The Pricing of Online Media

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Introduction

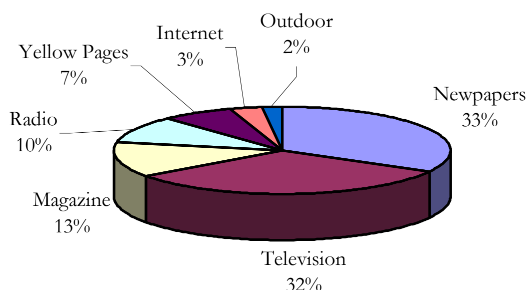
Will the Internet industry, as we saw with biotechnology, eventually fall far from the dizzying heights that it is currently experiencing? Ultimately, all of these companies will be valued utilizing traditional valuation benchmarks and methodologies, and the companies that retain their current valuation levels will support their values with positive cash flows and earnings. However, for the time being, the escalating valuations in the Internet space and the Internet Content/Community ("Online Media") sector in particular, seem to defy all sense of reliance on investment fundamentals. This has left traditional benchmarks of fundamental valuation analysis less reliable and, to a certain extent, non-applicable. So, what criteria should be used to value Online Media companies? To answer this question, we first need to examine their business models to determine where the value lies. For Online Media companies, Internet advertising, primarily in the form of banners and sponsorships, is their main source of revenues. Although many Online Media companies have recently expanded their business into e-commerce, advertising is still expected to be their primary source of revenues going forward. A key component to this business strategy is the expansion of web traffic to their sites. Success may ultimately be a function of the size of the audience and/or the specific target audience an Online Media company can generate to draw advertising interest.

Regardless of the type of industry or business models (i.e. Biotech, Online Media), a company's value is measured according to the ability of that company to generate cash flows. However, the uncertainty as to the timing of those cash flows is what makes valuing companies in the area of Online Media with traditional valuation methodologies extremely difficult. The purpose of this report is not to define a standard valuation metric that can be applied to all Online Media companies, but rather this was written to provide insight on current trends related to the principals of valuation as they relate to the Online Media industry.

The State of Internet Advertising

Since its public inception almost five years ago, the Internet has become the fastest growing medium in history with a current reach of 43.2 million active users (source: The Nielsen/Netratings Reporter July 18,1999). According to Morgan Stanley Technology Research, the adoption rate of the Internet is much faster than historical rates for other mediums such as Radio, TV, and Cable. Morgan Stanley projects the Internet will reach 50 million active users in just five years versus 10 years for Cable, 13 years for TV, and 38 years for Radio. As a result of this rapid expansion in audience reach, the Internet has established itself as a viable advertising medium, with growth now measured in billions of dollars. In 1998, $1.92 billion was spent on Internet advertising, a growth of 112% over 1997 figures. According to estimates from Robert Coen of McCann-Erickson, this growth represents approximately 1% of the $200 billion US advertising dollars spent in 1998. With expectations of increasing online ad budgets from current advertisers and a growing number of large traditional advertisers migrating their advertising campaigns to the Internet, industry experts project a sustained period of growth in the years ahead. According to Jupiter Communications, the market for Internet-based advertising and sponsorship is projected to grow to approximately $7.6 billion, or 3% of the advertising market, by the year 2002 (see chart below). This growth is expected to be fueled by an increase in advertising effectiveness and appeal resulting from improvements in the tools and technologies used to target online advertisements and track user behavior and purchasing decisions.

2002 Projected US Advertising Spending Components



Source: Jupiter Communications, Inc., and Merrill Lynch Internet Research

Online Advertising is Effective

The attributes of the Internet present itself as an ideal medium for advertising. The Internet offers marketing capabilities that include the ability to target specific audiences, to measure the popularity of content, to make timely changes in response to market feedback, to reach worldwide audiences cost-effectively, and to create innovative and interactive advertisements. With the ability to collect demographic information and customer feedback, the Internet enables advertisers to conduct highly customized marketing campaigns at defined targets, thus providing the opportunity to increase advertising efficiency.

Studies performed on the effectiveness of online advertising have verified its tremendous communications power. Ipsos-ASI, an advertising research company, reports that consumers who remember seeing online advertising are significantly more likely to express purchase interest in the brand. According to the report, 74% of consumers were willing to make a purchase after seeing the brand advertised online versus 64% of consumers willing to buy that had not seen the brand advertised online. The Millward Brown International Study further validated the effectiveness of online advertising, which revealed that the Internet compares favorably to other media (i.e. TV) in its ability to create brand-linked impression. Millward Brown reported that a single exposure to a banner advertisement generated greater brand awareness than a single exposure to a TV or print ad.

Banner advertisements continue to be the predominate type of Internet advertising. The New Media Group of PricewaterhouseCoopers reported that banner advertisements for the fourth quarter of 1998 accounted for 56% of all online advertising, with sponsorships (30%), interstitials (5%), email (1%), and other (8%) accounting for the remainder. According to the 1997 Internet Advertising

Bureau (IAB) Online Advertising Effectiveness Study, a single exposure to an online banner advertisement increased advertisement awareness, brand awareness, product attribute communication, and purchase intent. The study showed that banner exposure itself carries nearly all of the value, and that click-throughs are not necessary for effective brand communication. In fact, click-throughs only provide a modest impact on brand enhancement. Banner exposure alone was responsible for 96% of brand enhancement, while click-throughs only contributed 4%.

Online Media Business Model

The current business model of Online Media companies is based on deriving substantially all of their revenues from selling advertising space on their network of sites and communities. Common revenue sources from advertisement sales include placement fees, promotions, banner advertisements, sponsorships, direct marketing, and transactions. By expanding their advertising audience through a network of globally branded media properties and aggregated content to users free of charge, Online Media companies expect advertising revenues to increase as more advertisers go online. A significant part of this objective involves building brand awareness by utilizing online and traditional media. Currently, sales and marketing expenses are the most variable and fastest growing costs with Online Media companies as they continue to jockey for strategic positioning and market share.

The present Internet industry as a whole, especially the Online Media sector, is still in a nascent phase. As a result, Online Media companies continue to show moderate to no profitability as costs related to developing content, attracting audiences and building brand equities continue to escalate. However, as the industry matures, Online Media should attain profitability levels equal to or greater than traditional media businesses (i.e. magazines, radio, TV networks). In relation to gross margins, the leading Online Media companies, such as Yahoo! and CNet, report higher margins than traditional media companies. The ability of Online Media companies to limit their cost of revenues results from the fact that in this industry content costs tend to be relatively fixed in comparison to sales levels and site traffic. Furthermore, although the delivery costs of Online Media tend to be more variable than those of traditional media, the incremental bandwidth and server costs associated with site traffic growth in Online Media are still relatively small compared to the additional revenue-value gained.

Valuing Online Media Companies

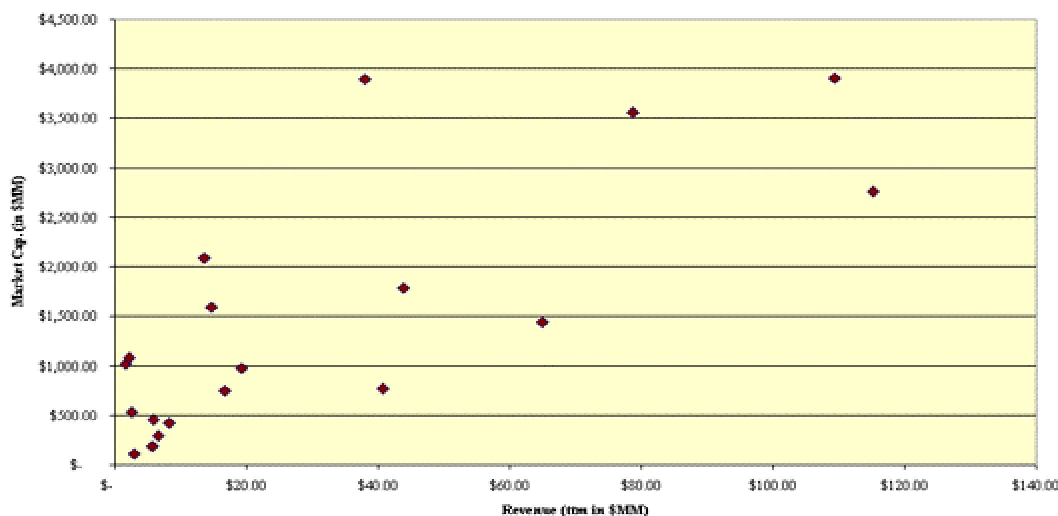
The value of a business is traditionally determined through three industry recognized valuation methodologies which include the asset approach, the market approach, and the income approach. (1) The asset approach considers the underlying value of the business enterprise's individual assets net of its liabilities. (2) The market approach considers the market value of business enterprises similar to the subject company being valued, as observed either in the trading price of publicly-traded companies or the purchase price in mergers. (3) The income, or discounted cash flow, approach considers the net present value of future cash flows available to the investor which are discounted at a rate that reflects the risks inherent in receiving those cash flows. Typically, the value of a business enterprise is determined by the ability of that company to convert its earning power into value.

The application of traditional valuation methodologies and metrics to derive value indications for companies in embryonic industries, such as Online Media, is difficult. Lending to this difficulty are factors such as the lack of earnings, uncertainty of the mature state of the industry, and unpredictability of future cash flows. Inherently, all market pricing is based on the expectations of future cash flows, but in an immature industry, these cash flows are highly speculative with no consistent pattern or rationale. Due to the relative newness of the Internet, and more specifically Online Media, it is necessary to analyze alternative methodologies and metrics to derive value indications.

Publicly Traded Online Media Companies

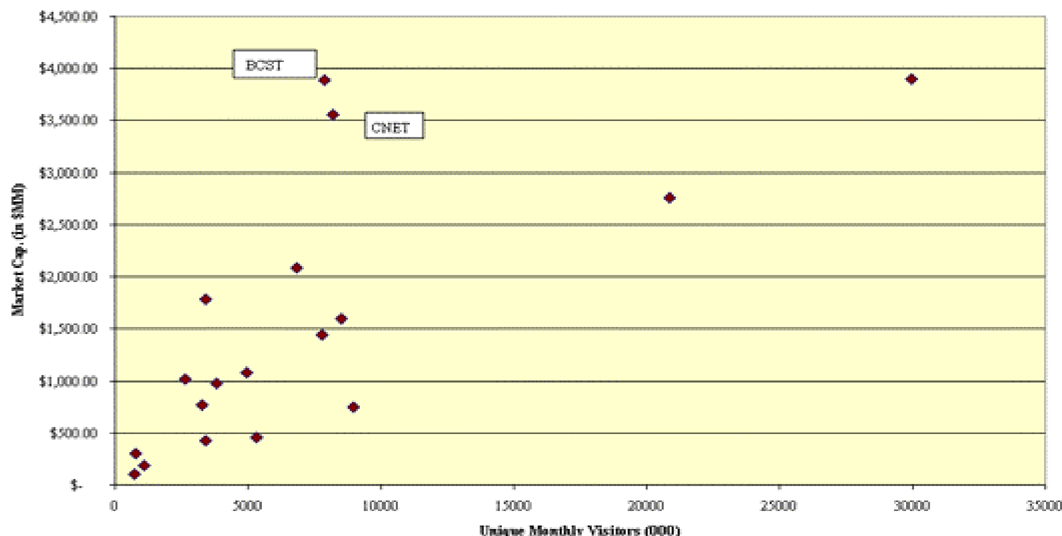
Most publicly traded Online Media companies, with the exception of a few (Yahoo! and CNet), are not yet reporting profits. With a strong emphasis on building brand awareness through aggressive sales and marketing initiatives, operating expenses of most Online Media companies continue to exceed generated revenues. As a result, profitability measures, such as earnings, EBIT, and EBITDA, are not available to develop applicable market multiples. However, since most Online Media companies currently report revenues generated from online advertising, the price-to-revenue multiple may serve as the only applicable market multiple for valuing this industry. Although the price-to-revenue multiple completely discounts potential differences in operating strategies between different Online Media companies that could lead to varying levels of profitability, it does nevertheless serve as a good barometer for determining value since revenue generation is directly related to advertising appeal and brand equity.

Price-to-Revenues - WE examined the price/trailing-twelve-month (ttm) revenue multiples for the following 20 publicly traded Online Media companies: Yahoo (YHOO), Lycos (LCOS), Infoseek (SEEK), Xoom.com (XMCM), Broadcast.com (BCST), Cnet (CNET), Infospace (INSP), Go2Net (GNET), About.com (BOUT), Ticketmaster-Citysearch (TMCS), Ivillage (IVIL), CBS Sportsline (SPLN), The Globe.com (TGLO), Ziff-Davis Net (ZDZ), Salon.com (SALN), Launch.com (LAUN), Mail.com (MAIL), AskJeeves (ASKJ), Iturf (ITRF), and Goto (GOTO). To determine a multiple of price-to-revenues, a 30-day average trading price during the month of June 1999 was used to derive the market capitalization of the subject companies. For companies that did not trade during the entire month of June, an average of the stock prices was taken from the time the company went public until June 30, 1999. The price/revenue (ttm) multiples of the subject companies analyzed ranged from 18.8x to 596.8x, with a median of 47.9x. The scatter diagram below presents the relationship of market cap to trailing-twelve-month revenues, which reveals that, generally, as revenues increase so does market capitalization. Yahoo! was excluded from the chart because its heightened market capitalization relative to the revenues it generates caused it to be an extreme outlier. Yahoo!'s high capitalization relative to its level of revenues may be explained by the contribution of its immense brand equity and recognition as the leading Web portal to its overall market capitalization. Additionally, Yahoo! is one of a very few Online Media companies with positive earnings.



Price-to-Unique Visitors - Alternatively, WE analyzed pricing based on online traffic volume using data from the May 1999 Media Metrix Report. Media Metrix is a leader in the field of Internet and digital media measurement services and publishes monthly reports on the traffic volume of the top 500 digital media properties. A Scatter diagram was plotted showing the relationship of market capitalization to unique monthly visitors. A unique monthly visitor is defined as a unique individual that visits a particular Web site within a given month. For example, if an individual visited AskJeeves fifteen times within one month that individual would be counted as one unique visitor for that month. With the exception of a few outliers (Broadcast.com and CNet), there appears to be a general correlation between market capitalization and the number of unique monthly visitors. Broadcast.com and CNet had remarkably high market capitalizations relative to the amount of unique visitors they were attracting to their site. Broadcast.com's inflated value is the result of a sharp increase in its stock price during the month of June due to the announced acquisition by Yahoo!. Prior to this announcement, Broadcast.com was trading approximately 30% below its 30-day average in June of $110, which would place it closer to the range of data points in the plot. As for CNet, the market may have placed a premium price for its stock because the company generates the highest marginal profitability among

the rest of its Online Media counterparts, which ultimately bodes well for its potential to generate future cash flows. Marginal profitability1 is a financial performance metric used by Wall Street analysts to quantify a company's ability to convert revenue growth into profit growth.



	Price/Revenues (ttm)	Price/Unique Visitors
Median	47.9	225.8
Mean	113.2	317.8
Min	18.8	83.4
Max	596.8	953.3

Source: Cogent Valuation and Media Metrix

Revenue Generation per Unique Page View - WE also explored advertising revenues generated per unique page view in our subject companies. Average monthly unique page views were calculated using Media Metrix data by multiplying the average unique page views per visitor in a month with the number of unique monthly visitors.2 Because the Media Metrix data extends only as far back as November 1998, WE determined the revenue-to-unique page views (Rev/UPV) multiple based on the first quarter 1999 results. Our analysis of this multiple revealed that Online Media companies that operate more demographically targeted sites generate greater revenues per unique page view. The range of Rev/UPV multiples was from 0.02 to 0.10, with a median of 0.02. Almost all the Online Media companies that were generating revenues less than $0.04 per unique page view (the mean – see table below) operated general portal sites with the exception of the Ivillage Network, which is targeted toward women.

	Revenue/Unique Page View (Q1 1999)
Median	0.02
Mean	0.04
Min	0.02
Max	0.10

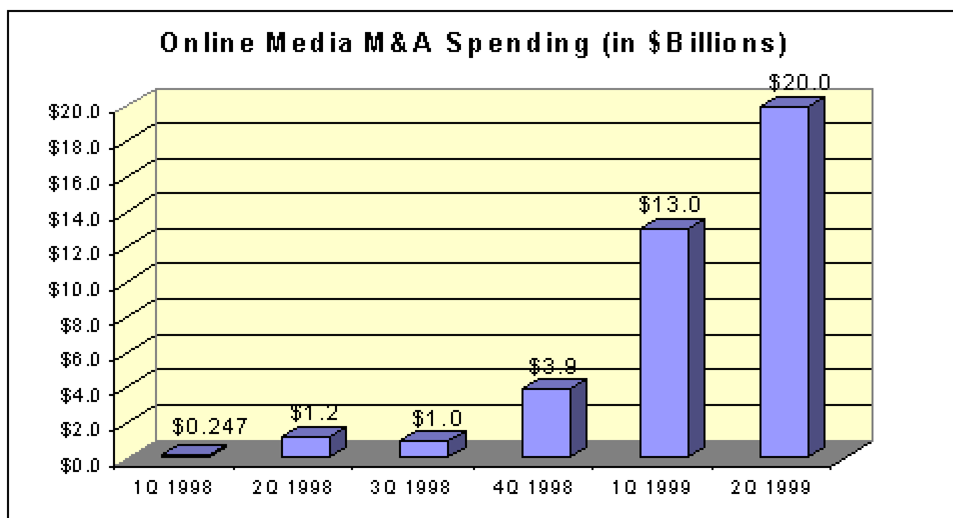
Source: Cogent Valuation and Media Metrix

These sites were for the most part, general search engines such as, Yahoo! and Lycos, and community driven Web sites such as, Go2Net, Inc. On the other hand, companies generating more than $0.04 in revenues per page view were sites that targeted specific demographic categories and interests. For example, Launch.com, a music site, and CNet, a site designed specifically as a one-stop portal for information technology, generated $0.10 and $0.07 per page view, respectively. From this observation, it appears that sites that target specific audiences may command a premium on advertisement rates going forward. However, this does not imply that sites of this nature will be able to drive

the kind of traffic that some of the general all-in-one portal sites have been able to do. Intuitively, this observation is reflective of the advertising community in general, where advertisers determine the allocation of their online advertising budgets based on a mixture of audience reach and target marketing. Though the Rev/UPV multiple is not a direct market capitalization multiple, the correlation observed may provide an alternative approach for projecting future advertising revenues.

Merger & Acquisition Transactional Data

Over the past 18 months, the Online Media industry has exploded in merger and acquisition activity. According to webmergers.com, a service of New Media Resources, M&A spending over the past six quarters involving web sites that provide content, commerce, community, communications or other media to users via the Internet has dramatically increased from $247 million in 1Q 1998 to $20 billion in 2Q 1999. In the first half of 1999 alone, there was a total of 169 M&A transactions equaling $33.4 billion which had an average reported price of $200 million.



Source: webmergers.com (Web M&A Report: 1st Half 1999)

To derive pricing multiples for recent M&A transactions involving Online Media companies, WE examined a total of 104 M&A transactions dating back to January 1998. The monitoring of visitor traffic to various Internet sites is relatively new, and only a limited amount of Web traffic data is currently available. As a result, our analysis of pricing multiples based on online traffic was limited to just 27 of the 104 transactions examined. Of the 27 transactions, seven were public-to-public, one was private-to-private, and the rest were public-to-private transactions. Using the most current Media Metrix data available, pricing multiples were derived by taking the price of the transaction and dividing by the number of unique visitors at the time the transaction was announced as well as the average daily page views of each of the acquired sites. For the public-to-public transactions, price/revenue multiples and trading premiums were also calculated. Upon calculating the multiples, a clear dichotomy between public-to-public transactions and public-to-private transactions was evident. Companies involved in public-to-public transactions on average commanded greater price/monthly unique visitors and price/average daily page views multiples. The results of the derivations are summarized in the table below:

M&A Transactional Data

	Public-to-Public Transactions:			Public-to-Private Transactions:		
	Median	*Mean*	*Range*	*Median*	*Mean*	*Range*
Price/Monthly Unique Visitors	477	518	247 - 968	66	86	5 - 243
Price/Average Daily Page Views	129	127	44 - 285	9	19	1 - 73
Price/Revenues (ttm)	107.5	104.5	1.9 - 197.4	Not Available	Not Available	Not Available

Source: Cogent Valuation and Media Metrix

The principal reason for this dichotomy may be that acquirers of public companies are paying for the target companies' greater brand equity and Web traffic. Generally, due to larger access to capital, public Online Media companies have had the means to build greater brand equity than private Online Media companies. This increased brand equity translates directly into increased web traffic and an increased probability of future cash flows, helping explain the premiums paid for publicly traded targets.

We also investigated the seven public-to-public M&A transactions to determine potential price premiums paid for the acquisitions. Since stock prices usually fluctuate positively with M&A announcements or the anticipation of M&A announcements, we determined the target price premiums against the announced transaction price one day and 20 days before the announcement of the transactions. Interestingly, there was a significant difference in the observed target premiums for one day and 20 days prior to the transaction announcement. The median premiums to target price one day and 20 days prior to the announcement were 13% and 46%, respectively. The difference in premiums may be explained by possible news leaks of the M&A transactions prior to their public announcements. News leaks usually produce heightened demand for the target's stock as investors attempt to front run the potential movement of the stock price when the transaction is publicly announced.

Premiums Paid on Public-to-Public M&A Transactions

	Median	Mean	Range
Premium to target price one day before transaction announcement	13%	27%	1% - 63%
Premium to target price 20 days before transaction announcement	46%	59%	7% - 126%

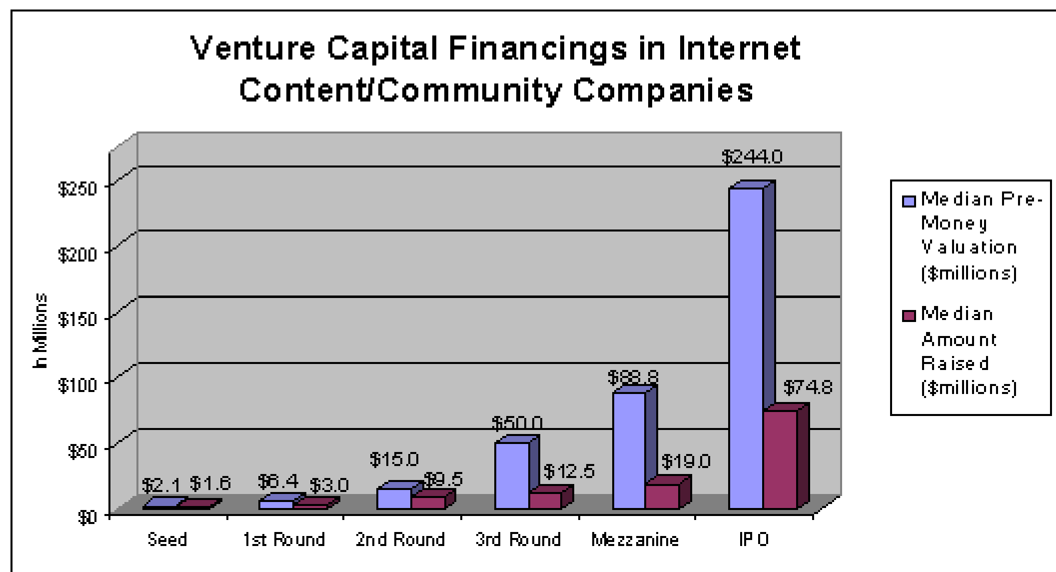
Source: Cogent Valuation

Private Venture Capital Financing Data

We analyzed 111 private venture capital financings of Internet Content/Community companies to develop an alternative valuation methodology that may be useful for the valuation of emerging companies in the Online Media industry and for the pricing of their securities. In doing so, we performed a transactional data analysis of 47 Internet Content/Community companies, of which 11 were public, and measured the following key variables: time between financing rounds, amount raised at each round, pre-money valuations, step-ups in value between any two rounds, time until IPO, and returns on capitalization (ROC is the annualized change, or growth, in pre-money market capitalization between any two rounds). Data gathered from the transactional analysis are listed in the table below. One observation to note is that ROCs to IPO, which depicts the annualized returns on equity for an investor at a certain financing round, of Online Media companies increased as they moved further along in their development. This is contrary to financial theory that implies that expected returns move proportionately with risks, which diminishes as companies move further along in their development. This observation is also contrary to trends reported in other studies3 that investigated the pricing of venture capital financings in the high-tech industry, which showed that ROCs to IPO declined in the progression from seed to third rounds and increased significantly at the mezzanine round. A possible explanation for this observed trend in ROCs with Online Media companies is that they have experienced a much faster time to IPO than other high-tech industries. The time to IPO from the first round of venture capital financing for Online Media companies ranged from 1.9 years to 4.3 years, with a median time to IPO of 2.5 years. This is significantly lower than the median time to IPO of 4.4 years reported from the venture study, which examined 479 technology companies that went public from January 1993 to June 1997.

Venture Capital Financing in Internet Community Companies						
	Seed	1st Round	2nd Round	3rd Round	Mezzanine	IPO
Median Pre-Money Valuation ($millions)	2.2	6.2	14.3	48.1	65.0	244.0
Median Amount Raised ($millions)	1.5	2.8	6.4	11.2	19.0	74.8
Median Post-Money Valuation ($millions)	3.5	9.0	21.3	55.3	76.7	333.0
Median Pre-Money Step-Ups from Previous Round	NM	4.2	3.2	2.7	1.4	4.4
Median Valued Created from Previous Round per Capital Infused	NM	6.6	2.6	4.7	1.4	11.0
Median Time to Financing from previous round (in years)	NM	0.5	0.8	0.6	0.9	0.6
Median Returns on Capital from each round to IPO	NA	261%	364%	441%	568%	NM

Source: VentureOne and Cogent Valuation NA = Not available NM = Not meaningful



Application to Valuation - Transactional analysis of private venture capital financings in Online Media companies provides an alternative valuation methodology in which private pricing transactions of comparable companies can be used to derive indications of value. Furthermore, this method allows for the examination of several variables with regard to the pricing of similar companies with respect to age, development stage, and fundraising history. These variables, such as value step-ups and value creation per capital infused, can be used to derive value indications of private Online Media companies based on data from their prior financings. Moreover, since the data used in the analysis corresponds to companies that were private during all of their financing rounds, the pre-money valuations implicitly consider the illiquidity factor. Therefore, no subjective assumptions regarding a marketability discount or further adjustment for illiquidity is needed.

Conclusion

The Market has clearly recognized the promises of the Internet. The astronomical valuations of publicly traded Internet stock, the rapid increase in Internet related IPOs, and the dollar amount raised by Internet companies and their shortened time to liquidity for such investments in the venture capital community, are all very real signs of investors' insatiable appetite for this industry. History has shown that many of the trends observed in today's Internet space are not dissimilar to past trends in other industries, most recently the biotech space. In such environments, standard financial principals and more specifically principals of valuation seem to be thrown aside as investors rush to, "catch the ship before it leaves the port." However, in all cases, certain principals of valuation do not completely disappear and trends and rationales do become apparent. The basis of this report was not to provide a blueprint or a set of standards for valuing Online Media companies, instead it was written to provide insight on current trends related to principals of valuation concerning the Online Media industry. In an extremely young industry, such as Online Media, traditional valuation metrics usually do not apply, thus alternative valuation methodologies must be used to derive value indications. This often involves analytical creativity, a thorough understanding of the company under examination and its respective industry, as well as an intimate knowledge of the capital markets.

1. Marginal profitability is calculated by dividing the change in operating income from one year to the next by the change in revenue during the same period of time. (Definition from Lanny Baker, CFA – New Media analyst at Salomon Smith Barney)

2. This calculation underestimates the total number of unique page views because the number of unique monthly visitors used in the calculation is less than the total number of monthly visitors. It nevertheless provides a conservative approximation of a site's monthly activity.

3. Kam, Steve and Dave Witherow The Pricing of Successful Venture Capital-Backed High Technology and Life Sciences Companies. The Journal of Private Equity, Spring 1999.