Mobile is helping establish an entirely new wireless advertising market, which we currently estimate at approximately \$500 million. However, we believe the wireless advertising market has growth and revenue potential to rival the Internet advertising market. We believe consumers are increasingly shifting their offline activities online, such as browsing classified ads and searching yellow pages directories while direct marketers are using email to do the same. As a result, advertising dollars from these sources will likely also move online. We also believe these new product developments can further open the door to additional revenue opportunities beyond advertising, such as ecommerce-related revenue sharing and slotting fees, but we don't believe Google has any plans to do so.

We expect more aggressive promotion of Google's enterprise services such as the Google Mini search replacement program announced November 8, 2005; however, we expect revenue outside of advertising to remain less than 5% of total revenue through 2006. We also expect Google to increase their development of software technology. Our bet is that Google's brand strength and technology expertise will enable it to successfully enter new markets and obtain revenue beyond advertising sales. We believe Google's brand and technology expertise make it a formidable competitor in the enterprise even for the likes of Microsoft.

- The Desktop as Portal? Time will tell.** As mentioned in our thesis, we are bullish on Google's prospects in desktop software markets where standards have yet to be developed, but slightly more skeptical regarding their success in established software markets. We like their approach, which we call "desktop as portal," to developing applications and search-related tools, but we believe Google will seek to tap the enterprise market rather than the consumer for additional revenue, particularly as it increases its development in Free/Open Source Software (F/OSS). How Google decides to monetize its future products in developing markets and increase revenue



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from the enterprise excites us, but requires our patience. With Google's massive back-end infrastructure and ubiquitous presence with users, the company has an opportunity to serve as the delivery mechanism for its own as well as third-party applications. Under this scenario, the role of traditional operating systems would diminish and provide opportunity for Google to fill that role. Microsoft is a formidable competitor who owns the desktop through its interoperable applications. We think Google's search-based approach to the desktop may be the next generation of software technology and, given their market strength and history of innovation, worth our current wait.

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## INVESTMENT RISKS

**The Internet advertising market is new and unpredictable.** Almost all (99%) of Google's revenue is dependent on Internet advertising. Advertising in general is both cyclical and seasonal. The newly formed Internet advertising market is only just beginning to establish its own patterns. The market has already experienced a sharp downturn in growth during its early years and may experience a similar downturn depending on the economy, exposure to international events, Internet development, and Google's advertising base.

**Google's ability to diversify its revenue or simply create appealing new products for consumers remains unproven.** Google has not and may never charge consumers for its ancillary products, such as Picasa, GMail, Google Talk or Google Earth. Google offers no guidance on the popularity or usage of these products or their future plans for monetization. Once again, this leaves Google almost entirely dependent on advertising revenue. Revenue diversification aside, consumers' interest in and use of these products demonstrates Google's brand and competitive strength, helping investors determine how quickly consumers might accept or reject new competitors.

**Technological innovation and competition is constant and plentiful in the Internet marketplace.** New technologies, new competitors, or even new business models could pose a risk to Google. Competition can be formidable, such as Microsoft and Time Warner or a nimble technology start-up could pose a new threat. Either may develop new technologies or services which consumers favor over Google, particularly as Google diversifies its product offerings and increases its R&D in new markets.

**Managing rapid growth will be a complex challenge.** Google is growing rapidly in all areas of business and is under intense public scrutiny. Managing growth can be challenging for most new companies, but it may be particularly challenging for a business like Google's, which has few mentors and comps, a bright public spotlight and intense competition.

**Google's future growth is dependent upon on our limited view of the development of future markets, such as IPTV, Interactive Television, and the wireless market, which have a limited base of consumer users and visibility.** Technological glitches, regulatory forces, and unpredictable events may alter our growth scenario quite differently than expected.

**Google is increasing its revenue from international sources, exposing it to foreign currency and interest rate risk, new customer credit risk, foreign market regulatory risks, and localization issues.** These risks vary from market to market, but could threaten the success of new product launches and securing revenue from international sources.

**Management offers no guidance.** Limited guidance in a highly competitive market is understandable, but Google's lack of both financial and basic business information increases suspicions that management has limited visibility itself and raises investor insecurity and risk.



**Management has little experience in media and advertising.** While the three members of the executive leadership team have impressive technology expertise and experience, outside of their tenure at Google, they have little media or advertising experience. Given Google's primary source of revenue is advertising, this lack of insight into the business that drives their primary revenue stream could limit their vision and execution of media and advertising-based revenue opportunities.

**Google is increasing its capex spending and number of employees.** These activities may reduce margins and net income.

## VALUATION...WE PUT OUR HAT IN THE RING

As noted, Google is a unique company in a rapidly growing market. While this is exciting, it can make valuation tricky. We analyzed two valuation methods: 1) Net Present Value under a normalized growth scenario; and 2) Discounted cash flow.

Our discounted cash flow valuation model assumes a 33% free cash flow CAGR through 2012, 12% discount rate, and a terminal multiple on cash flow of 25x.

### EXHIBIT 11: DCF VALUATION

Assumed Range						
Terminal Multiple	25.0	25.0	25.0	25.0	25.0	25.0
Discount Rate	14.0%	13.0%	12.0%	11.0%	10.0%	9.0%
Terminal FCF	11,186	11,186	11,186	11,186	11,186	11,186
Terminal Value	279,646	279,646	279,646	279,646	279,646	279,646
Discounted TV	85,993	93,090	100,843	109,321	118,597	128,757
CDCF	32,459	32,459	32,459	32,459	32,459	32,459
Enterprise Value	118,452	125,549	133,302	141,780	151,056	161,216
Plus Excess Cash	5,519	5,519	5,519	5,519	5,519	5,519
<b>Equity Value</b>	<b>123,971</b>	<b>131,067</b>	<b>138,821</b>	<b>147,298</b>	<b>156,575</b>	<b>166,734</b>
Shs. Outstanding	289	289	289	289	289	289
<b>Equity Value/Share</b>	<b>\$429</b>	<b>\$454</b>	<b>\$481</b>	<b>\$510</b>	<b>\$542</b>	<b>\$577</b>

Total Value	Discount Rate		10-yr FCF Terminal Multiple				
	10.0%	11.0%	22x	24x	25x	26x	28x
10.0%	145,551	155,039	159,783	164,527	174,015		
11.0%	135,729	144,474	148,847	153,220	161,966		
12.0%	126,720	134,787	138,821	142,854	150,922		
13.0%	118,449	125,897	129,620	133,344	140,791		
14.0%	110,851	117,730	121,170	124,610	131,489		

Per Share Value	Discount Rate		10-yr FCF Terminal Multiple				
	10.0%	11.0%	22x	24x	25x	26x	28x
10.0%	\$503.99	\$536.84	\$553.27	\$569.69	\$602.55		
11.0%	\$469.98	\$500.26	\$515.40	\$530.54	\$560.82		
12.0%	\$438.78	\$466.72	\$480.68	\$494.65	\$522.58		
13.0%	\$410.14	\$435.93	\$448.82	\$461.72	\$487.50		
14.0%	\$383.83	\$407.65	\$419.56	\$431.48	\$455.30		

Source: WR Hambrecht + Co estimates

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Our net present value under normalized growth assumes a 20% growth starting in 2012, a 12% discount rate, and a P/E multiple of 25x.

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EXHIBIT 12: NPV ANALYSIS

Discount Rate	P/E Multiple						
	22x	23x	24x	25x	26x	27x	28x
10.0%	\$477	\$499	\$520	\$542	\$564	\$586	\$607
11.0%	\$448	\$468	\$489	\$509	\$529	\$550	\$570
12.0%	\$421	\$440	\$459	<b>\$478</b>	\$497	\$516	\$535
13.0%	\$395	\$413	\$431	\$449	\$467	\$485	\$503
14.0%	\$372	\$388	\$405	\$422	\$439	\$456	\$473

Source: WR Hambrecht + Co estimates

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## KEY FINANCIAL ASSUMPTIONS

We are forecasting FQ4:05 (December) total revenue of \$1.299 billion (+98.6%) and EPS of \$1.81 (+96.3%), which is above Street consensus estimates of \$1.269 billion and \$1.74, respectively. These estimates are based on Google's own websites revenues of \$1.07 billion (+103%), Google Network websites revenues of \$847.7 million (+73%), and operating margins of 56.4%. Accordingly, our FY:05 estimates call for total revenue of \$4.032 billion (+105.7%) and EPS of \$5.93 (+85.3%), which is above Street consensus estimates of \$4.003 and \$8.59, respectively. Looking forward, our initial FY:06 estimates forecast total revenue of \$6.429.9 billion (+59.5%) and EPS of \$8.72 (+47.1%), which is above Street estimates of \$6.426 billion and \$8.59, respectively.

We have listed our key financial assumptions in the table below.

### EXHIBIT 13: KEY FINANCIAL ASSUMPTIONS

	YoY		YoY		YoY		Comments
	4Q:05E	Growth	FY 2005	Growth	FY 2006	Growth	
<b>Income Statement</b>							
Google Web Sites	\$1,076.7	103.0%	\$3,355.5	111.2%	\$5,634.1	67.9%	<ul style="list-style-type: none"> <li>• Brand strength driving strong growth of ad revenues</li> <li>• Slightly lower growth as larger sites decrease outsourced search</li> </ul>
Google Network Web Sites	\$847.7	73.0%	\$2,737.1	76.1%	\$4,404.9	60.9%	
Advertising Revenues	\$1,924.4	88.6%	\$6,092.6	93.8%	\$10,039.0	64.8%	
Licensing & Other Revenues	\$19.0	70.8%	\$70.3	52.9%	\$105.4	50.0%	
<b>Total Reported Revenues</b>	<b>\$1,943.4</b>	<b>88.4%</b>	<b>\$6,162.8</b>	<b>93.2%</b>	<b>\$10,144.4</b>	<b>64.6%</b>	
Traffic Acquisition Costs (TAC)	\$644.7	70.7%	\$2,130.7	73.4%	\$3,714.4	74.3%	
<b>Total Revenue, Net</b>	<b>\$1,298.7</b>	<b>98.6%</b>	<b>\$4,032.2</b>	<b>105.7%</b>	<b>\$6,429.9</b>	<b>59.5%</b>	<ul style="list-style-type: none"> <li>• Superior search technology and advertising innovation lead us to be more bullish than the Street</li> </ul>
Consensus Revenue	\$1,268.9	94.1%	\$4,003.2	104.2%	\$6,426.0	60.5%	
Operating Margins	56.4%		58.1%		56.1%		<ul style="list-style-type: none"> <li>• Increased investment in R&amp;D, capex, and new employees may pressure margins</li> </ul>
<b>EPS</b>	<b>\$1.81</b>	<b>96.3%</b>	<b>\$5.93</b>	<b>85.3%</b>	<b>\$8.72</b>	<b>47.1%</b>	
Consensus EPS	\$1.74	89.3%	\$5.88	83.9%	\$8.59	45.9%	
Diluted Shares	291.7		288.8		296.7		
<b>Balance Sheet</b>							
Cash Balance	\$5,868.6		\$5,868.6		\$7,819.2		<ul style="list-style-type: none"> <li>• Strong cash position allows for strategic acquisitions</li> </ul>
Cash/Share	\$20.12		\$20.12		\$26.36		
Deferred Revenue	\$76.4	73.9%	\$76.4	73.9%	\$165.3	116.2%	
DSO	47.0		47.0		45.0		
<b>Cash Flow</b>							
Operating Cash Flow	\$550.1	149.4%	\$2,351.1	140.6%	\$2,750.5	17.0%	
Free Cash Flow	\$350.1	13.3%	\$1,558.7	136.9%	\$1,950.5	25.1%	
FCF/Share	\$1.20		\$5.40		\$6.57		

Source: Company; WR Hambrecht + Co estimates



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## YAHOO! INC. (YHOO)

Yahoo!, Inc., headquartered in Sunnyvale, California, is an Internet search and online services company for consumers and business. Founded by two former Stanford University students, David Filo and Jerry Yang in 1994, Yahoo! started as a web directory and has expanded to include a variety of services for U.S. and international web users. As a free content provider, Yahoo! aggregates content from the AP, Marketwatch, Reuters, and The Weather Channel, among others, and also offers some exclusive content such as Sports and Yahoo! TV. Free services for consumers include Yahoo! photo, HotJobs, email, and messenger. Users may subscribe to a host of premium, fee-based services for connectivity, entertainment, or financial-related information. Fee-based services for business include advertising services, small business services, and employment services through HotJobs. Yahoo! has formed strategic alliances with SBC Communications, Inc.; BT Group plc; Rogers Cable, Inc.; Alibaba.com Corporation; Seven Network, Ltd.; Softbank Corp.; and Verizon Communications, Inc.

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## INVESTMENT THESIS

We are initiating coverage of Yahoo! Inc. (YHOO) with a Hold rating and are establishing a 12-month price target of \$40, which is calculated using both a discounted cash flow and sum-of-the-parts analysis. Our discounted cash flow assumes a free cash flow CAGR of 26% to 2014 and a discount rate of 11.2%. Our sum-of-the parts analysis averages the equity values of forward EV/Sales, P/E, and free cash flow multiples using valuations of other comparable companies. Given Yahoo!'s business structure, including a sizeable NOL and 34% ownership interest in Yahoo! Japan, in addition to its historical high growth but relative maturity in the Internet space, we believe these methodologies best reflect the value of the company.

Yahoo! is the media company of the future, leveraging technology to deliver content and services that meet consumers' changing demands. Consumers like Yahoo! and the media and advertising markets are clearly evolving towards its new distribution platform. Yahoo! has aggregated the right content, services, tools and relationships to provide us with a fairly clear view of its future as a technology-driven media company. While we are bullish on the future of media as outlined in our investment thesis, we would like to see Yahoo! make the following changes to better position itself to be a future media market leader:

- Improvement in its core search technology;
- Increase in higher value, rich media advertising;
- Increase in fee-based revenue.

We believe these goals are quite possible in 2006, given Yahoo!'s investments in product development, the state of the Internet advertising market, and Yahoo!'s looming phone service. Until these key revenue triggers are put into motion however, we rate YHOO shares a Hold.

Earlier in this report, we provided evaluation criteria for investors interested in investing in Internet search. We believe the most successful search companies are: 1) Improving and reinvesting in their core product, search technology; 2) Bolstering their original revenue source, Internet advertising; 3) Decreasing their dependence on paid search revenue; 4) Increasing International revenue; 5) Demonstrating strong traffic metrics; 6) Creating opportunities to shift share from traditional advertising markets; and 7) Diversifying revenue streams and monetizing new products. We outline how Yahoo! is performing in each of these key areas:

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- **Stop the share shift.** As outlined in our investment thesis, we believe in the power and necessity of search in the future of media. For Yahoo! we believe search is the core technology that glues all of its diverse content and services together and ultimately what attracts users and sites that outsource their paid-search function to Yahoo!. Without this competitive advantage, we believe Yahoo!'s user base will decline as they seek this service elsewhere. Investors should be concerned with a decline in Yahoo!'s user base because the number of users a site has correlates to the amount of advertising and fee-based revenue it garners in the long-term. In the short-term, a less popular search tool will decrease the amount of revenue it will gain from search advertising—currently the fastest growing segment in Internet advertising. In terms of improving and reinvesting in search technology, Yahoo! has increased its spending in product development year-over-year by 46%, Q3:04 to Q3:05. While Yahoo! has consistently increased spending on product development, it has also lost search share to Google over the same time, according to Internet measurement services. This indicates that Google has a better search tool for users and, consequently, search advertising dollars. We are keeping a close eye on Yahoo!'s share of search to determine how successful their efforts are at improving and maintaining its search tool functionality. While we do not like a decrease in search share, we do like that Yahoo! has maintained its share of search this year. Since January 2005, Google has consistently powered 50% of editorial searches and nearly 60% of paid searches—neither gaining nor losing its share in either area this year. Yahoo!'s editorial share has hovered in the mid-to-low 20's and paid search in the mid-30s; although less than Google's, Yahoo! has managed to maintain its share in both editorial and paid search. We like this trend and hope that Yahoo! is done losing share to Google. Moving forward, we are looking for increased share of searches from Yahoo! in both editorial and paid search as a demonstration that the investments they are making in their core product are paying off.
  - **A Leader in Options for Advertisers...** What Yahoo! lacks in search technology, it makes up for in advertising options. We think Yahoo!'s advertising options mix enables it to capture a wide variety of advertising campaigns—from search and classified ads to brand building and awareness advertising. Investors should like this too, as rich media and brand-based advertising has higher average CPMs than the effective CPM of search-based advertising. And, since these advertisements are sold on Yahoo!'s sites, they are even more valuable to Yahoo!'s bottom line because they have no TAC. According to *DoubleClick's* Q3:05 Search Trend Report, fewer than 20% of all keywords purchased cost more than \$0.51 cents per click. Although CPC is rising due to an increase in advertisers bidding for keywords, these prices have a long way to go before their effective CPM reach the likes of rich media, with effective CPMs we conservatively estimate in the range of \$10 to \$30. Yahoo!'s competitive advantage is in its ability to capture both the growing search and rich media advertising markets, particularly as advertisers shift this kind of advertising from TV and other media to online. An increase in this high value advertising activity would be reflected as a decrease in TAC as a percentage of marketing services. Given that TAC has consistently remained 34% of Yahoo!'s marketing services revenue during the first three quarters of 2005, increasing from an average 31% in 2004, we suspect Yahoo! has not leveraged its capabilities in this area. We are somewhat disappointed and would like to see Yahoo! leverage this competitive advantage in 2006.
  - **...but still too dependent on paid search.** While we like to see the depth and breath of options available to advertisers, we need to see revenue coming from these sources in addition to paid search. As outlined in our investment guidelines, we believe larger sites are bringing the paid search function in-house, given its growing contribution to their overall revenues and competitive issues. Among smaller sites, including the fast-growing group of bloggers, the trend has been the opposite—to

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outsource this function. This trend should reduce TAC overall, but may potentially reduce the amount of revenue the network generates due to a loss in traffic. These changing dynamics are another reason we like to see Yahoo! decreasing its dependence on the network which can be measured by a decrease in TAC. We believe decreasing TAC is also an indication of Yahoo!'s pricing power as it wields influence over smaller sites with more favorable revenue share agreements as market dynamics change. We believe the bulk of Yahoo!'s TAC comes from revenue share with sites using their paid search, formerly Overture, product. Although Yahoo!'s TAC also includes payments made to traffic affiliates, we see this as minimal and use TAC as a direct measure of network activity. In addition to measuring Yahoo!'s strength in brand advertising, TAC as a percentage of marketing services measures the strength of Yahoo!'s pricing power and decreased reliance on the network. We like to see TAC as a percent of marketing services revenue decreasing. Unfortunately, this grew 10% from 2004 to 2005, indicating decreased pricing power from Yahoo! and a larger reliance on the network as a source of revenues. We suspect that Yahoo!'s losing share to Google in search queries has also trickled down to the network, forcing Yahoo! to be more competitive in deals with publishers and thus reflected by increasing TAC as a percentage of marketing services revenue.

- **Strong international growth...and new market opportunities support high growth.** Newly developed international Internet markets are rapidly expanding market opportunities for search and Internet services. We expect growth in these markets to exceed US growth, given the relative maturity of the US Internet market. By the same token, we expect International Internet advertising growth to exceed growth in the US, currently forecasted at 29%. Yahoo!'s International revenue grew 62% from Q3:04 to Q3:05 while US revenue grew 41% during the same time frame. We believe Yahoo!'s investments in product development have contributed favorably to Yahoo!'s International growth. In 2005, Yahoo! has made impressive strides in developing its brand internationally, particularly in Asia via the following activities:
  - Formed a strategic partnership with Alibaba.com in China.
  - Created a partnership with Australian media company, Seven Network to build a unique, new online property with their combined assets.
  - Converted international subsidiaries to wholly owned Yahoo! companies in France, Germany, Korea, and the UK, demonstrating a clear commitment to international growth.

We are excited about these international developments and Y/Y growth, but are slightly concerned with the slow-down in Q/Q growth to 6.2% in the last quarter—matching that of US quarterly revenue growth.

- **A Mixed Bag of Metrics.** Yahoo!'s strength in numbers is in the relationship it has with its users, which is difficult to quantify. We are impressed with Yahoo!'s 191 million active registered users and 11.5 million subscriber base. These numbers give Yahoo! a distinct advantage over other search-centric sites. These strong relationships are reflected by strong growth in fee-based services, currently at 55% over Q3:04, although fee-based revenue accounts for only 13% of total. In addition to creating a deeper relationship with their users, having user-specific information provides Yahoo! with premium advertising targeting capabilities, which advertisers will pay more for. We would like to see these premiums reflected with a decrease in TAC as a percentage of marketing services.
- **Beyond Internet advertising...** Certainly Yahoo!'s existing advertising products help it shift share from traditional advertising markets to the Internet, increasing the market opportunity beyond the \$12 billion Internet advertising pie. For example, HotJobs has



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successfully shifted share from the classified advertising market to its online classified marketplace while Yahoo!'s search and local advertising options allow it to shift revenue from traditional direct mail and local advertising markets. As previously noted, we think one of Yahoo!'s key competitive advantages is its varied mix of Internet advertising options it can offer advertisers, specifically rich media. We believe rich media advertising options give Yahoo! the increased potential to dramatically shift share from the lucrative \$42 billion TV market which it has not yet demonstrated.

- **...to fee-based services.** Yahoo! is clearly not content to rely on one revenue stream, having both marketing services and fee-based revenue. We view this positively, as it shields Yahoo! (and investors) from downturns in the highly seasonal and cyclical advertising market. Fee-based revenue growth is impressive, but fee-based growth as a percentage of total revenue has remained relatively flat from Q1:04 at 12.4% to 12.8% in Q3:05. Yahoo!'s relationships with communications, entertainment, and media companies have given Yahoo! compelling content to offer to consumers. Given the smaller size and slower growth of the online content market, approximately \$1.5 billion with an estimated 15% growth rate according to the OPA, we believe this business will remain a relatively small though steady revenue stream for Yahoo! throughout 2006. We look forward to new fee-based products and services, such as Yahoo!'s recently announced phone service via its acquisition of Dial-pad. These new technologies have huge potential to increase Yahoo!'s revenues, in our view. Otherwise, we suspect that like many traditional media companies, Yahoo!'s fee-based services may never be larger than 20% of total revenue.

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## INVESTMENT RISKS

**The Internet advertising market is new and unpredictable.** A majority of Yahoo!'s revenue (88%) is dependent on Internet advertising. Advertising in general is both cyclical and seasonal. The newly formed Internet advertising market is only just beginning to establish its own patterns. The market has already experienced a sharp downturn in growth during its early years and may experience a similar downturn depending on the economy, exposure to International events, Internet development, and Yahoo!'s advertising base.

**Yahoo!'s fee-based services operate in a highly competitive environment, competing with other online services as well as services offered directly from device manufacturers.** Yahoo!'s fee-based services are dependent upon strengthening its relationship with its user base. In many cases, competition is merely a click away, and similar products and services can found relatively easily online. Some of Yahoo!'s fee-based services such as music and mobile compete with services offered directly from hardware manufacturers, such as cellular phone operators and Apple's iPod. Even avid Yahoo! users may be inclined to use their manufacturers' services because they are automatically directed to these services upon installation and registration.

**Technological innovation and competition is constant and plentiful in the Internet marketplace.** New technologies, new competitors, or even new business models could pose a risk to Yahoo!. Competition can be formidable, such as Microsoft and Time Warner or even a nimble technology start-up could pose a new threat. Either may develop new technologies or services which consumers favor over Yahoo!.

**New fee-based services may fail.** Yahoo! may fail to launch products in new market areas and waste R&D, product and marketing resources in the process. Yahoo! may fail to execute in launching these products or discovering new market opportunities.



## VALUATION

Yahoo! is a relatively mature company for the Internet space, having been public since April, 1996. We believe Yahoo!'s financial structure (ownership in Yahoo! Japan and NOLs) require us to start with a sum-of-the-parts analysis to determine the company's true intrinsic value. Although mature among its peer group, Yahoo! is still a high growth company in the technology space. As such, we compared its forward EV/Sales, P/E, and FCF to other high growth technology companies and took the average of the range to calculate its core business value. We then added to this the company's cash balance, the market value of the company's stake in Yahoo! Japan, and the NOL which we treat essentially as cash. Our total sum-of-the-parts analysis valued Yahoo! at \$37.84.

### EXHIBIT 14: SUM-OF-PARTS ANALYSIS

	Forward			SEGMENT COMPARABLES		
	Forward			Forward		
	Sales/share	Operating EPS	FCF/Share	EV/Sales	P/E	FCF
Yahoo Core Business	\$4.53	\$0.65	\$1.04	4.4x	34.0x	46.3x

SUM OF THE PARTS	EV/Sales	P/E	FCF	Value	Notes
Yahoo Core Business	\$19.93	\$22.18	\$48.13	\$30.08	Avg. of the range
Yahoo Japan				\$4.09	
NOL Value				\$0.97	
Cash per Share				\$2.70	
			TOTAL	\$37.84	

Source: WR Hambrecht + Co estimates

We thought it prudent to compare our sum-of-the-parts value to a DCF valuation assuming 26% CAGR on free cash flow through 2015, an 11.2% discount rate and a 24x terminal multiple. Adjusting for Yahoo!'s equity interest in Yahoo! Japan and the roughly \$1.4 billion in tax loss carryforwards, we estimate that Yahoo! is currently valued at \$40.77. Given that we expect net income growth of +30% in FY:06, versus the single-digit organic growth of mature technology companies, we believe a 24x FCF terminal multiple, which represents a premium to the group average of 15-20x, is justified.

## EXHIBIT 15: DISCOUNTED CASH FLOW ANALYSIS

Assumed Range						
Terminal Multiple	24.0	24.0	24.0	24.0	24.0	24.0
Discount Rate	13%	12%	11%	10%	9%	8%
Terminal FCF	4,655	4,655	4,655	4,655	4,655	4,655
Terminal Value	111,724	111,724	111,724	111,724	111,724	111,724
Discounted TV	32,913	35,972	38,646	43,075	47,194	51,750
CDCF	16,503	16,503	16,503	16,503	16,503	16,503
Enterprise Value	49,416	52,475	55,149	59,578	63,697	68,253
Plus Excess Cash	4,014	4,014	4,014	4,014	4,014	4,014
Plus NOL	1,436	1,436	1,436	1,436	1,436	1,436
<b>Equity Value</b>	<b>54,866</b>	<b>57,925</b>	<b>60,598</b>	<b>65,027</b>	<b>69,146</b>	<b>73,703</b>
Shs. Outstanding	1,486	1,486	1,486	1,486	1,486	1,486
<b>Equity Value/Share</b>	<b>\$37</b>	<b>\$39</b>	<b>\$41</b>	<b>\$44</b>	<b>\$47</b>	<b>\$50</b>

Total Value	Discount Rate	10-yr FCF Terminal Multiple				
		20x	22x	24x	26x	28x
10.0%	58,855	62,444	66,034	69,623	73,213	
11.0%	54,904	58,183	61,462	64,741	68,020	
11.2%	54,158	57,378	60,598	63,819	67,039	
14.0%	45,032	47,544	50,055	52,567	55,078	
15.0%	42,297	44,599	46,900	49,201	51,503	

Per Share Value	Discount Rate	10-yr FCF Terminal Multiple				
		20x	22x	24x	26x	28x
10.0%	\$39.59	\$42.01	\$44.42	\$46.84	\$49.25	
11.0%	\$36.94	\$39.14	\$41.35	\$43.55	\$45.76	
11.2%	\$36.43	\$38.60	\$40.77	\$42.93	\$45.10	
14.0%	\$30.30	\$31.98	\$33.67	\$35.36	\$37.05	
15.0%	\$28.46	\$30.00	\$31.55	\$33.10	\$34.65	

Source: WR Hambrecht + Co estimates

## KEY FINANCIAL ASSUMPTIONS

We are forecasting FQ4:05 (December) total revenue of \$1.069 billion (+36.2%) and EPS of \$0.17 (+34.2%), which is in-line with management's revenue guidance and Street consensus estimates. These estimates are predicated on the company achieving marketing services revenues of \$1.334 billion (+41.5%), fee revenue of \$188.7 million (+40.0%), and operating margins of 31.8%. Accordingly, our FY:05 estimates call for total revenue of \$3.697 billion (+42.8%) and EPS of \$0.59 (+59.9%). Looking forward, our initial FY:06 estimates forecast total revenue of \$4.762 billion (+28.8%) and EPS of \$0.75 (+26.0%), which is in-line with Street estimates.

We have listed our key financial assumptions in the table below.

**EXHIBIT 16: KEY FINANCIAL ASSUMPTIONS**

	YoY		YoY		YoY		Comments
	4Q:05E	Growth	FY 2005	Growth	FY 2006	Growth	
<b>Income Statement</b>							
Marketing Services	\$1,334.2	41.5%	\$4,612.9	48.0%	\$5,853.2	26.9%	<ul style="list-style-type: none"> <li>• Wide advertising options give Yahoo a competitive advantage</li> <li>• New fee-based initiatives such as VoIP could provide upside to estimates</li> </ul>
Fees	\$188.7	40.0%	\$666.7	49.1%	\$875.8	31.4%	
<b>Total Reported Revenues</b>	\$1,522.9	41.3%	\$5,279.6	48.1%	\$6,729.0	27.5%	
Traffic Acquisition Costs (TAC)	\$453.6	55.0%	\$1,582.3	62.3%	\$1,966.6	24.3%	
<b>Total Revenue</b>	\$1,069.3	36.2%	\$3,697.3	42.8%	\$4,762.4	28.8%	
Consensus Revenue	\$1,069.3	36.2%	\$3,695.8	42.7%	\$4,763.6	28.9%	<ul style="list-style-type: none"> <li>• Looking for improved search technology and rich media ads before becoming more bullish</li> </ul>
Operating Margins	31.8%		30.3%		31.4%		
<b>EPS</b>	\$0.17	34.2%	\$0.59	59.9%	\$0.75	26.0%	<ul style="list-style-type: none"> <li>• Cash balance aided by strong cash flow</li> </ul>
Consensus EPS	\$0.17	32.4%	\$0.60	62.4%	\$0.75	25.4%	
Diluted Shares	1,496.9		1,486.4		1,531.9		
<b>Balance Sheet</b>							
Net Cash	\$5,050.6		\$5,050.6		\$6,609.7		
Net Cash/Share	\$3.37		\$3.37		\$4.31		
Deferred Revenue	\$454.5	31.6%	\$454.5	31.6%	\$622.8	37.0%	
DSO	58.3		58.3		58.0		
<b>Cash Flow</b>							
Operating Cash Flow	\$367.4	9.1%	\$1,881.1	72.6%	\$1,985.5	5.5%	
Free Cash Flow	\$272.0	8.2%	\$1,499.1	77.6%	\$1,603.5	7.0%	
FCF/Share	\$0.18		\$1.01		\$1.05		

Source: Company; WR Hambrecht + Co estimates



Company	Ticker	Rating	Price	Price	EV	Mkt. Cap.	Revenue (\$M)			Rev Growth		EV / Rev			EPS			EPS Growth		Price / Earnings			5 YR	PEG		
			Target	12/20/05	(\$MM)	(\$M)	CY04A	CY05E	CY06E	04-05	05-06	'04A	'05E	'06E	CY04A	CY05E	CY06E	04-05	05-06	'04A	'05E	'06E	Gr. (%)	'05	'06	
<b>Internet Search</b>																										
Google	GOOG	BUY	\$480.00	\$ 429.74	119,500	127,009	1,961	4,032	6,430	106%	59%	61.0x	29.6x	18.6x	3.20	5.93	8.72	85%	47%	134x	72x	49x	36%	2.0x	1.4x	
Yahoo	YHOO	HOLD	\$40.00	\$ 40.68	57,659	57,714	2,590	3,697	4,762	43%	29%	22.3x	15.6x	12.1x	0.37	0.59	0.75	60%	26%	110x	69x	55x	28%	2.4x	1.9x	
InfoSpace Inc.	INSP			\$ 26.52	459	822	244	339	368	39%	9%	1.9x	1.4x	1.2x	1.28	1.49	0.85	17%	-43%	21x	18x	31x	25%	0.7x	1.2x	
Looksmart	LOOK			\$ 3.99	42	91	80	41	42	-49%	2%	0.5x	1.0x	1.0x	(2.31)	(0.82)	(0.78)	NM	NM	NM	NM	NM	20%	NM	NM	
												<b>MEDIAN:</b>	<b>12.1x</b>	<b>8.5x</b>	<b>6.7x</b>				60%	26%	<b>109.9x</b>	<b>68.8x</b>	<b>49.3x</b>	27%	2.0x	1.4x
												<b>AVERAGE:</b>	<b>21.4x</b>	<b>11.9x</b>	<b>8.2x</b>				54%	10%	<b>88.3x</b>	<b>53.0x</b>	<b>45.0x</b>	27%	1.7x	1.5x
<b>Internet Advertising Services</b>																										
Valueclick	VCLK			\$ 18.28	1,519	1,834	162	303	493	87%	63%	9.4x	5.0x	3.1x	0.32	0.45	0.58	41%	29%	57x	41x	32x	26%	1.6x	1.2x	
aQuantive	AQNT			\$ 24.84	1,733	1,626	152	303	377	99%	25%	11.4x	5.7x	4.6x	0.26	0.46	0.55	77%	20%	96x	54x	45x	27%	2.0x	1.7x	
Digitas	DTAS			\$ 12.82	973	1,147	251	352	392	40%	11%	3.9x	2.8x	2.5x	0.42	0.47	0.60	12%	27%	31x	27x	22x	19%	1.5x	1.2x	
Marchex	MCHX			\$ 25.40	926	636	NA	94	130	NA	38%	NA	9.9x	7.1x	(0.08)	0.35	0.53	NM	49%	NM	72x	48x	39%	1.8x	1.2x	
24/7 Real Media	TFSM			\$ 7.58	337	348	84	136	183	62%	34%	4.0x	2.5x	1.8x	0.05	0.18	0.32	251%	72%	144x	41x	24x	40%	1.0x	0.6x	
Miva	MIVA			\$ 5.18	123	160	174	194	190	12%	-2%	0.7x	0.6x	0.6x	0.62	0.15	0.12	-76%	-15%	8x	36x	42x	20%	1.8x	2.1x	
												<b>MEDIAN:</b>	<b>3.9x</b>	<b>2.8x</b>	<b>2.5x</b>				45%	27%	<b>63.2x</b>	<b>41.1x</b>	<b>41.6x</b>	27%	1.8x	1.2x
												<b>AVERAGE:</b>	<b>5.0x</b>	<b>4.3x</b>	<b>3.3x</b>				66%	31%	<b>69.8x</b>	<b>46.0x</b>	<b>36.0x</b>	29%	1.6x	1.3x
<b>Internet Commerce</b>																										
eBay	EBAY			\$ 44.14	60,960	61,521	3,268	4,509	5,894	38%	31%	18.7x	13.5x	10.3x	0.61	0.84	1.01	38%	20%	72x	52x	44x	30%	1.8x	1.5x	
Amazon	AMZN			\$ 48.14	20,502	19,953	6,812	8,582	10,154	26%	18%	3.0x	2.4x	2.0x	0.98	0.77	1.00	-21%	29%	49x	62x	48x	22%	2.8x	2.2x	
Blue Nile	NILE			\$ 42.80	663	740	166	210	259	27%	23%	4.0x	3.2x	2.6x	0.53	0.75	0.96	41%	28%	80x	57x	45x	29%	2.0x	1.5x	
Overstock.com*	OSTK	HOLD	\$37.00	\$ 34.25	735	661	483	837	1,226	73%	46%	1.5x	0.9x	0.6x	(0.35)	(0.87)	(0.49)	NM	NM	NM	NM	NM	41%	NM	NM	
RedEnvelope*	REDE	HOLD	\$10.00	\$ 11.09	88	100	93	118	141	27%	19%	0.9x	0.7x	0.6x	(0.54)	(0.49)	0.26	NM	NM	NM	NM	43x	24%	NM	1.8x	
												<b>MEDIAN:</b>	<b>3.0x</b>	<b>2.4x</b>	<b>2.0x</b>				38%	28%	<b>72.2x</b>	<b>57.2x</b>	<b>44.2x</b>	29%	2.0x	1.6x
												<b>AVERAGE:</b>	<b>5.6x</b>	<b>4.1x</b>	<b>3.2x</b>				19%	26%	<b>67.2x</b>	<b>57.3x</b>	<b>44.8x</b>	29%	2.2x	1.7x
<b>Internet Services</b>																										
Blackboard Inc.	BBBB			\$ 29.26	712	794	110	135	159	23%	17%	6.5x	5.3x	4.5x	0.44	0.93	0.83	111%	-10%	67x	32x	35x	25%	1.3x	1.4x	
Bankrate Inc.	RATE			\$ 30.98	450	490	39	49	80	25%	63%	11.5x	9.2x	5.7x	0.58	0.57	0.86	-2%	51%	53x	54x	36x	28%	2.0x	1.3x	
eCollege.com	ECLG			\$ 18.76	410	411	90	103	123	15%	19%	4.6x	4.0x	3.3x	0.41	0.50	0.67	21%	35%	46x	38x	28x	27%	1.4x	1.1x	
Housevalues Inc.	SOLD			\$ 13.43	258	345	47	87	132	86%	51%	5.5x	2.9x	2.0x	0.35	0.51	0.72	46%	43%	39x	27x	19x	33%	0.8x	0.6x	
Knot Inc.	KNOT			\$ 13.21	264	304	NA	51	63	NA	23%	NA	5.2x	4.2x	NA	0.15	0.36	NM	140%	NM	88x	37x	25%	3.5x	1.5x	
												<b>MEDIAN:</b>	<b>6.0x</b>	<b>5.2x</b>	<b>4.2x</b>				33%	43%	<b>49.7x</b>	<b>37.9x</b>	<b>35.3x</b>	27%	1.4x	1.3x
												<b>AVERAGE:</b>	<b>7.0x</b>	<b>5.3x</b>	<b>3.9x</b>				44%	52%	<b>51.2x</b>	<b>47.7x</b>	<b>30.9x</b>	27%	1.8x	1.2x
<b>Internet Media</b>																										
IAC/InterActiveCorp	IACI			\$ 27.64	7,620	8,828	6,189	5,882	6,848	-5%	16%	1.2x	1.3x	1.1x	0.92	1.33	1.48	45%	11%	30x	21x	19x	16%	1.3x	1.1x	
CNET Networks Inc.	CNET			\$ 14.64	2,267	2,174	291	353	419	22%	18%	7.8x	6.4x	5.4x	0.08	0.22	0.40	171%	78%	177x	65x	37x	31%	2.1x	1.2x	
WebMD Health Corp.	WBMD			\$ 29.91	1,727	1,677	NA	169	217	NA	29%	NA	10.2x	8.0x	NA	0.29	0.47	NM	63%	NM	104x	64x	33%	3.2x	2.0x	
iVillage Inc.	IVIL			\$ 8.19	557	594	67	89	107	33%	21%	8.3x	6.3x	5.2x	0.04	0.13	0.26	250%	103%	223x	64x	31x	50%	1.3x	0.6x	
TheStreet.com Inc.	TSCM			\$ 6.93	139	175	35	32	36	-8%	12%	3.9x	4.3x	3.8x	(0.10)	0.22	0.27	NM	23%	NM	32x	26x	30%	1.1x	0.9x	
												<b>MEDIAN:</b>	<b>5.9x</b>	<b>6.3x</b>	<b>5.2x</b>				171%	63%	<b>177.0x</b>	<b>63.7x</b>	<b>31.3x</b>	31%	1.3x	1.1x
												<b>AVERAGE:</b>	<b>5.3x</b>	<b>5.7x</b>	<b>4.7x</b>				155%	56%	<b>143.4x</b>	<b>57.1x</b>	<b>35.3x</b>	32%	1.8x	1.2x

\* Covered by Craig Bibb

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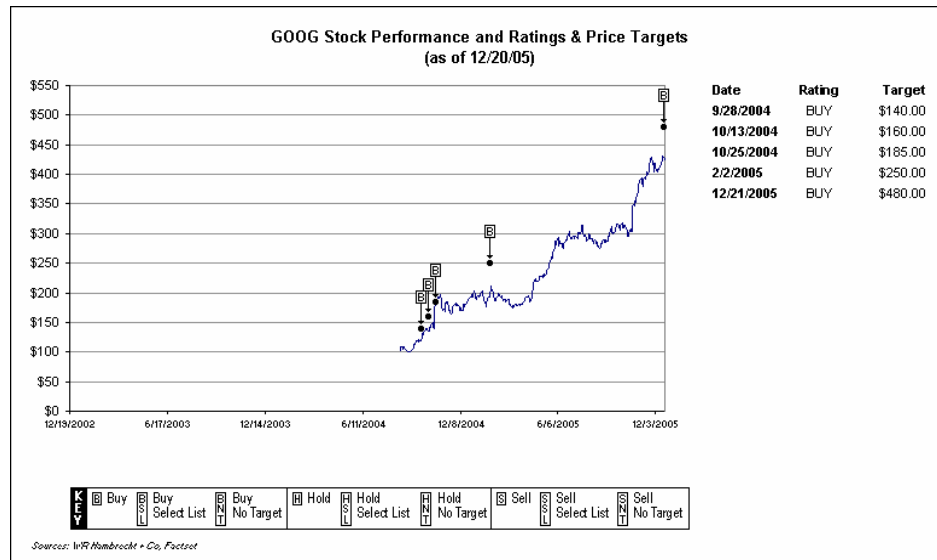
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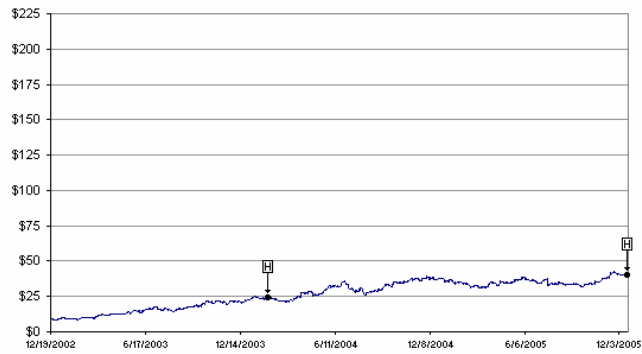
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**YHOO Stock Performance and Ratings & Price Targets**  
(as of 12/20/05)



Date	Rating	Target
2/6/2004	HOLD	\$24.50
12/21/2005	HOLD	\$40.00

<input type="checkbox"/> Buy	<input type="checkbox"/> Buy Select List	<input type="checkbox"/> Buy No Target	<input type="checkbox"/> Hold	<input type="checkbox"/> Hold Select List	<input type="checkbox"/> Hold No Target	<input type="checkbox"/> Sell	<input type="checkbox"/> Sell Select List	<input type="checkbox"/> Sell No Target
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Source: WR Hambrecht + Co, Factset

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BUY	Stocks rated Buy are those we recommend actively buying; these stocks are expected in absolute dollar terms to appreciate at least 10% over the next 6 months.	66	12
HOLD	Stocks rated Hold are those stocks we would continue to hold in our portfolio; these stocks are expected to appreciate or depreciate in absolute dollar terms less than 10% over the next 6 months.	33	0
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Investment risks associated with the achievement of the price target include, but are not limited to, the company's failure to achieve our earnings and revenue estimates, unforeseen macroeconomic and/or industry events that adversely impact demand for the company's products or services, product obsolescence, changes in investor sentiment regarding the specific company or industry, intense and rapidly changing competitive pressures, the continuing development of industry standards, the company's ability to recruit and retain competent personnel, and adverse market conditions. For a complete discussion of the risk factors that could affect the market price of the company's shares, refer to the most recent form 10-Q or 10-K that the company has filed with the SEC.



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## VALUATION METHODS TO DETERMINE PRICE TARGET

Our 12-month \$480 price target for Google (GOOG) is derived by calculating the net present value of the company assuming normalized growth of 20% starting in 2012 and a discount rate of 12%. We believe this methodology serves as the best way to value the company, given the historical high growth and relative youth of the search market.

Our 12-month \$40 price target for Yahoo! (YHOO) is calculated using both a discounted cash flow and sum-of-the-parts analysis.

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