

A Closing **View**

Valuing dot-coms **after the fall**



BRYAN LEISTER

Timothy M. Koller

Investment values always revert to a fundamental level based on cash flows. Get used to it.

It was inevitable. Last year's decline in the NASDAQ composite index brought a sudden halt to a heady—some would say reckless—time for investors and acquisition-minded companies, particularly those focused on anything and everything connected with the Internet. Predictably, this slump has now sent the pendulum swinging in the other direction: many investors are staying away from the sector entirely, and established brick-and-mortar companies are scaling back their on-line initiatives. The survival of even leading Internet firms is being questioned.

The Internet roller coaster may rank as the market's most dramatic upheaval over the past 20 years,¹ but it certainly hasn't been the only one. Remember biotech? Real estate? Leveraged buyouts? What about Japan Incorporated? Each fad was accompanied by the conviction among market bulls that—somehow, this time—classical notions of value creation, such as approaches that emphasized a company's cash flow, were hopelessly out of touch with the new vision of investing. In fact, investment values always eventually revert to a fundamental level based on cash flows.

Although investors and companies can no longer throw money at every dot-com idea, they shouldn't abandon the Internet. As they ponder the reality of a greatly reduced NASDAQ, they should cast a gimlet eye on the real sources of the sector's

¹As reckoned by value.

value. Such an analysis, together with an understanding of the basic principles of value creation, will generate new insights into the potential value of Internet opportunities.

Cash flow is king

In an earlier article on valuing dot-coms, several colleagues and I argued that solid investment analysis has never really been about shorthand metrics such as price-to-earnings multiples or multiples of revenue or traffic.² These approaches, in vogue during the Internet boom, do not consider a company's particular characteristics, nor do they account for the way investments in intangible assets (such as the cost of acquiring customers) flow through the income statement rather than the balance sheet.

Our approach involved applying a long-term discounted-cash-flow (DCF) analysis supplemented by three twists. First, instead of starting with the current level of performance—the usual practice in DCF valuations—start by thinking about what the industry and the company would look like in a state of sustainable, moderate growth, and then work that estimate back to current performance. For Internet businesses, this plateau of economic stability is probably at least a decade away.

Second, instead of a single forecast, use probability-weighted scenarios of future performance—an approach that can help highlight the inherent uncertainty in valuing high-growth technology companies. These scenarios should include extreme outcomes, such as very high returns and, conversely, bankruptcy. Finally, use tools such as customer value analysis to understand more fully how value is actually created.

Spotting the value creators

The development of a fundamental economic perspective for analyzing companies with no profits and negative cash flows must begin with a focus on the way companies create value. The ultimate drivers of value creation are the potential revenue of a company and its ability to convert that revenue into cash flow for shareholders—an ability best measured by its long-term return on invested capital. People who are looking for real value in an Internet sector that has fallen down to Earth can begin by asking three questions.

How will the company generate revenue?

Getting money from customers is an obvious place to start—right? Yet only a short time ago, investors were buying companies without a clear sense of how they would

²See Driek Desmet, Tracy Francis, Alice Hu, Timothy M. Koller, and George A. Riedel, "Valuing dot-coms," *The McKinsey Quarterly*, 2000 Number 1, pp. 148–57.

generate such revenue. The fact is that most of the ways of generating it have already been unearthed. In the business-to-consumer (B2C) market, companies can sell physical products, services, information, entertainment, and financial products; earn revenue from advertising; and collect fees for facilitating transactions. In short, B2C companies must collect their revenue either from consumers or from other businesses that use their sites to reach consumers. Sources of revenue are similar in the business-to-business (B2B) market.

Be cautious about business models based on future revenue for anything that people wouldn't pay for today. America Online managed to build its business on membership fees from the start by offering consumers something they were willing to buy. Yet too many so-called lifestyle sites first aim to build a user base and then try to figure out how to generate revenue from sources beyond mere advertising. Similarly, Internet banks that use low prices and little else to lure customers could well see cost-sensitive ones go elsewhere when prices rise.

What will be the average return on capital once the industry matures?

In the Internet world, it is too often assumed that successful companies will earn very high returns on their fixed assets and working capital—perhaps 20 percent or more after taxes—because they rely on intangible rather than tangible assets or because network effects create effective monopolies.

This blanket assumption is dangerous. Industries earn high returns on capital if their products, such as patented pharmaceuticals, are nonsubstitutable and legally protected; if branding is important and consumers are indifferent to price; and if a product, such as Microsoft's Windows operating system, becomes more valuable to customers as more people use it.

One reason to be skeptical about claims that Internet companies will earn high returns is that intangibles don't necessarily earn them; the industry structure does. Consider investment banking and movie production, two industries with lots of intangible capital. In both, most of the value goes to the talent—bankers, actors, and directors—not to the shareholders.

Few industries in the Internet world have the structural characteristics needed for high returns on capital. One exception may be those B2C and B2B marketplaces whose customers will naturally gravitate to the biggest site, thus creating a winner-takes-all opportunity for high returns. But most B2C and B2B marketplaces will earn returns that are close to or only marginally above their cost of capital. Internet retailing, for example, doesn't exhibit any of the traits associated with high returns. Products are substitutable, and consumers are sensitive to prices: they may, for example, seek information at one World Wide Web site but shop at another

or off-line. (My wife loved the eToys site, but once she found a product she would often buy it elsewhere; eToys is now closing down.) A similar logic applies to on-line financial-services and entertainment sites.

How big is the relevant market?

Most analysts focus on the size of a market, but these estimates can be inflated or even irrelevant. Many Internet companies, for example, rely on advertising for revenue, but it is fairly certain that ad expenditures will be a relatively small part of the total economy, though they might rise somewhat over time.

Be wary, too, of the way companies assess the size of the relevant market or even measure their own revenue. In airline travel services, for example, the relevant market isn't the entire revenue of the airlines but rather the much smaller fees that they pay to on- or off-line agents.

Finally, ask yourself if the management, technology, brand, and head start of a company will allow it to beat the industry average. Keep in mind that few companies do so for long.

This fundamental approach to valuation is by no means a panacea. For starters, it won't eliminate uncertainty. Continual innovation and an inability to predict consumer behavior will ensure that volatility and risk remain important parts of the dot-com landscape. Yet investors and companies following these principles will at least be asking the right questions. They will have a better chance of success than they would if they simply followed the herd.



Tim Koller is a principal in McKinsey's New York office. Copyright © 2001 McKinsey & Company. All rights reserved.