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INDUSTRY SURVEYS

Internet Software & Services

July 2015

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July 2015

INDUSTRY SURVEYS

Internet Software & Services

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Internet Software & Services

TOPICS COVERED BY INDUSTRY SURVEYS

Aerospace & Defense	Household Products
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Automobiles	Internet Software & Services
Banks	Information Technology Services
Beverages	Life Sciences Tools & Services
Biotechnology	Machinery
Capital Markets	Media
Chemicals	Metals & Mining
Commercial Services & Supplies	Multiline Retail
Communications Equipment	Oil, Gas & Consumable Fuels
Consumer Finance	Paper & Forest Products
Electric Utilities	Pharmaceuticals
Electrical Equipment	Real Estate Investment Trusts
Energy Equipment & Services	Road & Rail
Food & Staples Retailing	Semiconductors & Equipment
Food Products	Software
Gas Utilities	Specialty Retail
Health Care Equipment & Supplies	Technology Hardware
Health Care Providers & Services	Telecommunications
Hotels, Restaurants & Leisure	Textiles, Apparel & Luxury Goods
Household Durables	Thrifts & Mortgage Finance

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INDUSTRY SURVEYS

Internet Software & Services

To our valued Industry Survey clients:

S&P Capital IQ is pleased to inform you of many insightful enhancements and modifications to our product offering. First of all, you will notice an entirely new **Performance** section in addition to our traditional coverage of key industry statistics and trends that are now contained in the **Industry Profile** portion of our publication. The new and innovative Performance section is predominantly driven and empowered by S&P Capital IQ company fundamental data that is aggregated and market capitalization index weighted according to Global Industry Classification Standards (GICS) methodology. By taking this customized proprietary approach to data collection and analysis we are now able to provide our clients with a unique, contemporary and highly relevant perspective on the financial performance of entire sectors and related specific industries representing groupings of multinational corporations included in the S&P 1500 index, according to the most current financial reporting metrics available to the marketplace.

Appropriately, the specific industry titles covered by our Industry Survey report service offering have now also been aligned to the widely recognized and accepted GICS format. This new approach provides a direct connection between the data and insights provided in our upgraded reports, and many stock market indices and index-based securities, such as Exchange Traded Funds (ETFs). We have also added a new Sector Overview portion at the beginning of each report that is designed to summarize the fundamental sector-level backdrop in which the specific industry in-focus operates and competes on a peer-group basis. Coverage of capital market activity (M&A and, IPOs), inclusive of data, trend and deal analysis, has also been significantly enhanced as part of our upgraded service offering.

The sector and industry level data, observations and analysis are presented in a deliberate ordered fashion where the cumulative insights flow in a logical and decision-supportive progression, specifically:



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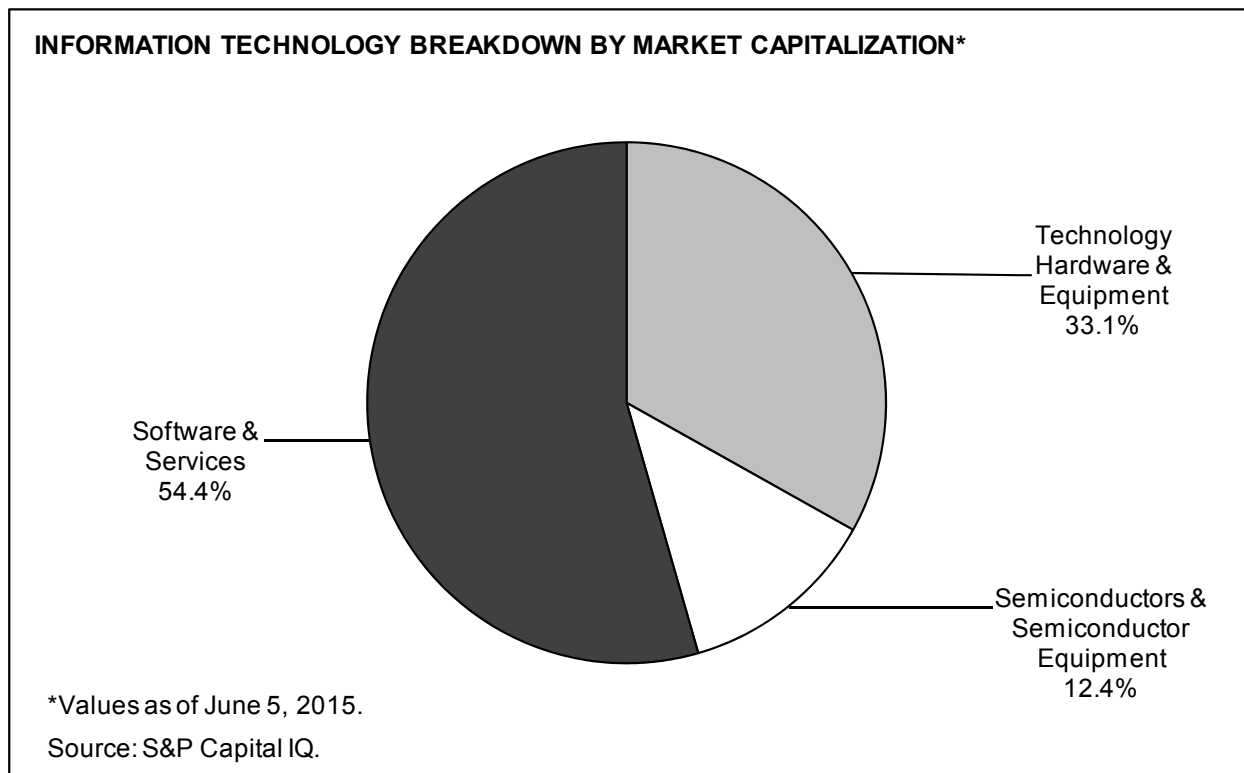
EXECUTIVE SUMMARY

- ◆ S&P Capital IQ sees continuing healthy revenue growth for the Internet software & services industry, driven by gains in Internet advertising, with an increasing emphasis on mobile.
- ◆ Strong margins remained largely stable over the past five years, and S&P Capital IQ sees potential future upside related to pricing for mobile advertising.
- ◆ Despite perceptions related to a lack of profitability, Internet software & services industry companies have generated considerable cash and have been aggressive allocating capital. However, S&P Capital IQ points to internal and external investment efforts, and not so much to buyback and dividend activity, especially on a relative basis.
- ◆ Interestingly, despite thoughts that the Internet business is extremely competitive, there are indications that category leaders are or can be at least somewhat entrenched.
- ◆ S&P Capital IQ thinks healthy revenue growth and strong margins, considerable cash generation and aggressive capital allocations, and somewhat entrenched leaders, coupled with a healthy US economy and six-year bull market, have contributed to considerable gains for Internet software & services industry stocks.

SECTOR OVERVIEW

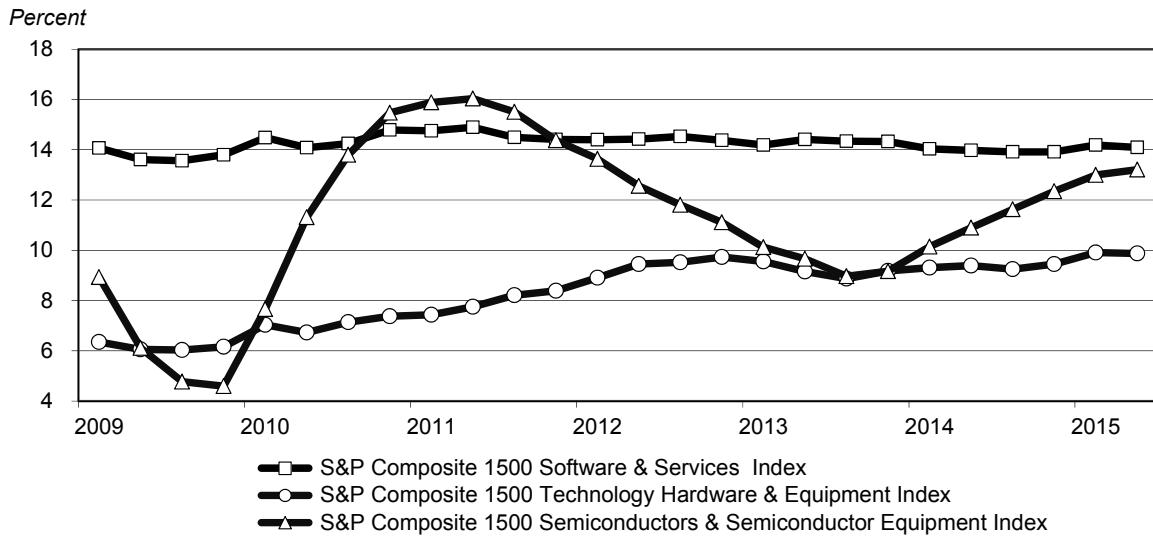
The Internet software & services industry is a component of the information technology sector. The information technology sector makes up 19.5% of the S&P 500 and 19.1% of the S&P 1500, as of July 10, 2015. The three main industry groups that make up the sector are software & services (*i.e.*, Internet software & services, IT consulting & other services, data processing & outsourced services, application software, systems software, and home entertainment software), technology hardware & equipment (*i.e.*, communications equipment, technology hardware, storage & peripherals, electronic equipment & instruments, electronic components, electronic manufacturing services, and technology distributors), and semiconductors & semiconductor equipment.

From a stock price perspective in 2014, the 18.2% increase for the information technology sector outperformed the 11.4% rise in the S&P 500. From a profit perspective (as of July 14, 2015), the information technology sector is anticipated to generate 3.5% profit growth in 2015 and 10.6% in 2016; both estimates exceed those for the broader market.



The software & services industry group is not only the biggest from a market capitalization basis, it also possesses the highest net income margin.

INFORMATION TECHNOLOGY SECTOR NET INCOME MARGIN BY INDUSTRY GROUP*
(aggregate value weighted per share, quarterly)

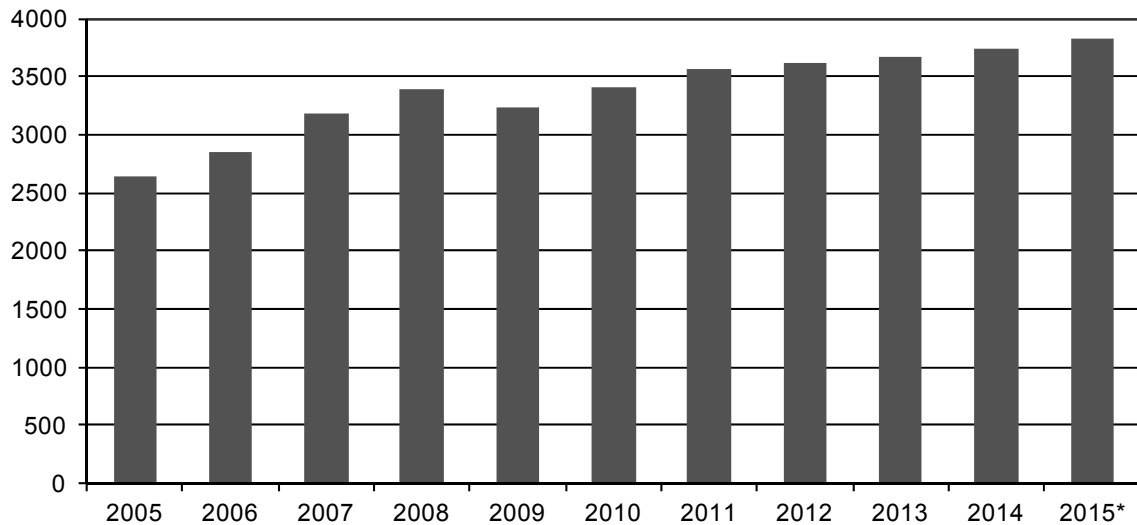


*Values as of June 5, 2015.

Source: S&P Capital IQ.

The environment for IT spending remains robust. After IT spending dipped in 2009, it quickly recovered the following year. IT spending increased for five straight years since 2009, and was projected to grow further in 2015.

WORLDWIDE IT SPENDING
(aggregate data, in \$, billions)



*Projected.

Source: Statista.

Several key metrics are important for understanding the state of the information technology sector, especially those that focus on revenue, margins, earnings, and credit trends.

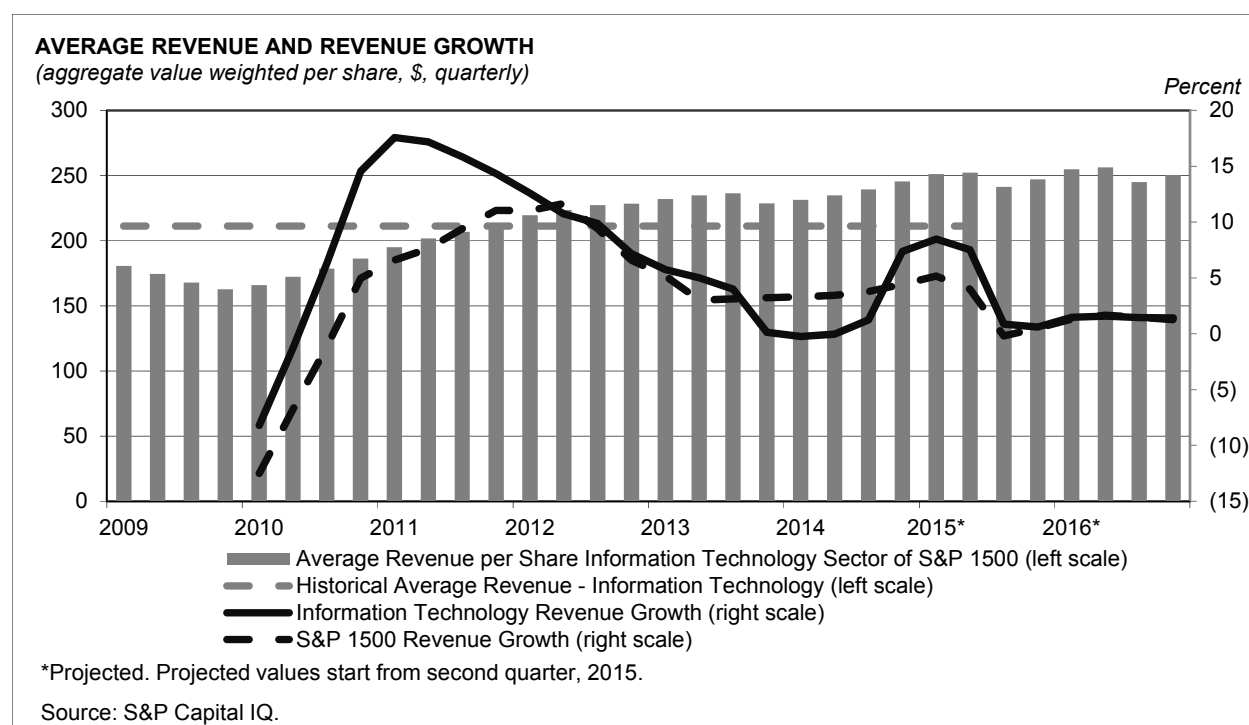
From an operational perspective, many financial metrics illustrate how productively or efficiently a sector, industry, or company is performing. These metrics can illustrate not only profitability and growth, but also operational efficiencies that may represent an investment opportunity or a potential red flag.

In this Sector Overview section, all data are calculated on an aggregated per-share basis within the information technology sector as a component of the S&P 1500 index constituent universe. The average is market-weighted, which means larger companies are more influential than smaller ones.

Sector Revenues

Revenue and Revenue Growth

◆ For the first quarter of 2015, revenue growth was 8.5%, the second-highest growth in the quarter behind health care (15.6%). The laggards among the other sectors were telecommunications (down 9.9%) and energy (down 4.1%).



◆ Information technology's revenue growth in the first quarter of 2015 also exceeded the 5.2% revenue growth for the S&P 1500.

◆ Looking forward, the information technology sector is expected (as of July 14, 2015) to generate 2.7% revenue growth in 2015, whereas the S&P 500 is expected to post a 2.1% revenue decline (in part due to the effect of the energy sector).

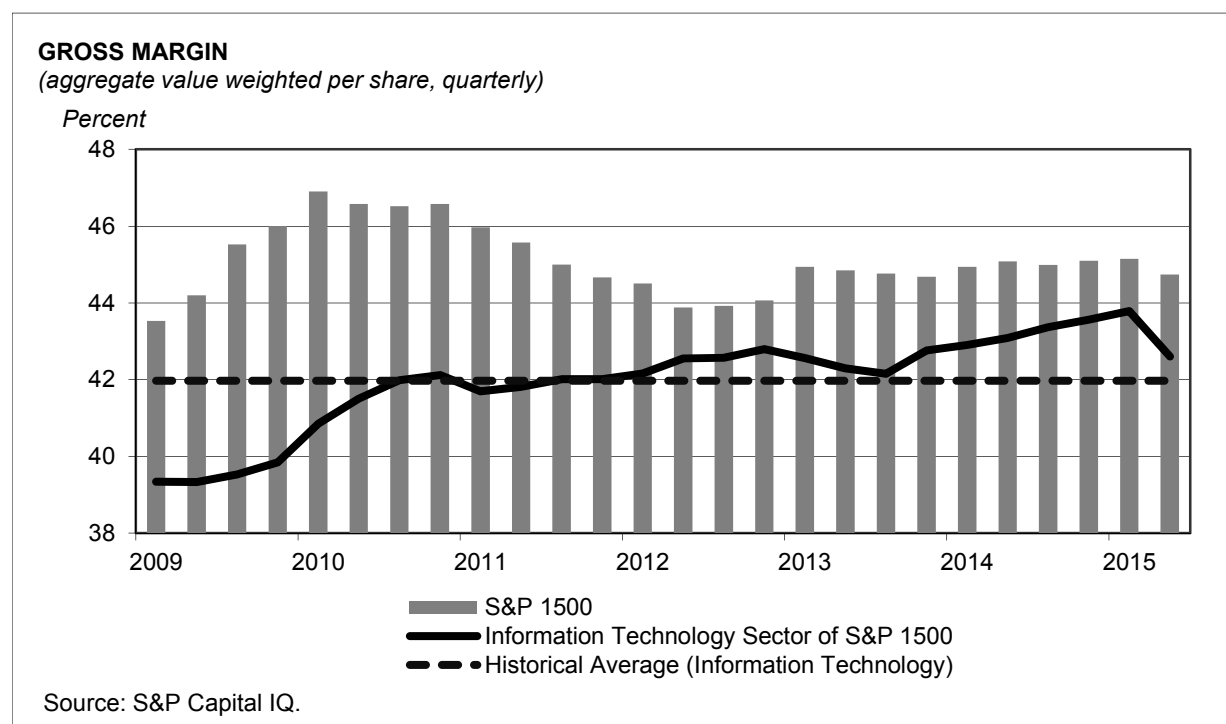
◆ The sector's revenue per share is projected (as of June 4, 2015) to grow from \$245.51 in the fourth quarter of 2014 to \$250.52 by the fourth quarter of 2016. If achieved, the revenue per share would represent a 54% increase off the sector's trough level in the fourth quarter of 2009, which demonstrates the amount of improvement the sector achieved as it rebounded from the 2008–2009 recession.

◆ If the sector can sustain its revenue growth, the sector's profitability should benefit. However, the modest growth expectations after the first quarter of 2015 are a concern.

Sector Profit Margins

Gross Margin

◆ The information technology sector's gross margin since 2009 rose steadily from a low of 39.3% in the first half of 2009 to a high of 43.8% in the first quarter of 2015. The first-quarter stat is 100 basis points (bps) above the average of 42.0% since the first quarter of 2009. As of June 4, the sector's gross margin is anticipated to contract to 42.6% for the second quarter of 2015.



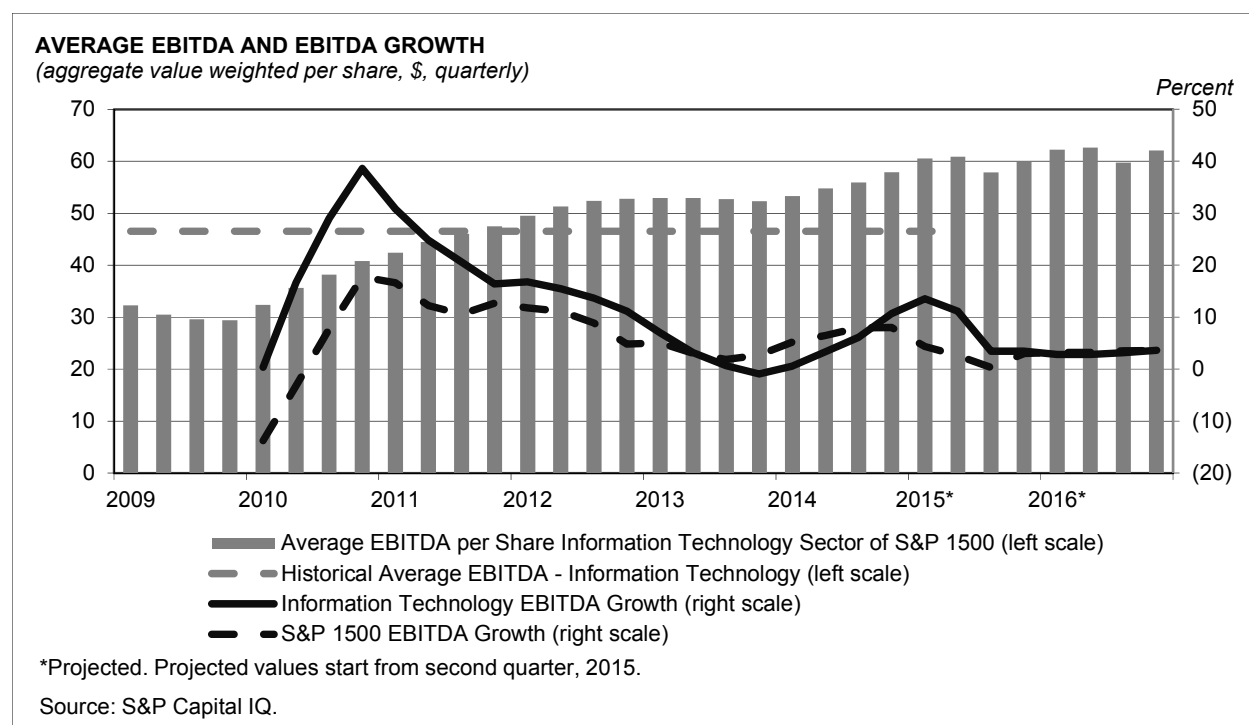
◆ Despite the sector's expanding gross margin, it is below that of the S&P 1500, continuing the trend for the entire six-year period from 2009 to 2014. However, the gap between the two measures has narrowed, with a 210 bps gap expected in the second quarter of 2015—40 bps narrower than the year-end 2014 measurement. The shrinking gap is impressive since the S&P 1500's gross margin also improved from the first quarter of 2009, as the measure grew from 43.5% in the first quarter of 2009 to 45.1% in the first quarter of 2015, and is projected to be 44.7% for the second quarter of 2015.

◆ Overall, the environment appears set for further gross margin gains and it may be possible for the sector to eventually match the gross margin of the entire S&P 1500.

EBITDA and EBITDA Growth

◆ Earnings before income tax, depreciation, and amortization (EBITDA) is a financial measure that looks to eliminate the impact from financing and accounting decisions. It essentially adds back financing and tax expenses as well as non-cash costs such as depreciation. It is a non-GAAP (Generally Accepted Accounting Principles) measure. EBITDA is often seen as a simplified

measure of cash flow, but it does not consider many cash flow items such as working capital shifts. Nevertheless, it is seen as a measure of profitability.



◆ Since 2009, the information technology sector's EBITDA per share ranged from a trough of \$29.43 in the fourth quarter of 2009 to its recent peak of \$60.53 in the first quarter of 2015. For the first quarter of 2015, EBITDA growth was 13.5%, which topped the 4.4% EBITDA growth for the S&P 1500.

◆ The information technology sector's best period came during the fourth quarter of 2010, when its EBITDA grew 38.6%.

◆ Looking forward, the information technology sector is expected (as of June 4, 2015) to generate 3.5% EBITDA growth in the second quarter of 2015, better than the 0.3% growth anticipated for the S&P1500. Through the fourth quarter of 2015, the sector's EBITDA growth is projected to top the S&P1500.

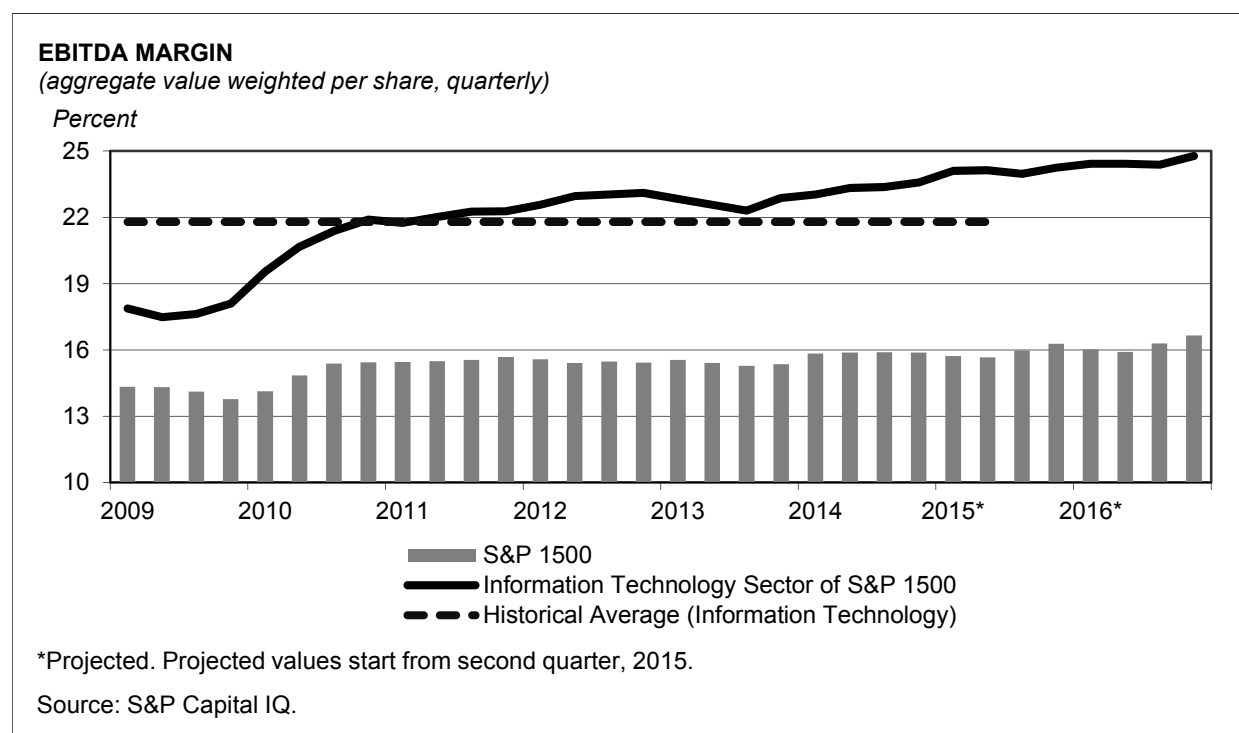
◆ The sector's EBITDA per share is projected (as of June 4, 2015) to grow from \$57.91 in the fourth quarter of 2014 to \$62.08 by the fourth quarter of 2016. The sector's average EBITDA from the first quarter of 2009 to the second quarter of 2015 was \$46.52.

EBITDA Margin

◆ Another important financial metric is the EBITDA margin. The primary difference between the EBITDA margin and gross margin is that the EBITDA margin incorporates the effects from selling, general, and administrative expenses (SG&A), but also adds back non-cash expenses such as depreciation and amortization (D&A).

◆ The information technology sector's EBITDA margin trend contrasts with the gross margin trend in that the 24.1% margin for the first quarter of 2015 significantly tops the 15.7% margin

for the S&P 1500. In the first quarter of 2015, the sector's EBITDA margin topped its 21.8% average over the prior six years.



◆ By year-end 2016, the sector's EBITDA margin is expected to be 24.8%, or 120 bps higher than its level for the fourth quarter of 2014. Although positive, it is directionally similar with the expectations for the entire S&P 1500, which is expected to rise 80 bps to 16.7% during the same period.

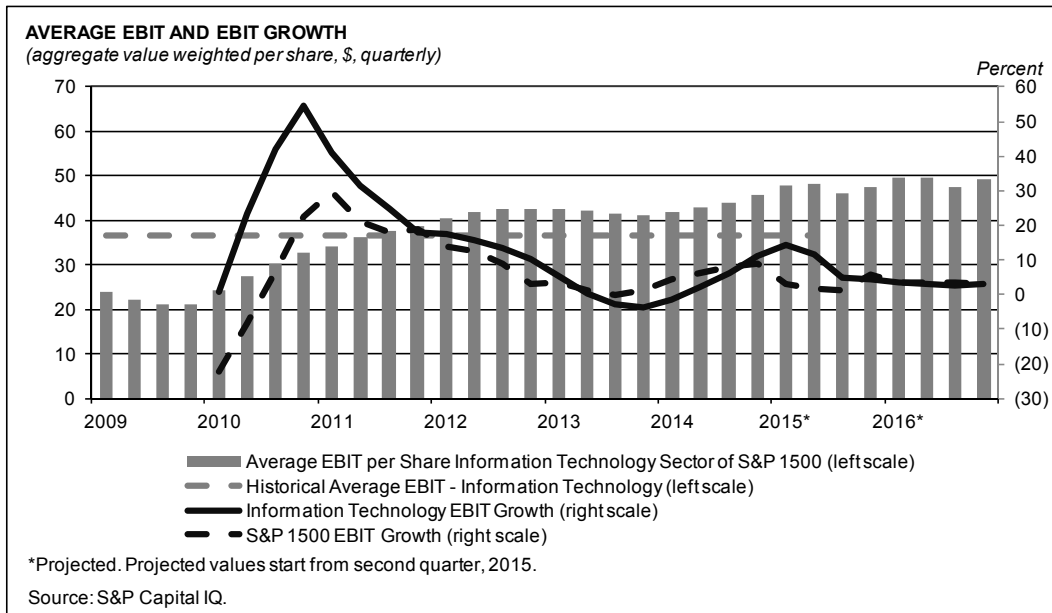
EBIT Margin

◆ Earnings before interests and taxes (EBIT), or operating margin, is another important financial metric. The primary difference between EBIT margin and gross margin is that the EBIT margin incorporates the effects from SG&A, D&A, and other operating expenses. While the gross margin looks at the costs to produce a good or service, the EBIT margin incorporates the costs of operating as a business, and the costs of selling or marketing the products or services. Thus, it is a more comprehensive measure of a company's costs.

◆ Since 2009, the information technology sector's EBIT per share ranged from a trough of \$21.16 in the fourth quarter of 2009 to its recent peak of \$47.99 in the first quarter of 2015. For the first quarter of 2015, EBIT growth was 14.5.

◆ The information technology sector's best period came during the fourth quarter of 2010, when its EBIT increased 55%.

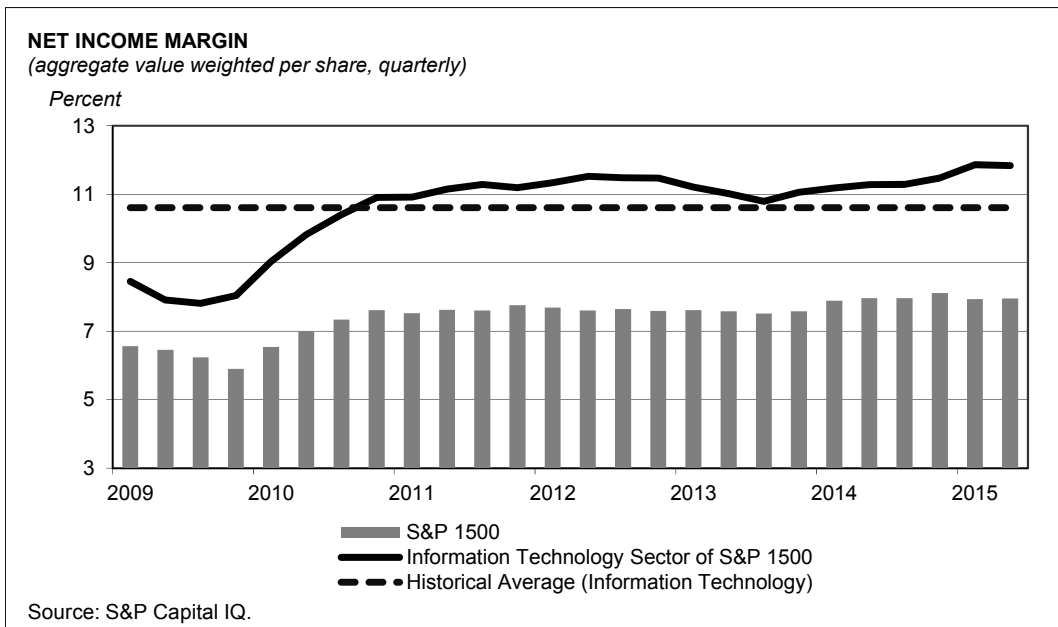
◆ Looking forward, the information technology sector is expected (as of June 4, 2015) to generate 11.9% EBIT growth in the second quarter of 2015, better than the 1.0% growth anticipated for the S&P1500.



◆ The sector's EBIT per share is projected (as of June 4, 2015) to grow from \$45.68 in the fourth quarter of 2014 to \$49.16 by the fourth quarter of 2016.

Net Income Margin

◆ Net income margin is another profitability measure that considers all other expenses and the impact of taxes.



◆ The information technology sector's 11.9% net income margin in the first quarter of 2015 is about 50% higher since its 7.8% trough in the third quarter of 2009. The average net income margin since the first quarter of 2009 was 10.6%. The sector's net income margin has stayed above this level since the fourth quarter of 2010.

◆ The sector's net income margin rose steadily since the third quarter of 2013, increasing 110 bps to 11.9% in the first quarter of 2015. As of June 4, 2015, the sector's net income margin for the second quarter of 2015 is projected to be 11.8%.

◆ Over the past few years, the sector's rising net income margins helped provide the sector with earnings growth.

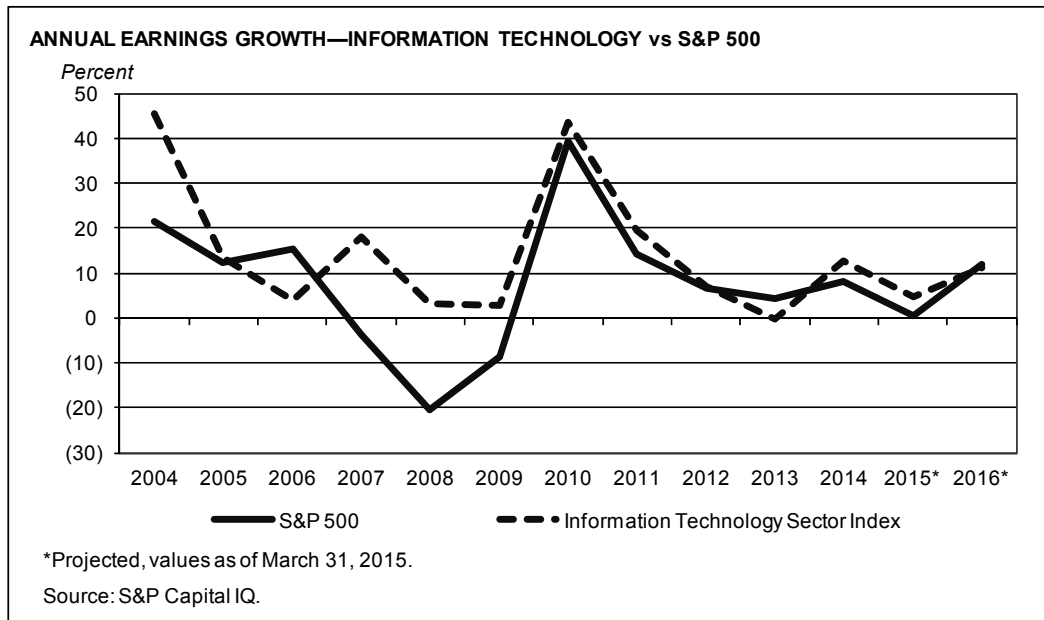
◆ As with the EBITDA and EBIT margin measurements, the information technology sector's net income margin topped that of the S&P 1500. For the second quarter of 2015, the net income margin of the information technology sector is projected to be 380 bps higher than the expected net income margin of 8.0% for the S&P 1500.

Sector Earnings

From an earnings perspective compared with the S&P 500, the information technology sector performed relatively well over the past year. Over the last five years ending December 31, 2014, the sector's earnings on a compound annual growth rate (CAGR) basis, outperformed the S&P 500, rising 9.6% per year compared with the S&P 500's 8.4%. In addition, over a 10-year period ended 2014, the sector's 11.7% CAGR exceeded the S&P 500 growth of 5.0%. Over the 10-year period, information technology was the leading sector, followed by health care (8.9%) and consumer discretionary (8.7%).

COMPOUND ANNUAL GROWTH RATES		
S&P 500 TOTAL AND BY SECTOR*		
<i>(values are in percent)</i>		
SECTOR	5-YEAR	10-YEAR
Consumer Discretionary Sector Index	11.73	8.69
Consumer Staples Sector Index	5.85	7.28
Energy Sector Index	5.24	2.56
Financials Sector Index	8.65	(4.32)
Health Care Sector Index	7.65	8.91
Industrials Sector Index	11.40	6.22
Information Technology Sector Index	9.59	11.67
Materials Sector Index	6.58	3.83
Telecommunication Services Sector Index	10.81	3.15
Utilities Sector Index	1.12	3.22
S&P 500	8.41	5.02
*Values as of June 9, 2015.		
Source: S&P Capital IQ.		

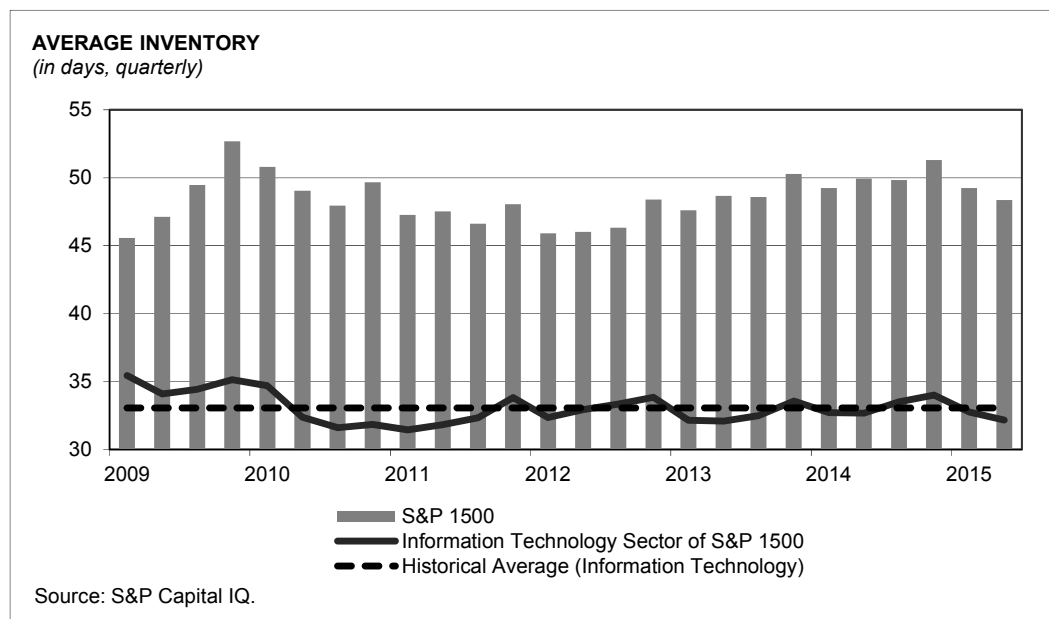
◆ From a year-over-year perspective that illustrates the earnings volatility over the past decade, which includes the 2008–2009 recession, the information technology sector more than exceeded the growth in the S&P 500 for the majority of the years.



Sector Balance Sheet

Inventory Days

◆ Inventory days illustrate how many days it takes for a company, industry, or sector to turn its inventory into sales. In this view, it is a measure of how efficient the sector uses part of its working capital. Too little inventory can lead to potential missed sales, while too much inventory may lead to write-downs or product discounts.



◆ From an operational perspective, the sector's inventory days dropped in 2015 from the fourth quarter of 2014, but are expected to remain stable compared with last year's first half. On an annual basis, inventory days dropped from a peak of about 35 days in the first quarter of 2009 to 34 at year-end 2014. However, as of June 4, 2015, inventory days are projected to be 32.2 for the

second quarter of 2015. Since the first quarter of 2009, inventory days have been stable, generally staying near the 33.1-day average since the first quarter of 2009.

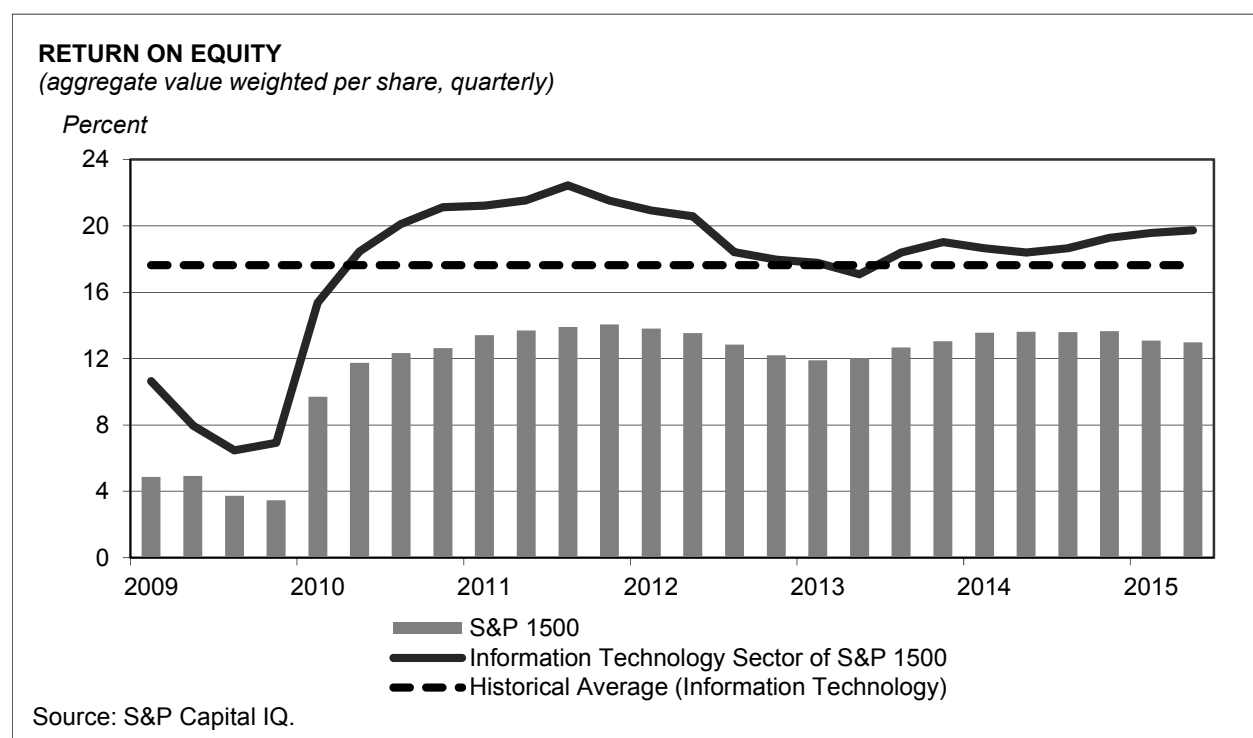
◆ The sector's inventory days are low compared with other sectors, including the peak sector, which is materials, with a projected 72.3 days for the second quarter of 2015.

◆ With a projected measurement of 48.3 for the second quarter of 2015, the average inventory days for the entire S&P 1500 is substantially higher than for the information technology sector. One of the reasons that inventory days are lower than other sectors is the contribution of software, which needs to be in physical inventory form, but may be downloaded upon consumer demand.

◆ Overall, recent inventory days data do not appear problematic for the information technology sector.

Return on Equity

◆ Return on equity (ROE) for the information technology sector stood at 19.6% in the first quarter of 2015, higher than its average of 17.6% since the first quarter of 2009. As of June 4, 2015, the sector's ROE is projected to rise to 19.7% in the second quarter of 2015, whereas the 13.0% ROE for the S&P 1500 is expected to reflect a 60 bps contraction compared with the year-end 2014 measurement.

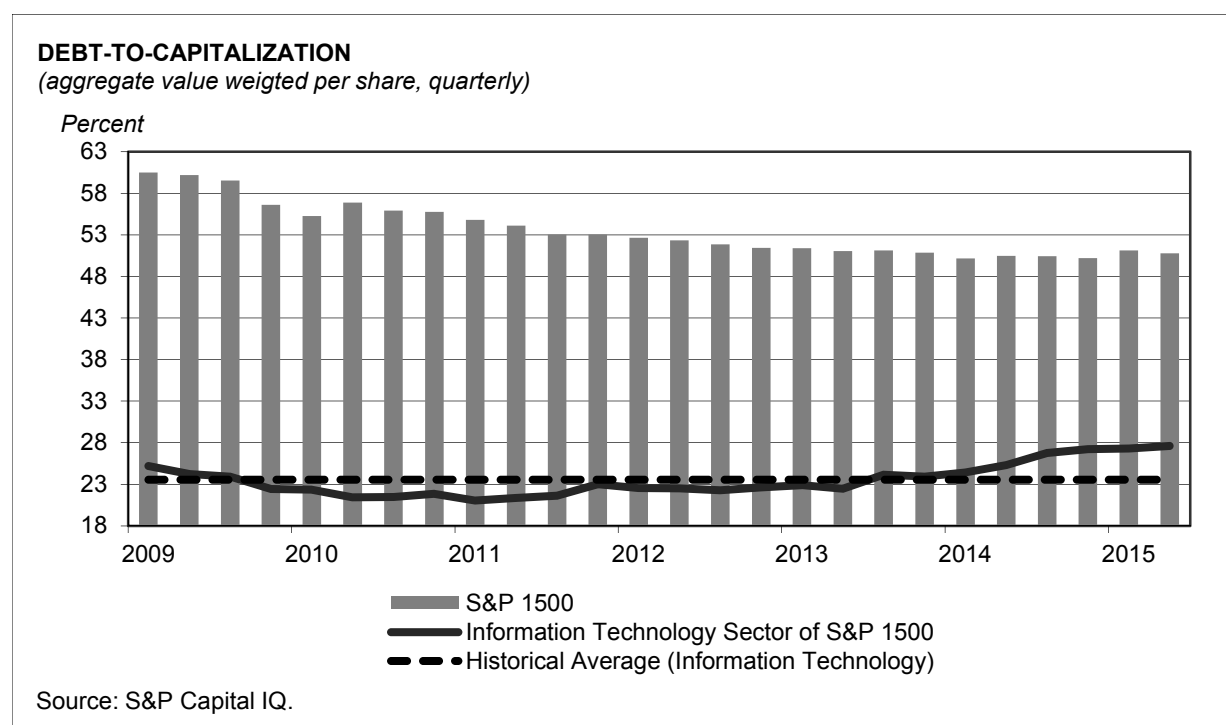


◆ The sector's ROE was lower during the 2008–2009 recession, but has since rebounded strongly.

◆ Comparatively speaking, using ROE projected for the second quarter of 2015, the materials sector features the lowest ROE at 8.0%. The highest expected ROE is in the consumer staples sector at 21.4%. Information technology has the third-highest ROE projection for the second quarter of 2015.

Debt-To-Capitalization

◆ Debt-to-capitalization is a credit-focused metric that measures the amount of debt as a percentage of the capital structure. A lower ratio indicates modest credit risk, whereas a higher ratio indicates enhanced credit risk. A sector's credit strength may depend upon the amount of debt in relation to other balance sheet items, such as equity or capital, or against the company's cash flow generation. Investors also need to be concerned with this metric because weaker credit strength could increase borrowing costs, which, in turn, could hurt profits.



◆ On the balance sheet, debt as a percent of capitalization for the information technology sector rose from its trough of 21.1% in the first quarter of 2011 to its highest level of 27.3% for the first quarter of 2015. For the second quarter of 2015, the debt-to-capitalization is projected to rise modestly to 27.6%.

◆ While the sector's debt-to-capitalization ratio rose over the past few years, it is still considerably lower than the S&P 1500's projected debt-to-capitalization of 50.8% for the second quarter of 2015. Actually, the information technology sector has the lowest debt-to-capitalization ratio among all the other sectors. Therefore, although its debt-to-capitalization ratio is higher than it was a few years ago, S&P Capital IQ does not view this as a material increase in credit risk due to the sector's conservative debt usage and its significant EBITDA generation.

Sector Valuation

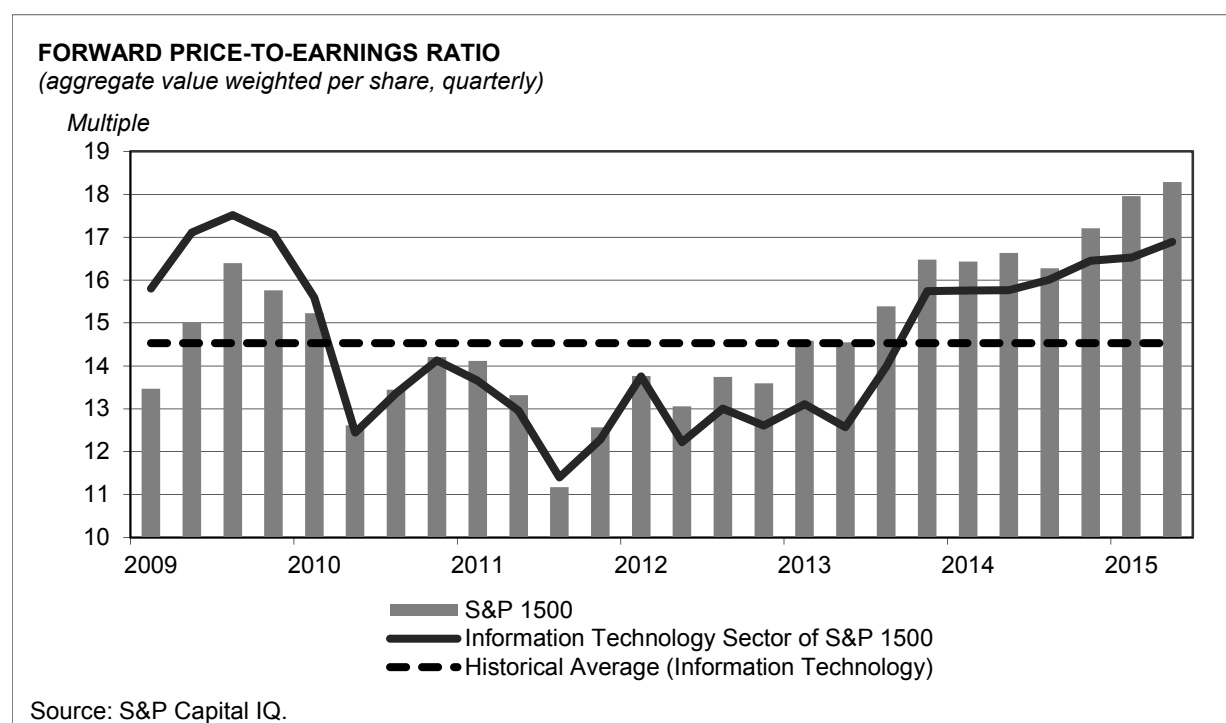
Forward P/E

◆ Forward price-to-earnings (P/E) ratio is one of the most popular valuation metrics, because it measures an investment based upon how it is expected to perform in the future, not what it accomplished in the past.

◆ From a valuation perspective, the information technology sector is valued at a significant premium to its 14.5x average since 2009.

◆ However, compared with the S&P 1500, the sector is valued at a discount. For the first quarter of 2015, the sector had a forward P/E of 16.5x, which is a discount to the 18.0x forward P/E multiple of the S&P 1500. For the second quarter of 2015, the sector's forward P/E multiple is expected (as of June 4, 2015) to be 16.9x, whereas the S&P 1500's forward P/E is expected to rise to 18.3x.

◆ For comparison, excluding energy due to recent earnings volatility, the sector with the highest projected forward P/E multiple in the first quarter of 2015 was consumer staples at 20.1x. The industry with the lowest forward multiple is telecommunications at 13.9x.



EV-To-EBITDA Ratio

◆ Another popular valuation metric, and one that is often used in acquisition valuation, is Enterprise Value (EV)-to-EBITDA (EV/EBITDA). This ratio incorporates debt and equity, while discounting cash (as a function of cash flow, not earnings), and thus adds back non-cash expenses, such as depreciation.

◆ The EV/ EBITDA ratio generally stayed at a discount to the S&P 1500 since 2009, but the valuation has expanded since 2012.

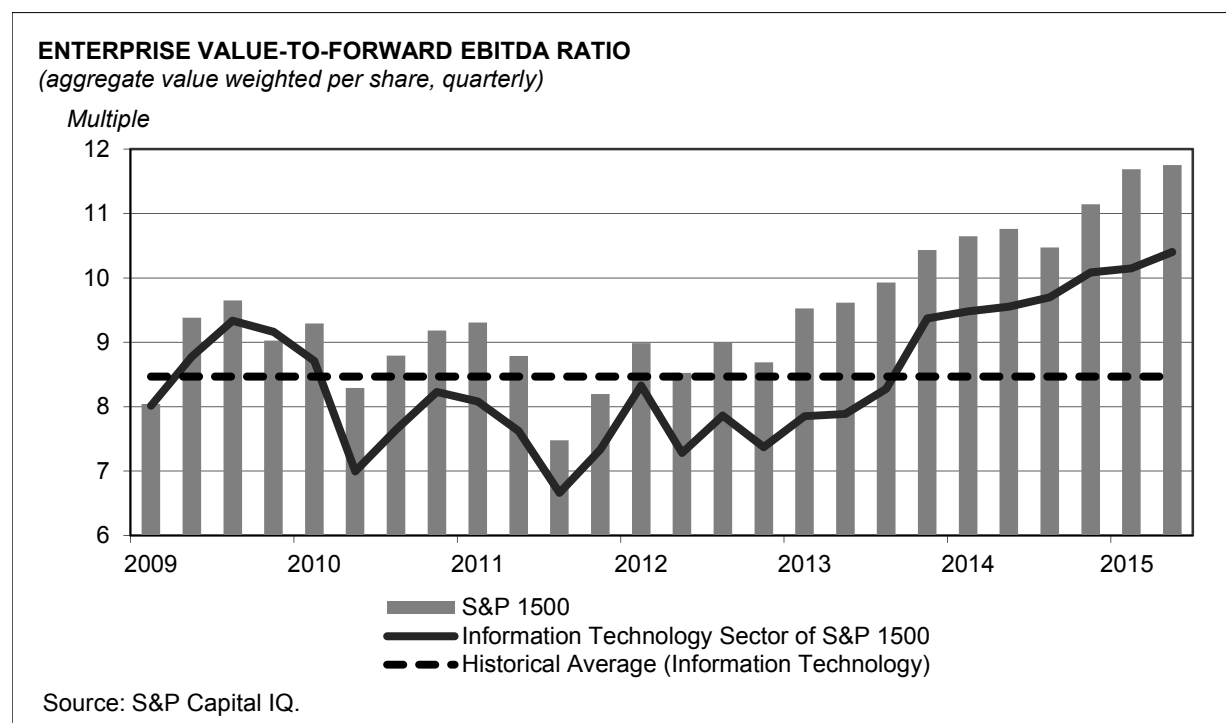
◆ Since 2011, the EV-to-forward EBITDA ratio expanded significantly, moving from a low of 6.7x in the third quarter of 2011 to 10.1x in the fourth quarter of 2014 and the first quarter of 2015.

◆ In comparison, the EV-to-forward EBITDA for the S&P 1500 was 11.7x in the first quarter of 2015.

◆ Among the sectors, information technology had the fifth highest EV-to-EBITDA multiple in the first quarter of 2015. The sectors with the highest EV-to-forward EBITDA multiples were health

care (13.0x), consumer staples (11.9x), and industrials (10.9x). The sector with the lowest forward multiple, excluding financials, was telecommunications at 6.3x.

Overall, the information technology sector appears rather strong, although the run up in share prices created a higher valuation. Nevertheless, this elevated valuation represents a discount to the broader market.



ETF Market Flows and Investing Landscape

◆ Investors increasingly use exchange-traded funds (ETFs) in a tactical manner to gain exposure to industries, while benefiting from ETFs' low-cost passive nature and the ability to make intra-day trades. In 2014, \$41 billion was added to all sector ETFs, while information technology-focused products saw more than \$2 billion of inflows. In the first six months of 2015, information technology ETFs experienced \$1.3 billion in inflows.

◆ Investors seeking exposure to the Internet software & services industry can gain exposure through a few industry-focused products. First Trust Dow Jones Internet (FDN) is the largest, with \$2.5 billion in assets. This ETF recently had 50% of assets tied to the Internet software & services industry, but also has meaningful exposure to companies in the Internet retail (25% of assets) and software (7%) areas.

◆ PowerShares NASDAQ Internet Portfolio (PNQI) is a smaller ETF, but has higher exposure to Internet software & services (62%) and minimal exposure to software (1%). PNQI has a higher three-year standard deviation.

◆ With a number of large-cap stocks in the Internet software & services industry, it is no surprise that this is a meaningful weighting (approximately 11% of assets) in diversified information

technology-laden ETFs such as PowerShares QQQ Trust (QQQ) and Technology Select Sector SPDR (XLK). Technology hardware, storage & peripherals companies are more represented in these ETFs.

◆ While some information technology ETFs experienced outflows in the first half of 2015, FDN added \$771 million of new money.

ETFs WITH MEANINGFUL INTERNET SOFTWARE & SERVICES EXPOSURE			
TICKER	ETF	ASSETS UNDER MANAGEMENT (in \$, millions)	NET EXPENSE RATIO
QQQ	PowerShares QQQ Trust	40,756	0.20
XLK	Technology Select Sector SPDR	13,280	0.15
VGT	Vanguard Information Technology	7,848	0.12
FDN	First Trust Dow Jones Internet	3,384	0.57
IYW	iShares US Technology	2,969	0.45
HACK	PureFunds ISE Cyber Security ETF	1,333	0.75
MTK	SPDR Morgan Stanley Technology	433	0.35
FTEC	Fidelity MSCI Information Technology	440	0.12
QTEC	First Trust NASDAQ-100 Technology	331	0.60
PNQI	Poweshares NASDAQ Internet Portfolio	231	0.60

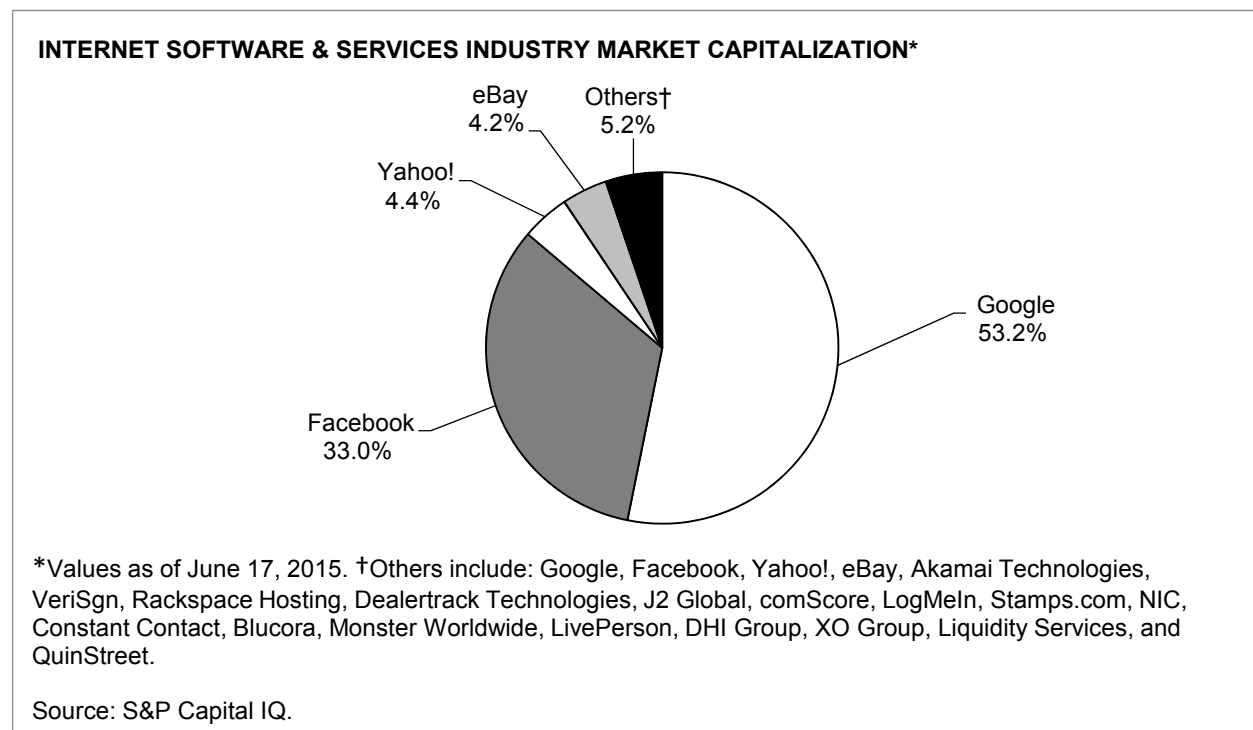
Source: S&P Capital IQ ETF Report July 18, 2015.

SECTOR ETF INFLOWS		
(total inflows for the period ended, in \$, millions)		
SECTOR	2014	FIRST SIX MONTHS, 2015
Consumer Discretionary	4,212	2,422
Consumer Staples	2,104	(2,319)
Energy	11,428	5,719
Financials	3,685	(1,628)
Health Care	6,427	9,432
Industrials	227	(3,045)
Information Technology	2,440	1,337
Materials	(1,871)	889
REITs	7,429	(852)
Telecommunications Services	478	40
Utilities	4,501	(3,317)

Source: State Street.

INDUSTRY OVERVIEW

- ◆ The Internet software & services industry is comprised of software companies included in the S&P 500, S&P MidCap 400, and S&P SmallCap 600 indices, and/or its constituent companies.
- ◆ As of June 2015, the S&P 1500 Internet software & services industry included 22 companies. The largest components of the index were Google, Facebook, eBay, and Yahoo, which amounted to more than 90% of the index's market capitalization. Google and Facebook alone accounted for more than three quarters of the market capitalization.



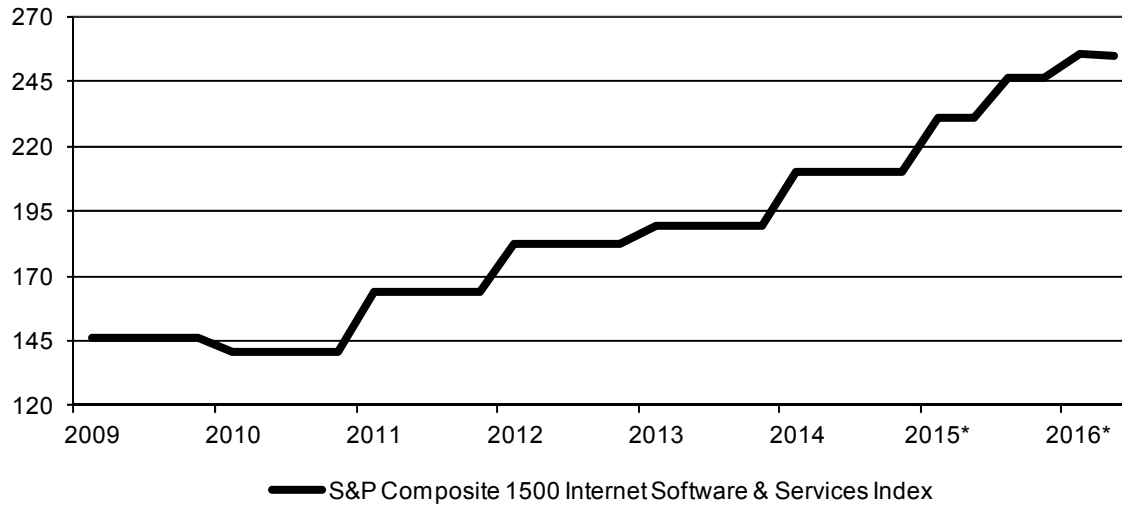
- ◆ Google, Facebook, and Yahoo generate most of their revenues from digital advertising. In 2014, this constituted 89% of Google's revenues, 92% of Facebook's revenues, and 81% of Yahoo's revenues.

Industry Revenues

- ◆ From 2009 to 2014, Internet software & services industry revenues rose 47% on a market-cap weighted basis and 139% on an absolute basis, reflecting favorable secular shifts and a global economic recovery.
- ◆ In May 2012, Google completed its \$12.5 billion acquisition of Motorola Mobility; Google sold a major piece of Motorola in October 2014.

REVENUES

(aggregate value weighted per share, \$, quarterly)



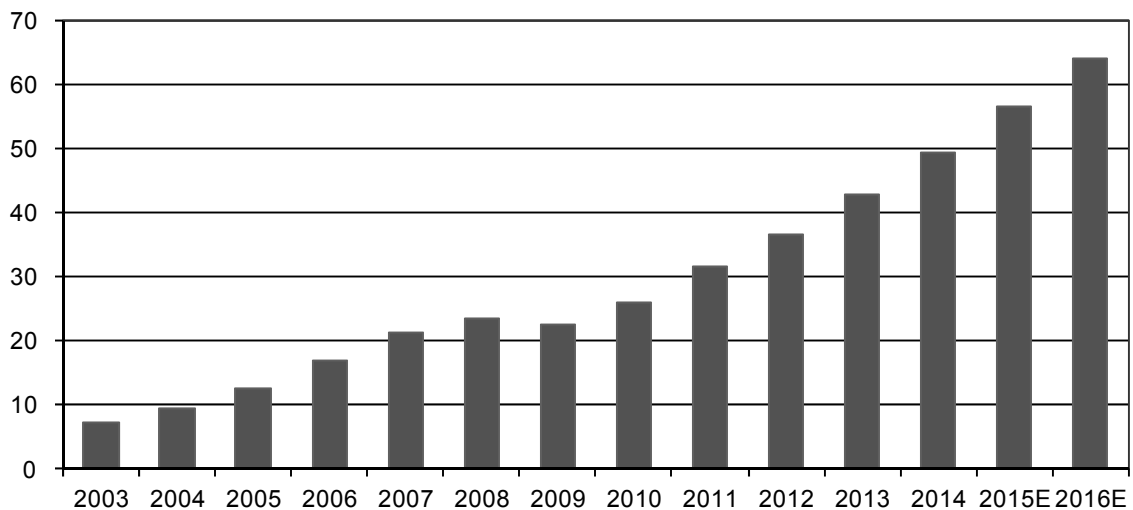
*Projected. Projected values start from second quarter, 2015.

Source: S&P Capital IQ.

◆ S&P Capital IQ consensus estimates indicate anticipated low-double-digit growth for 2015. We think this projection is reasonable given the strong US dollar. eBay spun off its Payments unit, under the name PayPal, in July 2015. Yahoo is likely to see a revenue decline of approximately 7%, which would mark yet another year of waning growth. Meanwhile, Google and Facebook, the Internet software & services industry's two largest companies by far, will likely continue to deliver healthy growth.

US INTERNET ADVERTISING REVENUES

\$, Billions



E-Estimated.

Sources: PricewaterhouseCoopers LLP and the Interactive Advertising Bureau; Standard & Poor's estimates.

◆ Domestic Internet advertising revenues will likely see a continuing healthy double-digit growth this year, based on data from the “IAB Internet Advertising Revenue Report” from the Interactive Advertising Bureau and PricewaterhouseCoopers. S&P Capital IQ projects revenue increases of 14% in 2015 and 13% in 2016, showing some deceleration.

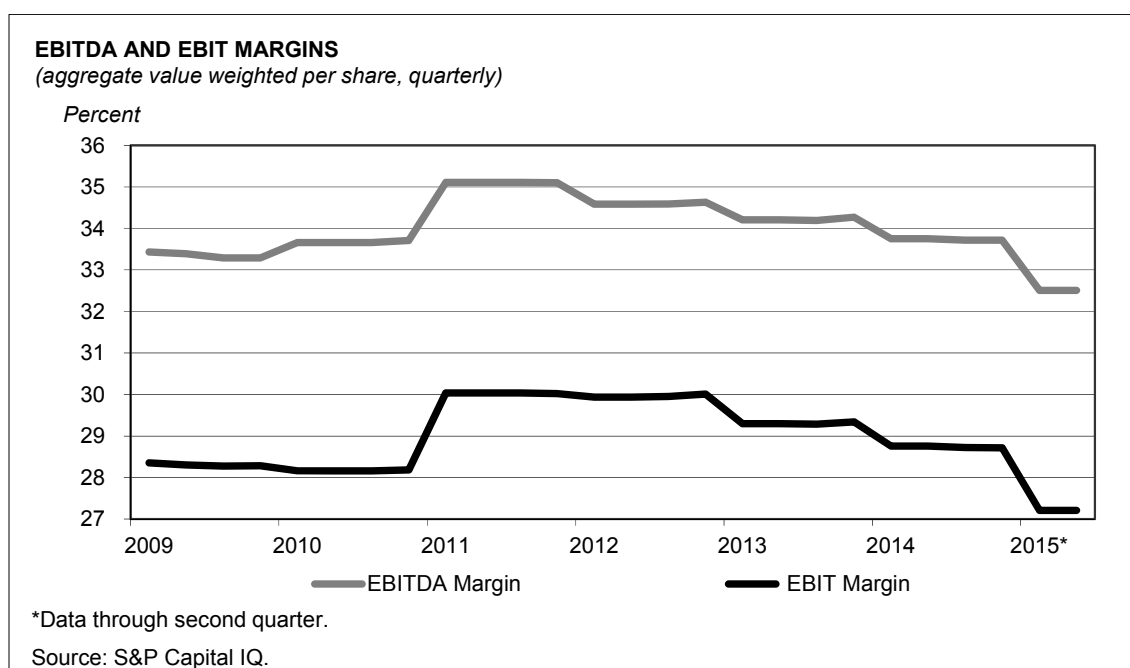
◆ S&P Capital IQ sees the percentage of revenue from search declining, while mobile will continue to increase. In fact, mobile will likely overtake search as the largest category of online revenues by 2016.

Industry Margins

◆ From 2010 to 2014, aggregate average annual gross margins for the Internet software & services industry stayed largely consistent, at 63%–65%. Gross margins widened from 64% in 2010 to 65% in 2011, reflecting an increase from Facebook, from 75% to 83%. The gross margins narrowed in 2012 and 2013, and S&P Capital IQ thinks this was in part due to a compression of 200 to 250 basis points (bps) from Google in both years, given challenges associated with pricing across mobile formats.

◆ Nonetheless, S&P Capital IQ consensus estimates indicated a significant widening of the aggregate average gross margin in 2015 from 65% to 70%. This largely reflects a projected increase from Google of nearly 900 bps, and S&P Capital IQ thinks mobile advertising margins have been firming.

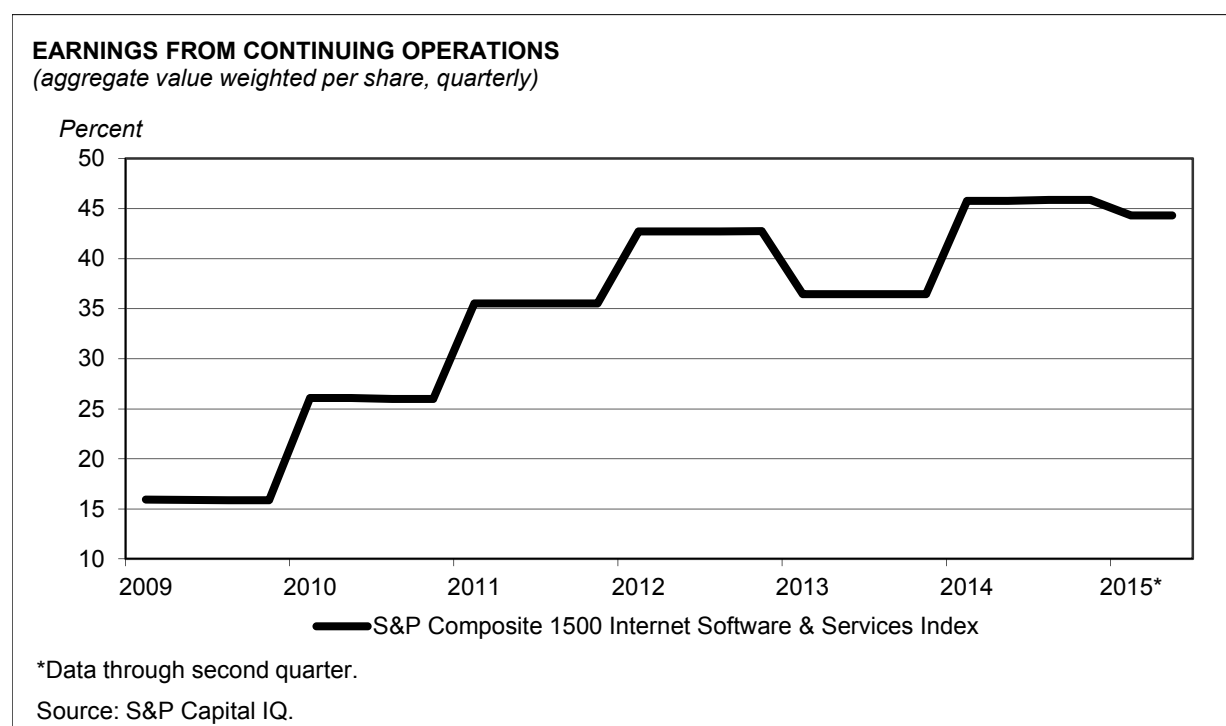
◆ Earnings before interest, tax, depreciation, and amortization (EBITDA) margins in the Internet software & services industry have been trending lower over the last few years on a market-cap weighted basis and on an aggregated basis. Companies in this industry have been significantly investing in a variety of ways, such as for new offerings, international expansion, and large-scale data centers. S&P Capital IQ also notes considerable merger and acquisition (M&A) activity and associated significant commitments of capital with limited associated revenue benefits.



Industry Earnings

◆ The Internet software & services industry net income nearly tripled from 2009 to 2014 on a market-cap weighted basis and increased 138% on an aggregate basis. However, the strong trend of net income growth was interrupted in 2013, due to considerable declines from Yahoo and AOL. Interestingly, in 2012, both companies benefited from investment gains. Yahoo sold a significant stake in Alibaba Group back to that company, resulting in a \$4.6 billion gain that year, and AOL sold patents to Microsoft, resulting in a \$963 million gain. In 2014, healthy growth of 25%–30% for Internet companies resumed on a market-cap weighted basis and on an absolute basis. The upward growth will likely continue in 2015 on a market-cap weighted basis.

◆ Despite some longstanding perceptions associated with the dot-com bubble, the 24 companies in the Internet software & services industry were all projected to generate positive net income in 2015, according to S&P Capital IQ consensus estimates.



Industry Balance Sheet

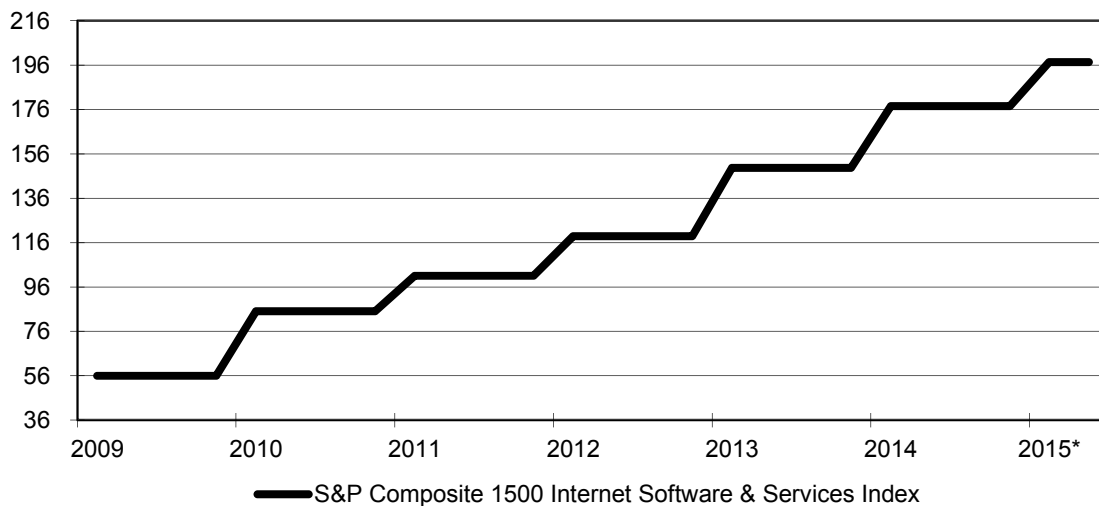
◆ Further debunking some misplaced perceptions, the Internet software & services industry cash and short-term investments rose substantially from 2009 to 2014. During this period, companies in this industry increasingly invested more freely and aggressively, and considerable M&A activity took place.

◆ From 2009 to 2014, total debt also rose steadily, tripling on a market-cap weighted basis and rising almost 10-fold on an absolute basis. The Internet software & services industry debt increased on an absolute basis in 2012 and in 2014, with notable activity from the index's four largest companies: Google, Facebook, eBay, and Yahoo. Interestingly, these companies had only \$43 million in aggregate debt in 2009, and amassed \$17 billion in debt in 2014.

TOTAL CASH AND SHORT-TERM INVESTMENTS

(aggregate value weighted per share, quarterly)

Percent



*Data through second quarter.

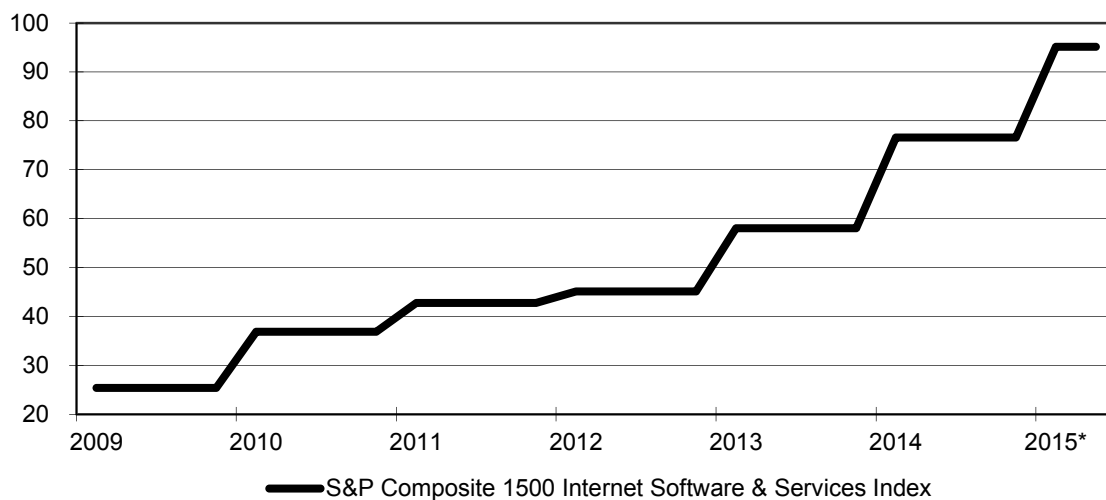
Source: S&P Capital IQ.

◆ In 2012, Google acquired Motorola Mobility (its largest acquisition ever) and Facebook completed its initial public offering (IPO). S&P Capital IQ thinks the indicated capital markets activity prompted notable debt issuances.

TOTAL DEBT

(aggregate value weighted per share, quarterly)

Percent



*Data through second quarter.

Source: S&P Capital IQ.

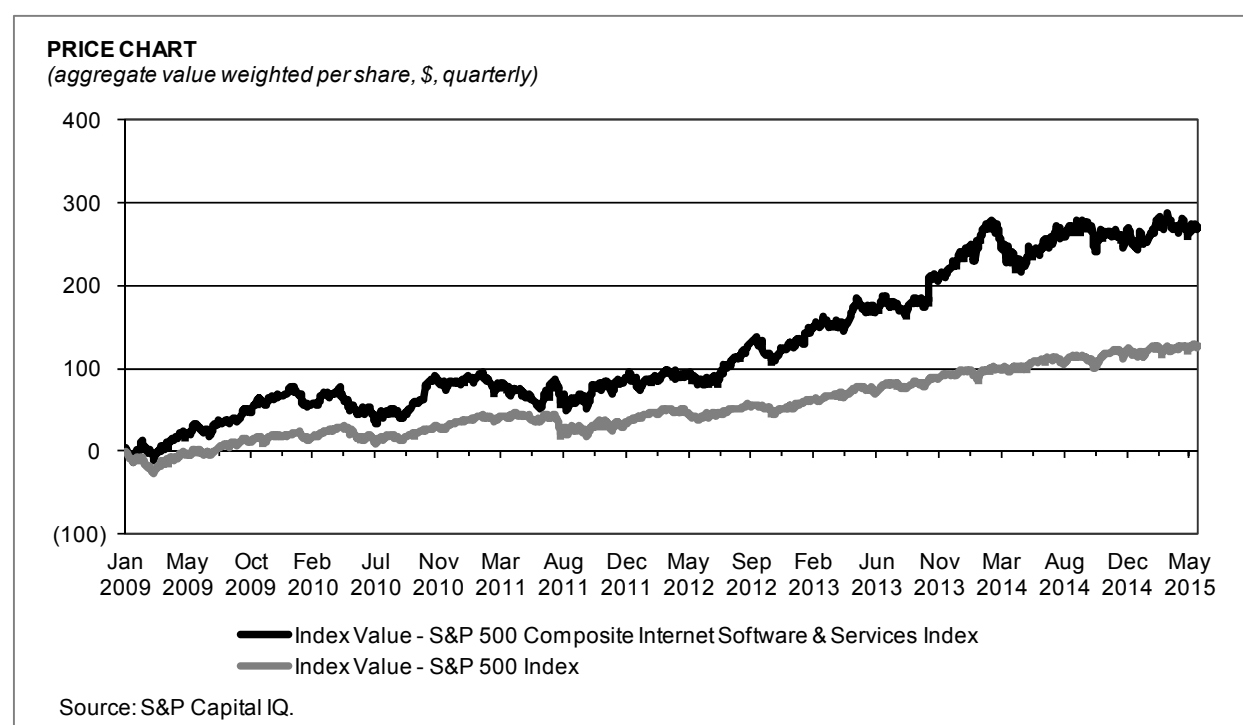
◆ Increases in debt have been driven, in S&P Capital IQ's view, by factors including greater confidence in macroeconomic and microeconomic conditions, historically low global interest

rates, and a desire for more financial flexibility as multinationals seem to be holding more cash and investments overseas that cannot be repatriated without a 35% tax obligation.

◆ The Internet software & services industry's aggregate average debt-to-equity ratio was consistent over the last five years through 2014, tracking from 11% to 13% over the period, with substantial increases in debt since 2010. Notably, the debt-to-equity ratios of the Internet software & services industry's two largest companies, Google and Facebook, have trended considerably lower. Google's fell from 11% in 2010 to 7% in 2014, and Facebook's dropped from 23% to 1%.

Industry Valuation

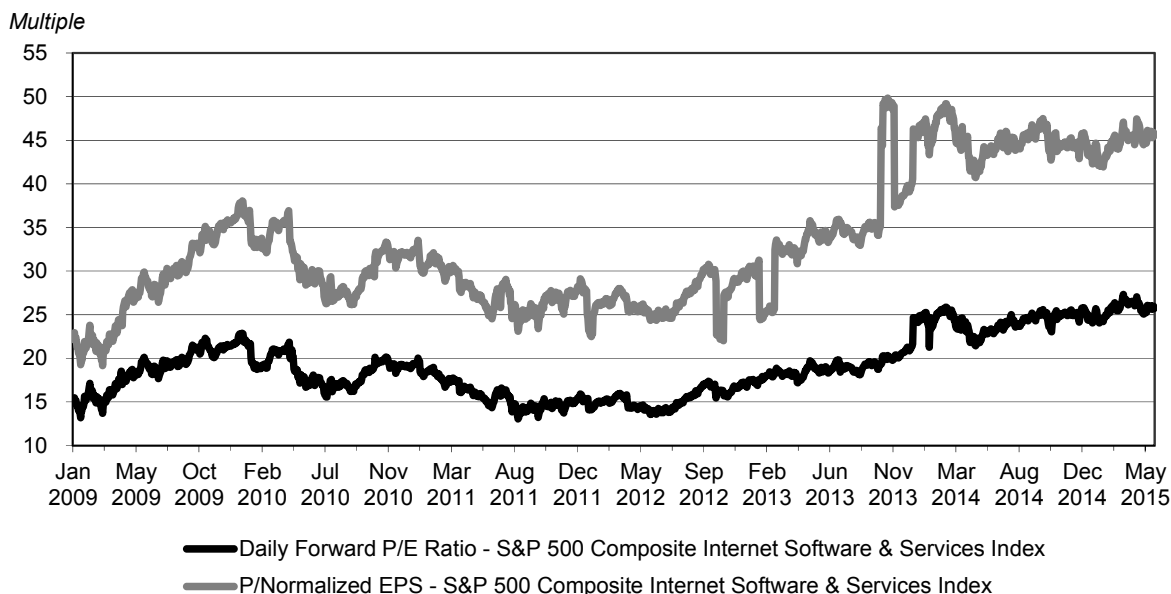
◆ From January 1, 2009 to May 31, 2015, the S&P 500 Internet software & services industry index rose 270%, compared with a gain of 126% in the S&P 500. The S&P 500 industry outperformed the broader S&P 500 over the entire period, but S&P Capital IQ notes that as of late June 2011, the Internet index outperformed by only about 1,500 bps.



◆ The S&P 500 software industry's normalized price-to-earnings ratio (P/E) and forward P/E rose significantly in 2009 from 22x and 15x at the beginning of the year to 38x and 23x at the end of the year, reflecting the beginning of a new bull market in March of that year. These multiples fell notably until early 2012, when they bottomed in January at 23x and 14x, roughly where they were at the beginning of 2009. Since then, these multiples have expanded considerably, reaching 46x and 26x in May 2015.

NORMALIZED AND FORWARD PRICE-TO-EARNINGS RATIOS

(aggregate value weighted per share, \$, quarterly)

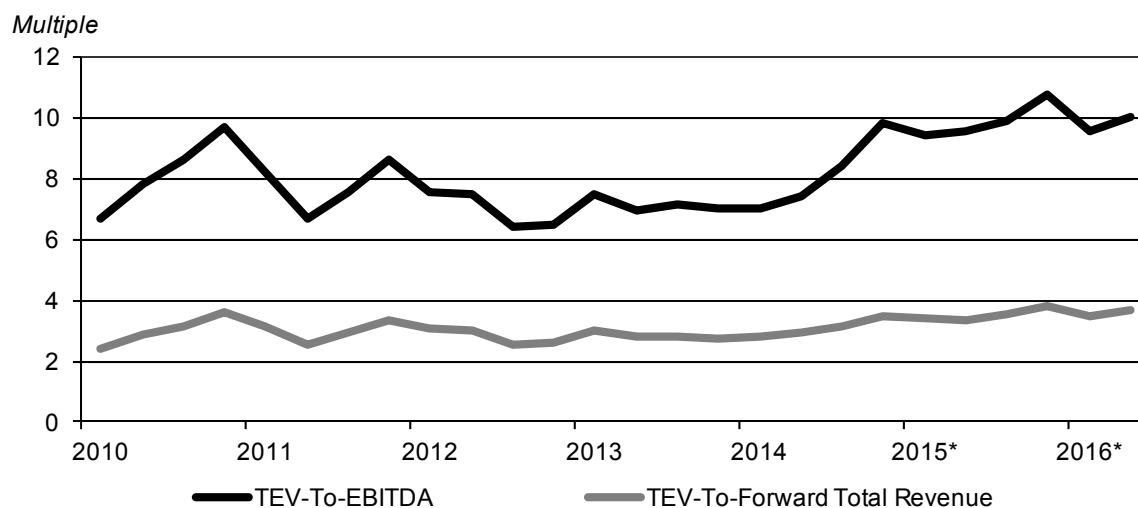


Source: S&P Capital IQ.

◆ Market-cap weighted enterprise value (EV)-to-EBITDA nearly doubled from 7.4x in the first quarter of 2009 to 13.3x in the fourth quarter of 2014. Total enterprise value (TEV) to sales rose from 2.5x to 4.7x over the same period.

TOTAL ENTERPRISE VALUE-TO-EBITDA AND TOTAL ENTERPRISE VALUE-TO-FORWARD TOTAL REVENUE

(aggregate value weighted per share, quarterly)



*Projected. Projected values start from second quarter, 2015.

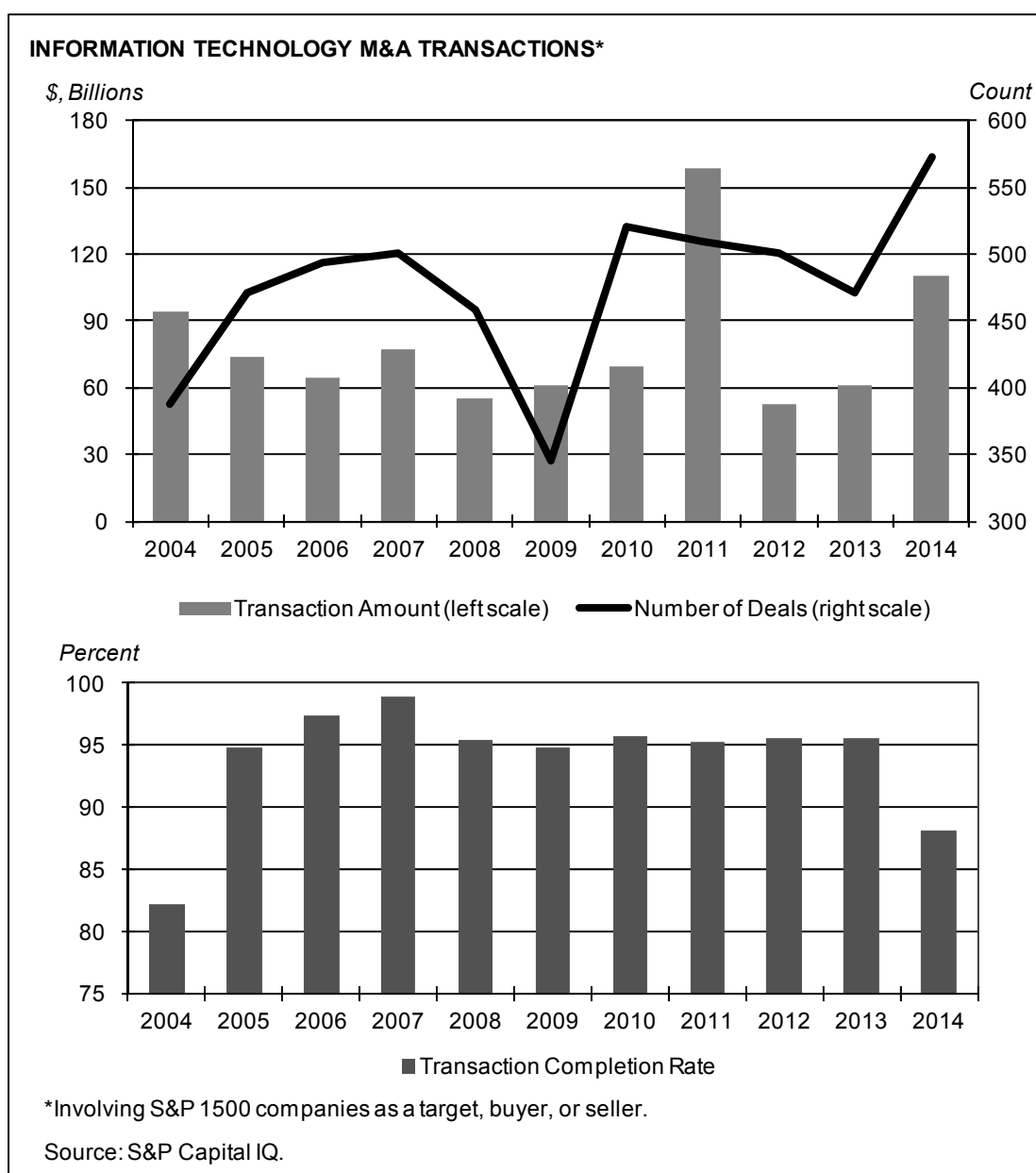
Source: S&P Capital IQ.

◆ S&P Capital IQ thinks that the higher indicated multiples reflect a strong stock market, revenue and earnings growth, and perceptions that the cloud has become an opportunity rather than a risk for these companies.

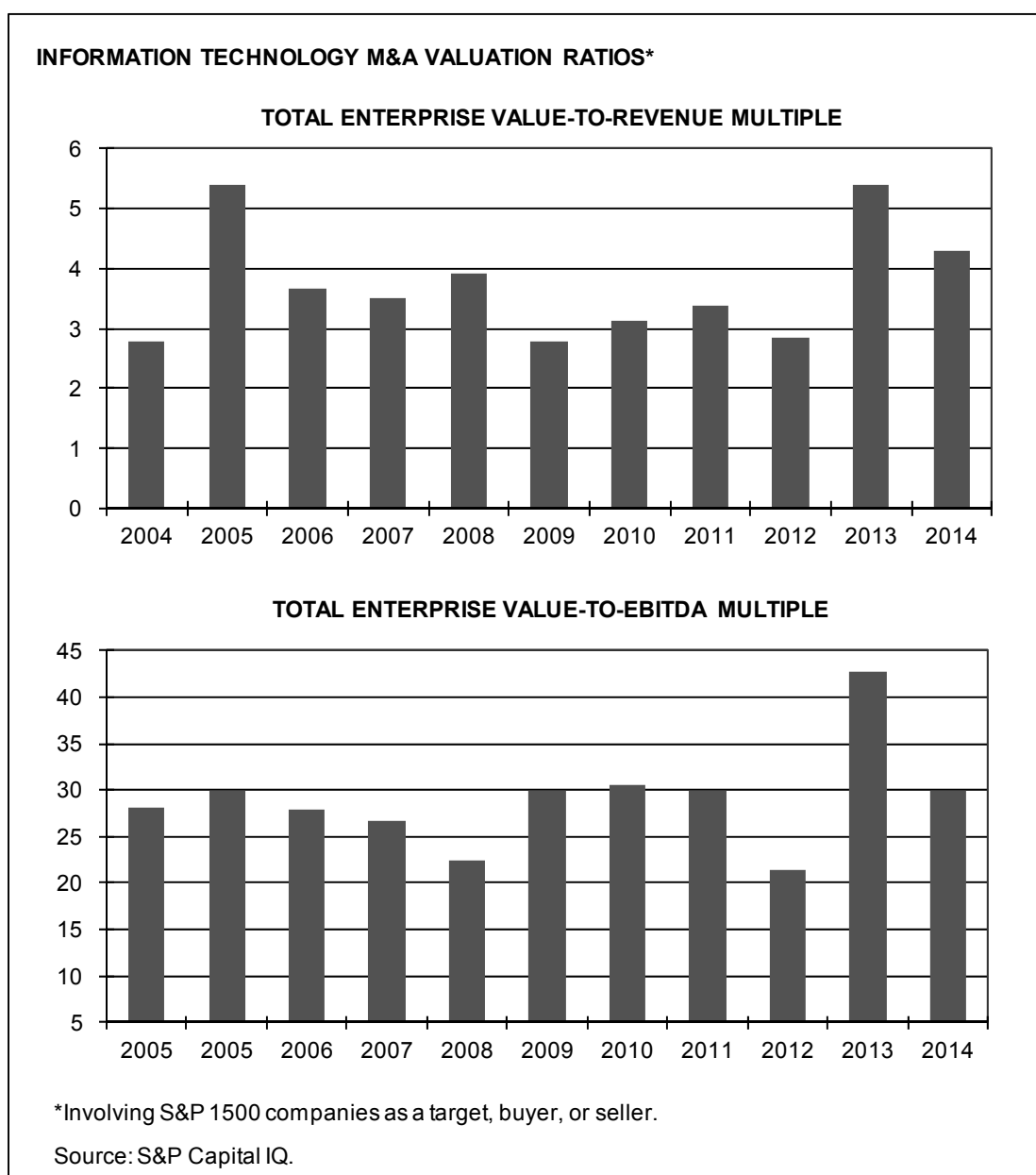
Capital Markets

Information Technology Sector

◆ Announced M&A activity in the information technology sector focusing on S&P 1500 companies as target, buyer, or seller saw \$110 billion in deal value in 2014, up from \$60.8 billion in 2013. Facebook, Inc.'s \$19.7 billion purchase of WhatsApp Inc., announced in February 2014, accounted for approximately 18% of the deal value for announced IT M&A deals involving S&P 1500 companies.



- ◆ Results in 2014 marked the strongest period for IT M&A deal activity since 2011 when transaction value topped \$158 billion.
- ◆ The combination of growing cash balances, continued low borrowing costs, and elevated equity prices contributed to the acceleration in the number of announced IT M&A transactions involving S&P 1500 companies. Last year's count of 572 deals marked a 21% increase from the prior year's total.
- ◆ Deal multiples based on a multiple of the target's revenue fell to 4.3x in 2014, down from 5.4x for transactions announced in 2013. Despite this decline, last year's valuation marked a multi-year high.
- ◆ S&P Capital IQ data indicated that, on average, buyers became less aggressive in their bidding as valuations based on a target's EBITDA retreated to 29.9x in 2014 from 42.7x in 2013.



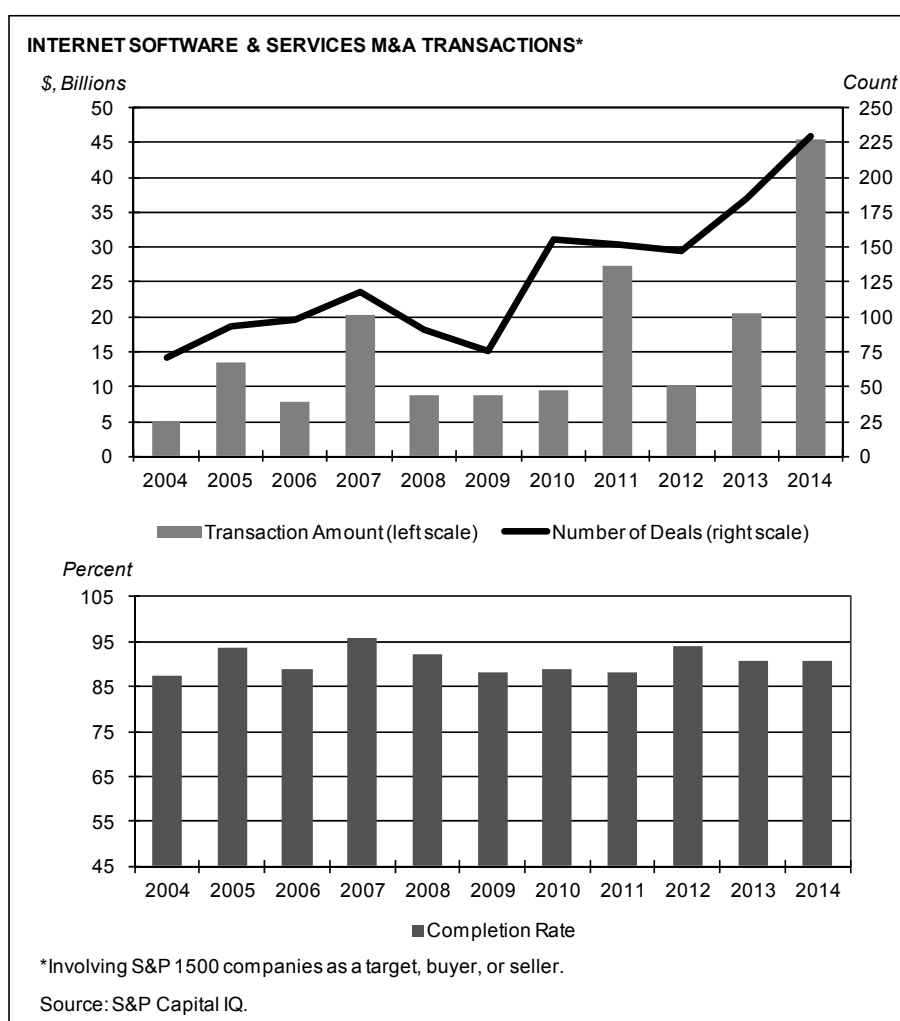
◆ The completion rate for IT M&A deals with S&P 1500 involvement, which were announced and completed in the same calendar year, dipped to 88% in 2014. This represents the first sub-90% completion rate since 2004, when it was 82%.

◆ Facebook, Inc.'s signing of an agreement to acquire WhatsApp Inc. from Sequoia Capital and other investors for \$19.5 billion in cash and stock on February 19, 2014 ranks as the top Internet software & services M&A deal involving an S&P 1500 company announced last year. The deal accounted for nearly 42% of the aggregate deal value of \$45.5 billion of M&A deals within this industry involving S&P 1500 companies.

◆ Verizon Communications Inc. entered into a merger agreement to acquire AOL Inc. for \$4.2 billion on May 12, 2015. In addition, Cox Automotive, Inc. entered into a definitive merger agreement to acquire Dealertrack Technologies, Inc. for \$3.5 billion in cash on June 15, 2015 and Equinix, Inc. made an offer to acquire Telecity Group plc for \$2.68 billion in stock and cash on May 7, 2015.

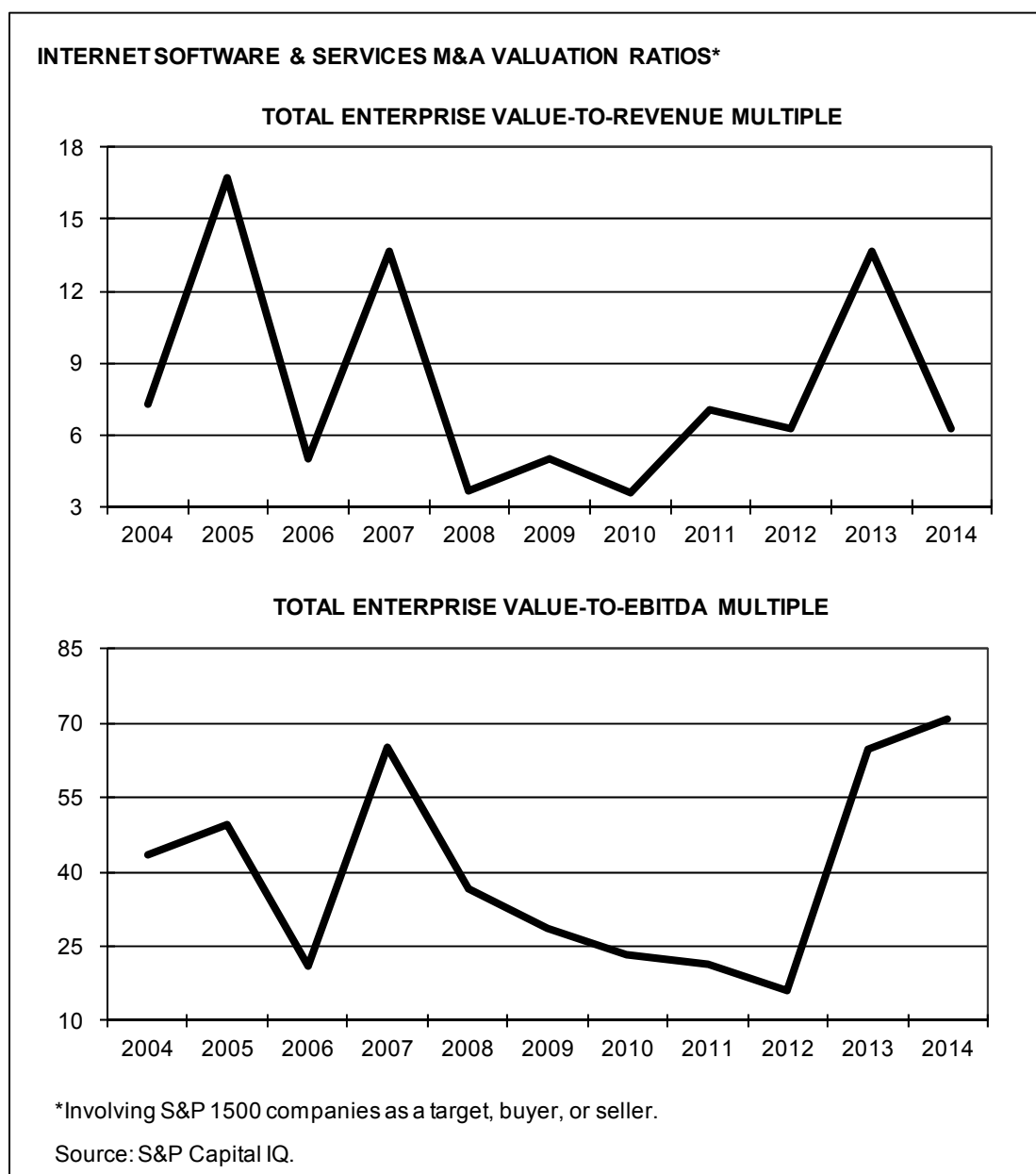
Internet Software & Services Industry

◆ The number of announced M&A transactions in the Internet software & services industry involving S&P 1500 companies as buyer, seller, or target reached 230 in 2014, up 24% from results in 2013.



◆ A typical M&A transaction in the Internet software & services industry involving an S&P 1500 company as buyer, seller, or target was valued at 6.3x revenue, down from nearly 13.7x for deals announced in 2013.

◆ Transaction valuations, based on a target's EBITDA, for deals in the Internet software & services industry involving S&P 1500 companies topped 70x deal value, the highest rate for transactions in the period surveyed.



◆ The completion rate for transactions announced and finalized in the same calendar year for Internet software & services has remained above 90% in each year since 2012.

RECENT M&A TRANSACTIONS

(for the past six months)

ANNOUNCED DATE	CLOSED DATE	TARGET	BUYERS / INVESTORS	SIZE (\$M)
05/28/15	05/28/15	Pulse.io	Google	-
05/19/15	05/19/15	Tugboat Yards	Facebook	-
05/12/15	-	AOL	Verizon Communications	4,759
05/07/15	03/31/15	CareerOne		9
05/07/15	-	Telecity Group	Equinix	4,089
05/05/15	05/05/15	Proximic	comScore	-
05/04/15	05/04/15	Timeful	Google	-
04/29/15	04/29/15	Hattery	1776 Campus	-
04/16/15	04/16/15	Vemm	QuinStreet	-
04/13/15	02/22/15	Athena Wireless	Google	-
04/06/15	04/06/15	OctoshapeApS	Akamai Technologies	-
04/06/15	03/31/15	Six Companies located in USA, France, Iceland, Norway and Denmark	j2 Global	-
03/31/15	-	Velos	AOL	-
03/24/15	-	PSI Systems	Stamps.com	215
03/24/15	03/24/15	SugarSync	j2 Global	-
03/13/15	-	TheFind	Facebook	-
03/02/15	03/02/15	Xerocole	Akamai Technologies	-
02/24/15	02/24/15	Red Hot Labs	Google	-
02/24/15	12/31/14	Zamurai	LogMeIn	-
02/23/15	02/23/15	JVL Ventures	Google	-
02/12/15	-	comScor	Cavendish Square Holding	205
02/12/15	-	The Kantar Group, Internet Audience Measurement Businesses in Certain European Markets	comScore	-
02/11/15	02/11/15	Firstway Digital	j2 Global	-
02/08/15	02/08/15	Nimbuz	Google	-
02/06/15	02/06/15	Menlo Science & Technology Park	Facebook	-
02/04/15	02/04/15	Launchpad Toys	Google	-
01/28/15	-	Vivastreet, Mexican Branch	eBay	-
01/20/15	01/20/15	Nimbo Technologies	Equinix	-
01/18/00	01/08/15	Quickfire Networks	Facebook	-
01/05/15	12/31/14	Six Companies Located in USA, Ireland, Canada, and Sweden	j2 Global	-
01/05/15	01/06/15	Wit.AI	Facebook	-
12/31/14	12/30/14	TK Investment		-
12/18/14	01/09/15	Incadea	Dealertrack Technologies	209
12/11/14	-	MEDIA GROUP ONE Digital	Yahoo!	-

Source: S&P Capital IQ.

PRIVATE PLACEMENT TRANSACTIONS*(for the past six months)*

ANNOUNCED DATE	CLOSED DATE	TARGET	BUYERS / INVESTORS	SIZE (\$M)
5/28/15	5/28/15	Green Mountain Digital	Monster Worldwide, VCET Capital, Vermont Technology Seed Capital Fund	2
5/11/15	5/11/15	AuthClub	Rackspace Hosting	1
4/8/15	4/8/15	Rubicon Labs	Akamai Technologies, Pelion Venture, Third Point	12
12/9/14	12/9/14	PT MetraPlasa	eBay	-

Source: S&P Capital IQ.

BUYBACK TRANSACTIONS*(for the past six months)*

ANNOUNCED DATE	CLOSED DATE	TARGET	SIZE (\$M)
5/19/15	-	DHI Group	50
3/26/15	-	Yahoo!	2,000
2/5/15	-	VeriSign	1,000
1/21/15	-	eBay	2,000
12/15/14	-	DHI Group	50

Source: S&P Capital IQ.

REGISTRATIONS AND OFFERINGS*(for the past six months)*

ISSUER	REGISTRATION FILED	REGISTRATION EFFECTIVE	PRIMARY TRANSACTION FEATURES	SECURITIES ISSUED	SIZE (\$M)
Blucora	5/29/15	5/29/15	Shelf Registration	Common Stock	100
VeriSign	5/27/15	-	Fixed-Income Offering	Corporate Debt (Non-Convertible)	500
Akamai Technologies	5/15/15	5/15/15	Shelf Registration	Common Stock	235
j2 Global	5/6/15	-	Shelf Registration	Common Stock	282
eBay	4/21/15	4/21/15	Shelf Registration	Common Stock	18
VeriSign	3/23/15	-	Fixed-Income Offering	Corporate Debt (Non-Convertible)	500
LogMeIn	3/13/15	3/13/15	Shelf Registration	Common Stock	64
Liquidity Services	3/6/15	3/6/15	Shelf Registration	Common Stock	29
Yahoo!	2/27/15	2/27/15	Shelf Registration	Common Stock	40
comScore	2/20/15	2/20/15	Shelf Registration	Common Stock	70
Stamps.com	2/18/15	2/25/15	Shelf Registration	Common Stock	44
Monster Worldwide	12/18/14	12/18/14	Shelf Registration	Common Stock	13

Source: S&P Capital IQ.

CASH BALANCE LEADERS*(latest annual, in \$, millions)*

COMPANY NAME	INDEX CONSTITUENTS	TOTAL CASH & SHORT-TERM		LONG-TERM INVESTMENTS	TOTAL
		INVESTMENTS			
Google	S&P 500 Index	62,633		4,090	66,723
Yahoo!	S&P 500 Index	7,995		36,066	44,062
eBay	S&P 500 Index	10,098		5,706	15,804
Facebook	S&P 500 Index	11,199		0	11,199
Akamai Technologies	S&P 500 Index	758		802	1,560
VeriSign	S&P 500 Index	1,425		0	1,425
Equinix	S&P 500 Index	1,140		11	1,151
j2 Global	S&P SmallCap 600 Index	530		62	592
AOL	S&P MidCap 400 Index	489		0	489
Dealertrack Technologies	S&P SmallCap 600 Index	334		35	369
Blucora	S&P SmallCap 600 Index	301		0	301
Rackspace Hosting	S&P MidCap 400 Index	214		0	214
LogMeIn	S&P SmallCap 600 Index	201		0	201
QuinStreet	S&P SmallCap 600 Index	116		0	116
Monster Worldwide	S&P SmallCap 600 Index	94		19	113
XO Group	S&P SmallCap 600 Index	90		6	96
NIC	S&P SmallCap 600 Index	88		0	88
Liquidity Services	S&P SmallCap 600 Index	74		0	74
Stamps.com	S&P SmallCap 600 Index	47		9	57
LivePerson	S&P SmallCap 600 Index	49		0	49
comScore	S&P SmallCap 600 Index	43		0	43
DHI Group	S&P SmallCap 600 Index	27		0	27

Source: S&P Capital IQ.

◆ Corporate cash holdings in the S&P 1500 Internet services & software industry is dominated by Google Inc. and Yahoo! Inc., which have combined cash of more than \$110 billion.

ACTIVIST OWNERSHIP*(latest annual, in \$, millions)*

COMPANY NAME	INDEX CONSTITUENTS	ACTIVIST INVESTORS (PERCENT OWNED)
Equinix	S&P 500 Index	11.5
Rackspace Hosting	S&P MidCap 400 Index	10.7
eBay	S&P 500 Index	8.3
XO Group	S&P SmallCap 600 Index	8.3
Akamai Technologies	S&P 500 Index	3.2
Yahoo!	S&P 500 Index	3.1
LivePerson	S&P SmallCap 600 Index	2.9
Blucora	S&P SmallCap 600 Index	2.0

Source: S&P Capital IQ.

◆ Of the 22 companies among the S&P 1500 Internet software & services components, only four have activist investor stakes of more than 5%.

INDUSTRY TRENDS

Much of the talk about the Internet software & services industry centers on whether there is a bubble and if so, when it will burst. S&P Capital IQ thinks that this concern largely reflects the dot-com crash of 2000 into 2003, and talk of Internet “unicorns” or private companies valued at \$1 billion or more, perhaps without profits or even revenues. These are important topics; they belie the considerable change that has been occurring in the area over more than a decade.

Competitive Environment

The Internet segment is seen as one of the world’s most dynamic and competitive categories, in S&P Capital IQ’s view. However, larger companies often dominate key areas, such as search (Google) and social media (Facebook). While changing technologies and consumer tastes have enabled newer companies to emerge, it often takes considerable time, resources, skill, and even luck to supplant others.

Established players generally have more recognized brands, bigger user bases, more diversified and successful business models, and greater financial flexibility. In fact, of the 22 companies in the S&P 1500 software industry, none was founded after the dot-com crash, except for Facebook in 2003. Interestingly, Monster Worldwide started in 1967 before the Internet was even created, and AOL was founded in 1985 before the browser was invented. Fifteen of the companies were founded from 1994 to 1999.

Harvard Professor Michael Porter developed a methodology to understand the competitiveness of industries by identifying and assessing “five forces” that shape and drive them. Porter’s five forces are industry rivalry, new entrants, threat of substitutes, power of suppliers, and power of customers.

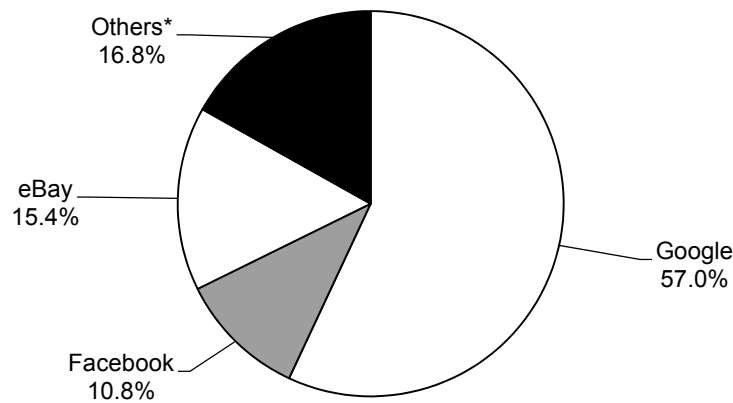
Industry Rivalry

S&P Capital IQ identified the companies in the Internet software & services industry with the most revenues in 2014. The results indicated that three companies, Google, eBay, and Facebook, in that order, accounted for 83% of industry revenues. This constitutes a significant concentration in the industry, suggesting a lack in competition.

Rivalry intensity can be determined by industry concentration and the number (and diversity) of participants, as well as category growth, innovation, switching costs, and expenses. As mentioned earlier, we have seen healthy growth and considerable innovation and expenses in the Internet software & services industry .

Bigger and better-capitalized companies can spend more to attract and retain talent, create and refine new offerings, attract more users, and make acquisitions. Selling, general, and administrative (SG&A) expense for the average Internet software & services industry company accounted for a third of revenues, and research and development (R&D) accounted for 10% of revenues. Notably, the four biggest companies in the industry—Google, Facebook, eBay, and Yahoo—accounted for 96% of overall spending on R&D and 84% of SG&A in 2014.

TOP INTERNET SOFTWARE COMPANIES' REVENUES



*Others include: Yahoo, Equinix, Akamai Technologies, Verisign, Rackspace Hosting, AOL, j2 Global, comScore, Dealertrack Technologies, Logmein, Stamps.com, IC, Blucora, Monster Worldwide, Liveperson, DHI Group, XO Group, Liquidity Services, and Quinstreet.

Source: S&P Capital IQ.

New Entrants

While the Internet area has a notable number of new entrants, S&P Capital IQ thinks it takes time to gain traction and build durable businesses. Importantly, while upstarts can raise funding and command considerable valuations relatively early on, winning clients and generating revenues and profits takes much more time.

It appears that LinkedIn and Twitter, though not in the S&P 1500 Internet software & services industry, have been able to achieve such success. Other successful entrants include Snapchat and Pinterest.

Threat of Substitutes

Even though users can easily substitute one Internet application or website with another, thanks to the many companies in the industry, switching software or services can be more challenging than many think due to matters of familiarity and trust. Advertisers and sellers, for example, often have significant workflows associated with certain companies and sites. Thus, S&P Capital IQ sees more switching friction than some might perceive.

Power of Suppliers

The Internet area is somewhat unique, to the extent that there are no significant suppliers. No raw materials are needed to build a website or app. One could argue, however, that internal or independent web designers, web developers, and mobile engineers creating Internet sites and apps are critical for companies, and competition for this talent makes it harder for smaller companies to attract and retain skilled workers.

Power of Customers

Lastly, users and customers have notable power, but there are substantial related opportunities for providers looking to win new and/or additional business, albeit with considerable switching friction and risks.

Overall, based on the Porter analysis, S&P Capital IQ sees the Internet software & services industry as competitive, but perhaps not as competitive as some might think.

Operating Environment

To paraphrase Greek philosopher Heraclitus, “the only constant is change,” and change is ever more rapid and unpredictable in the Internet software & services industry, especially in light of merger and acquisition (M&A) activity and investment in mobile and international expansion.

International

IDC sees gains in domestic Internet users amounting to a compound annual growth rate (CAGR) of 1.4% from 2013 to 2018. However, IDC projects a CAGR of more than three and half times that for worldwide users (5.3%). For example, users in the Asia-Pacific region (Asia excluding Japan) are expected to should a CAGR of 7.2%.

Not surprisingly, Internet companies have been investing in overseas operations. In fact, in 2014, the three largest companies in the Internet software & services industry generated more than half of their revenues from outside the US. Last year, 57% of Google’s revenues, 55% of Facebook’s revenues, and 52% of eBay’s revenues came from international sources.

Repatriating foreign earnings results in a 35% tax obligation, and thus, S&P Capital IQ thinks multinationals in the Internet software & services industry and elsewhere have been incentivized to invest notably in international businesses. Interestingly, in some ways Google, Facebook, and eBay are more dominant in Europe than in the US. Notably, Google has greater search share in some European countries than domestically, while eBay has historically had strength in countries like Germany and the UK.

Moves to Mobile

In May 2012, Facebook completed its initial public offering (IPO). It had no mobile advertising offerings or associated revenues in March 2012. Three years later, the company generated \$2.4 billion in revenues in the quarter ended March 2015.

IDC saw worldwide Internet users increasing at a CAGR of 5.3% from 2013 to 2018. However, it projected CAGR of 13% for mobile Internet users. From 2008 to 2018, the number of wireless Internet users around world is expected to increase from 424 million to 2.5 billion, equating to more than 2 billion new mobile users over a decade.

Accordingly, while mobile didn’t account for discernable Internet advertising revenues in 2009, just five years later, it contributed a quarter of advertising revenues, according to the “IAB Internet Advertising Revenue Report” put out by the Interactive Advertising Bureau and PricewaterhouseCoopers. S&P Capital IQ sees mobile contributing more than a third of Internet advertising revenues in 2015 and 40% of online marketing revenues in 2016.

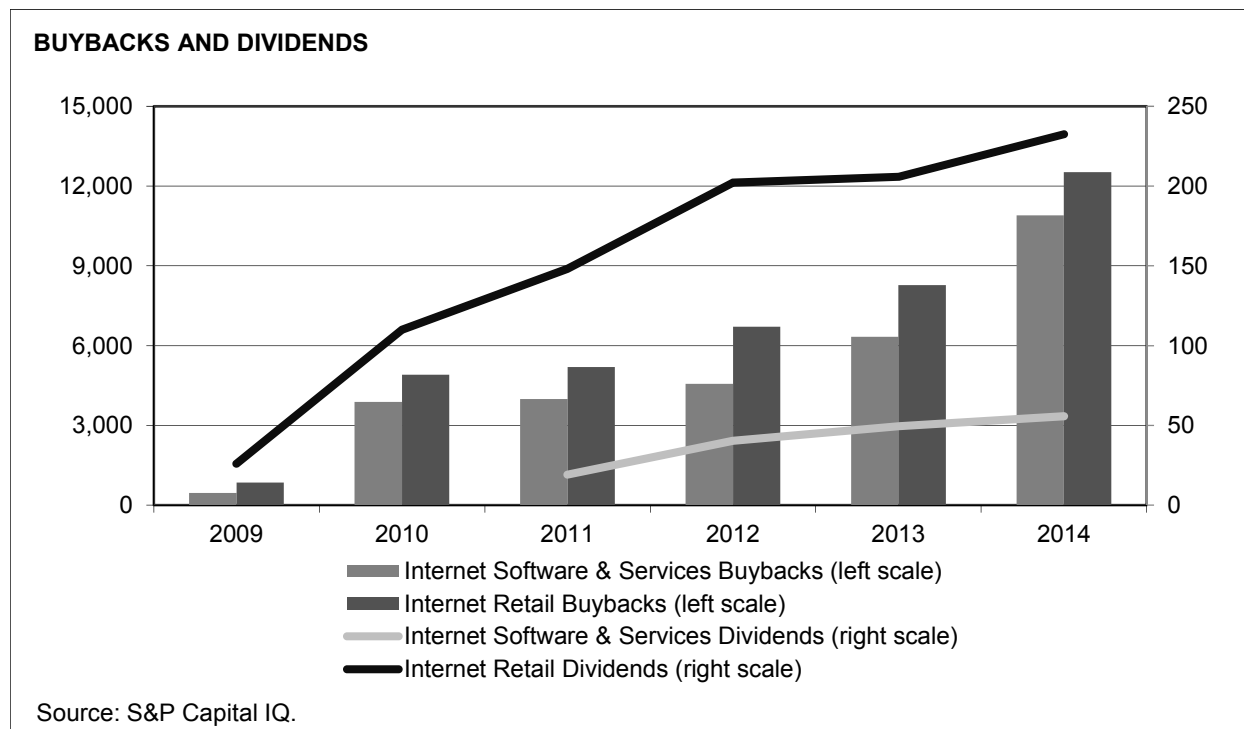
More and more, companies are measured by their efforts and successes in mobile. Companies ranging from Baidu to Yahoo now regularly report mobile product announcements, partnerships, and revenue contributions.

While providing options and opportunities for mobile-first and mobile-only business such as Instagram and Snapchat, the shift to wireless has also presented challenges for established leaders, such as Google. While mobile has likely contributed to gains in paid clicks (search advertising volume) for the company, it has also hurt price per click (search advertising pricing). Eventually, mobile will likely be additive to search advertising prices, reflecting user shifts and the potential benefits of location information and payment capabilities.

Capital Allocations Emphasize Investments

Given shifts across the Internet software & services industry, firms have been investing significantly. As noted earlier, companies have been committing capital for international purposes such as R&D and SG&A. M&A has also been a major purpose for capital allocation.

While there were significant increases in stock repurchases and dividends paid from companies in the Internet software & services industry from 2009 to 2014, these changes rose from low bases. In 2009, the Internet software & services industry accounted for \$467 million in buybacks and no dividends. In 2014, the industry accounted for \$10.9 billion in stock repurchases and \$56 million in dividends. Yahoo and eBay alone accounted for 81% of repurchases from the Internet software & services industry, while the two largest companies by far, Google and Facebook, did not engage in any discernable repurchase or dividend activity last year.



Companies and Material M&A

Companies in the Internet software & services industry have been among the most acquisitive in the world over the past few years. In fact, at times the four largest companies each averaged an acquisition or investment every month, as they looked to enhance their technological capabilities and opportunities and add to their bases of talent.

In 2014, Facebook made notable acquisitions, buying virtual reality company Oculus VR for consideration of \$1.9 billion in July, and purchasing global messaging company WhatsApp for consideration of \$17.2 billion in October. The value of these two transactions was worth more than roughly double the repurchases from the Internet software & services industry last year. Google bought Nest, a provider of connected home devices including thermostats and smoke detectors, for \$2.6 billion, and added video monitoring company Dropcam for \$517 million.

Meanwhile, the acquisition activity of eBay and Yahoo has slowed in 2015, likely reflecting significant and seemingly transformative types of pending transactions.

Divestitures Take the Spotlight in 2015

In September 2014, eBay announced plans to split into two publicly traded companies. The company stated that the Marketplaces business would be called eBay and the Payments business would be called PayPal. The announcement came after investor activist Carl Icahn took a stake in the company in January 2014. S&P Capital IQ sees the split-up contributing to greater operational focus, innovation, and value. The split-up was completed in July 2015.

In January 2015, Yahoo announced it would spin off its remaining 16% stake in Alibaba Group, along with its Small Business unit, as a separate publicly traded company. The structure was intended to limit tax liabilities, as Yahoo bought its initial interest in Alibaba for \$1 billion and some businesses in exchange for 40% of the company. Gross proceeds are expected to amount to more than \$25 billion, with an associated cost basis of less than \$500 million. Although there are some questions about whether the IRS will allow the tax-free spin-off to proceed as planned, the transaction will likely be completed in 2015, as anticipated.

Regulatory Environment

Many would suggest that the Internet has been an area where the US government has taken a largely laissez-faire approach to regulation, and this approach has enabled significant development and growth. International jurisdictions have likely taken similar stances; however, S&P Capital IQ has noticed a shift in certain contexts.

Powerful Participants Subject to Government Review and Penalties

It seems that governments around the world have increasingly been conducting inquiries and investigations involving Internet-related companies. S&P Capital IQ thinks this suggests that online firms are becoming bigger and more powerful in terms of critical activities such as data gathering and communications.

In January 2013, the Federal Trade Commission (FTC) announced a settlement with Google. The company agreed to allow competitors to access key patents and enable easier usage of its search advertising platform. Interestingly, the FTC found that Google was not altering its search results to its benefit or to the detriment of its competitors.

However, in April 2015, the European Commission alleged the company “abused its dominant position in the markets for general Internet search services” with its “comparison shopping product.” Related penalties could result in a mandate to alter business practices, as well as a fine of billions of dollars. Google has indicated that it would respond to these allegations.

Google has been the subject of actions and lawsuits around the world, and other online-oriented companies such as Amazon.com, Apple, and Facebook also seem to have been targeted by municipalities, states, countries, and pan-national organizations on topics ranging from privacy and taxes to perceived market dominance. In fact, in June 2015 alone, regulators in Europe announced actions involving both Amazon and Facebook.

Net Neutrality Set to Become Law

After a long road of different plans and related opposition, the Federal Communications Commission (FCC) proposed new “net neutrality” rules in February 2015. Most notably, the agency will not allow paid prioritization to have certain online traffic (*i.e.*, no “fast lanes”). Additionally, providers will not be able to block or limit access to legal online offerings (such as content, applications, services, and non-harmful devices). Although S&P Capital IQ sees further legal challenges, net neutrality is likely to prevail domestically.

Net neutrality will likely enable and support continuing significant innovation and competition in the industry. Fast lanes would have arguably allowed the industry's leaders to pay their way to more market share and profits. Net neutrality, on the other hand, is intended to "level the playing field," to offer the same opportunities to start-ups and to big bellwethers.

HOW THE INDUSTRY OPERATES

The origins of the Internet date back to the late 1960s, when the US Department of Defense's Advanced Research Projects Agency (ARPA) began to explore designs for a packet-switched communications network that could withstand the loss of any single part of the system. Called ARPAnet, this network transmitted military data through various computer facilities across the US. These facilities, called nodes, were interconnected by a series of telephone lines in such a way that the nodes were largely independent of one another.

What made this network revolutionary was its reliability. If one node was rendered inoperable, data could still flow among the others. In addition, the nodes could detect whether certain connections were congested and then would route the data accordingly.

Before 1985, ARPAnet was primarily a military resource. That year, ARPA ceded control of its network to the National Science Foundation (NSF), an independent US government agency that maintained the Internet from 1985 to April 1995. The NSF began to transform what was a military intelligence network focused on safeguarding data to an expanding civilian network linking universities and commercial users.

As the network grew, people began to communicate through a new medium: e-mail. The NSF expanded the backbone from six supercomputer sites in 1985 to 16 sites in 1995, including academic networks. In 1995, the NSF contracted with commercial entities to provide access to its backbone, and these licensees were charged with selling connections to groups, organizations, and companies. Since then, the NSF has moved beyond supporting the backbone, allowing independent for-profit companies—such as AT&T Inc., Sprint Nextel Corp., and Verizon Communications Inc.—to build and maintain domestic networks that now constitute a large part of the Internet.

The World Wide Web

Tim Berners-Lee primarily developed the World Wide Web for scientists at the Conseil Européen pour la Recherche Nucléaire (CERN), based in Geneva, Switzerland. The system was designed to facilitate research by allowing authors to reference documents available on the Internet. Years after this and after other contributions, Berners-Lee was awarded the Millennium Technology Prize, the world's largest technology award (based on financial value), in June 2004.

The web uses hypertext markup language (HTML) to reference documents with a simple coding system and to format them for viewing by web users. Until 1992, the web remained text-based and was relatively unknown outside academic circles. The network was difficult to navigate, and most users were computer science college students or former university users at computer-related companies.

In the spring of 1993, a team of students at the National Center for Supercomputing Applications at the University of Illinois developed a software program called Mosaic. Its graphical interface was a browser—software that enables an Internet user to view both text and graphics. This visual interface simplified Internet use and sparked rising interest in the web. Although the web is actually just a part of the Internet, the creation of the browser made it so popular that it became synonymous with the Internet itself.

The web allows even novices to use the Internet. Using HTML, organizations and individuals can create home pages with text, graphics, and dynamic content such as audio and video clips. These pages are tied together by a series of links, which the Internet user clicks on to move to the

referenced page. Increasingly, websites are employing extensible markup language (XML), which enables more flexible presentation and manipulation of data and information online.

As of May 2015, Microsoft Corp.'s Internet Explorer, which held more than a 50% share of the segment, is the most popular web-surfing software. Netscape Communications Corp.'s browser, which was once the market's leader, barely holds any discernible share, according to web utility provider Net Applications. The company (which was acquired by America Online, now AOL Inc., in March 1999) was co-founded by Marc Andreessen, one of the students who created Mosaic at the University of Illinois, who was one of the industry's most important pioneers and has become one of its most powerful venture capitalists.

A Powerful Global Medium

What makes the Internet a truly global medium is its decentralized nature. It is a virtual community owned by no one. The Internet empowers individuals and organizations by offering easy and equal access to billions of web pages, and the opportunity to communicate with hundreds of millions of Internet users. Low barriers to entry, relatively small capital expenditures, and electronic-payment technologies enable merchants to sell their products to a worldwide population of consumers regardless of geography, language, or currency.

Researchers can tap into an enormous source of information as the Internet serves as a continually growing global library, increasingly with multimedia content. With e-mail and social media, individuals have a low-cost, efficient way of keeping in touch with friends and family. Groups of people with similar interests can join online communities to exchange insights and debate topics regardless of location or time. Every client screen (*i.e.*, computer or other device accessing the Internet) is a gateway to a vast array of information and resources that is available on demand, 24 hours a day, from virtually anywhere.

Internet Infrastructure

Many companies in different industries play integral roles in how the Internet functions. One way to study the industry is to examine the infrastructure of the Internet: hardware, software, and access services.

Hardware

The computer and communications equipment industries provide the hardware that comprises the physical infrastructure of the Internet. More specifically, hardware companies make the equipment that connects, operates, and powers the networks that constitute a large portion of the Internet.

Web-Hosting Services

Some companies maintain their websites on servers kept in-house. Other corporations employ web-hosting firms to ensure that their sites operate without interruption. Customers using these services generally manage their own servers, while the data center operators offer safe, secure, and physical hosting space and direct service provider connections.

Software

Software companies provide a variety of Internet-related offerings to both businesses and consumers. This *Survey* focuses on two of the more important types of Internet-related software: browsers and security software.

◆ **Browsers.** Browser software enables online navigation by allowing users to view website text and graphics that are housed in servers. Microsoft dominates the current browser market.

◆ **Security software.** The Internet has notable vulnerabilities and is rife with hackers and dangerous applications. While some hackers work for their own benefit, others, often referred to as “hacktivists,” work for a common cause. One such group that has come to prominence is Anonymous. Formed in 2003, the global group involves individuals who do not disclose their identities.

Technology research firm IDC has defined “web security” as including uniform resource locator (URL) filtering, anti-malware software, Internet application firewalls, and online content solutions. These offerings safeguard against all kinds of threats.

URL filtering essentially protects users from visiting websites suspected of being malware gateways. Malware is malicious code or an application (more commonly known as viruses and worms) designed to do harm using the Internet. For example, it can help a criminal obtain another person’s online banking log-on information for perpetrating fraud, or infect and bring down small and large corporate applications and networks. Application firewalls are software that fortifies computers and networks from external threats. Online content solutions analyze Internet media to ensure that they are safe to view and consume.

Two other important areas of Internet security software are digital certificates (*i.e.*, identification measures), and authentication and encryption software, which confirms parties involved in communications and/or transactions, and then safeguards such interactions.

Access Services

When consumers or businesses access the Internet, they connect to an Internet service provider (ISP). ISPs offer basic, flat-rate Internet access to customers, either through wholly owned networks or networks leased from other ISPs. Users generally access an ISP’s network through ordinary phone lines or through faster digital subscriber line (DSL) or cable connections, using a browser to gain entry to the web.

In April 2014, the Federal Communications Commission (FCC), under the leadership of new chairman Tom Wheeler, who assumed the post in November 2013, took action that many believed would eventually lead to elimination of net neutrality. Chairman Wheeler communicated that his approach is consistent with “Open Internet” concepts adopted by the FCC in 2010, and that he intended to “have enforceable rules by the end of the year.” In 2014, the FCC proposed new rules on net neutrality despite protests.

In early 2015, the FCC voted in favor of net neutrality and decided to treat broadband as a “telecommunications service” rather than an “information service.” Importantly, the agency will not allow blocking or impairing access to legal online offerings (such as content, applications, services, and non-harmful devices), or paid prioritization favoring certain Internet traffic (*i.e.*, no “fast lanes”).

Destinations

Once a user has connected to the Internet, a dizzying array of destination sites is available to view and explore. For the purposes of this *Survey*, these destinations can be broken down into two main categories: content and e-commerce.

Content

This sector consists of websites frequently and regularly updated with new information and media. While many providers produce original content, others (known as portals) aggregate content from outside sources and repackage it into well-organized and often customizable websites.

◆ **Original content providers.** These companies either create material especially for the Internet or reconstitute their content for online consumption. Many established media companies, including news organizations and magazine and newspaper publishers, fall within this category, along with a growing number of upstarts that have established sites with content that is available solely on the Internet.

Given recent and projected significant growth in online advertising, many of these content providers generate revenues from Internet marketing. Some providers charge fees to access at least a portion of their content or services. Subscriptions on the Internet are like traditional subscription models used for magazines: over a finite period, users pay to obtain content that they would not be able to get elsewhere. Because users have shown a general reluctance to pay for online content, the success of this model has been somewhat mixed. However, a variety of entities—including ESPN and *The Wall Street Journal*—have shown that Internet users will pay for online content if it is unique, compelling, and reasonably priced.

◆ **Portals.** These are websites designed to be an Internet user's initial starting point for online usage. A portal's front page usually offers search options, e-mail capabilities, and a variety of other content and services ranging from news headlines, stock quotes, and sports scores, to shopping and entertainment offerings.

Portals often do not charge fees for most of the wide range of services that they offer. Instead, these companies predominantly generate revenues by providing online advertising solutions. The rates advertisers pay frequently are closely related to the number of people who potentially will see and click on particular ads, and the degree of targeting that is employed. For example, a portal's registered user who has a profile that includes a New York address, and who conducts a search at the site for the word "football," could be shown ads for New York Giants paraphernalia or local sports bars.

◆ **Communities.** Unlike traditional portals, which offer information and services derived from typical mass-media sources, community-oriented websites depend heavily on their registered user bases for content. Advertisers can target communities that they believe would respond favorably. For instance, a maker of entertainment software would likely target communities dedicated to electronic games.

Increasingly, the differences between portals and communities have become blurred. Many portals have acquired or built communities and integrated them into their websites, and many communities have added portal-like content to their offerings.

Examples of user-driven content include online postings, profiles, and polls, as well as newer technologies such as blogs, wikis, digital photographs, podcasts, and online videos. Blogs comprise a kind of community that has become popular. Blogs typically involve authors posting on the web their thoughts on particular subjects, with users responding. Initially, these kinds of forums generally focused on technology issues and politics, but they increasingly tackle other topics as well. A wiki is a kind of website that allows users to easily add, remove, or revise content. The most popular wiki is Wikipedia, which is a community-maintained online encyclopedia.

Other Internet communities involve multimedia elements. Flickr, which is owned by Yahoo, is a photo-sharing community. Instagram users post and communicate about pictures and videos through mobile devices. A podcast is an audio program that can be automatically distributed over the Internet to a person's computer, often for later playing on a digital audio device such as Apple's iPod.

Perhaps the most prevalent segment of the online communities category is social networking, which includes companies that facilitate personal connections among users with common interests and goals. Examples of popular social networks include Facebook, LinkedIn, and Twitter.

◆ **Search services.** Search engines are used to locate information online. Users input keywords, which search engines check against extensive volumes of indexed websites and web pages. If matches are found, the search service provides them to the user in the order of most relevant to least relevant.

As the vast amount of information on the Internet continues to grow explosively, the importance of search services has increased. As a result, companies focused only on providing search services have become more popular. Although established players such as LexisNexis (owned by Reed Elsevier Group Plc) offer a variety of fee-based search services, the advertising-focused free search model has become increasingly prevalent.

E-commerce

Electronic commerce, or e-commerce, generally is defined as business conducted through the Internet. This sector has two major segments—business-to-consumer (B2C) and business-to-business (B2B). Although the B2B market is estimated to be much larger than the B2C market, both areas are growing rapidly.

The online auction segment a part of the e-commerce sector, although it reflects only a small percentage of the overall e-commerce industry. It includes B2C, B2B, and consumer-to-consumer (C2C), also known as peer-to-peer or person-to-person (P2P) transactions.

◆ **Business-to-consumer (B2C).** This generally refers to transactions conducted between a consumer and an online retailer. Internet shoppers can browse through a company's inventory of goods, which will display a picture of each item along with a detailed description and an indication of availability. Most sites allow users to search for items based on specified criteria. On some sites, most notably Amazon.com, an item's description is accompanied by reviews by both professional and amateur critics. Comparative shopping sites (such as eBay Inc.'s Shopping.com or Google Product Search, formerly known as Froogle) offer applications known as shopping bots, which enable users to compare the prices of a specific product across multiple B2C e-commerce websites.

The relatively low cost of establishing a website has reduced barriers to entry in the retail market. It is now possible to target an extremely large market without spending the exorbitant amount of capital necessary to open brick-and-mortar stores. Companies aim to build brands and establish loyal users that will consistently purchase goods from their websites.

Traditional retailers often have advantages over new entrants: established brands and customer loyalty. Using these recognized and trusted names and existing (and sometimes longstanding) relationships as foundations, many traditional vendors have successfully expanded their sales capabilities to include the Internet. Conversely, many pure-play online retailers have gone out of business after incurring significant operating losses due to heavy sales and marketing expenditures, technology investments, and deep promotional discounting. The competitive and costly reality of running a large consumer e-commerce site has led many players to pursue outsourcing partners (which are responsible for some or all of their operations), such as Amazon.com Inc. or eBay's enterprise business (formerly GSI Commerce).

◆ **Business-to-business (B2B).** In contrast to consumers' sometimes impulsive purchasing, B2B transactions between companies tend to be very structured, and they are controlled by bureaucratic budgeting and buying processes. While a few vendors provide their goods solely via the Internet, many other firms take advantage of the Internet as an alternative distribution channel.

From a corporation's perspective, e-commerce can deliver significant cost savings. When customers order regularly from a website, they do not have to interact with salespeople, who thus can pursue other sales. Furthermore, because orders are entered and recorded electronically, buyers can monitor and update their cost ledgers more easily, sellers can manage their inventories more closely and efficiently, and transaction errors are much less frequent.

Government Plays a Prominent Role

If you think the government is playing more of a role in the policies and practices shaping the Internet, you are absolutely right. Public entities have been more active in addressing issues of significance to online users as the Internet has become more important for consumers and companies.

This heightened activity reflects government confidence in the Internet's significance and staying power, as well as a belief that the rights of Internet users need to be protected. As the Internet has become increasingly essential in people's lives, the government's inclination to evaluate and regulate online activity has also grown.

In recent years, government entities have pursued the fight against identity theft. The FCC made progress in promoting competition in broadband Internet access and protecting the rights of broadband users. In addition, several government bodies moved forward on matters regarding online privacy and taxation—two areas that continue to garner significant attention, for reasons explained in the text below.

Privacy

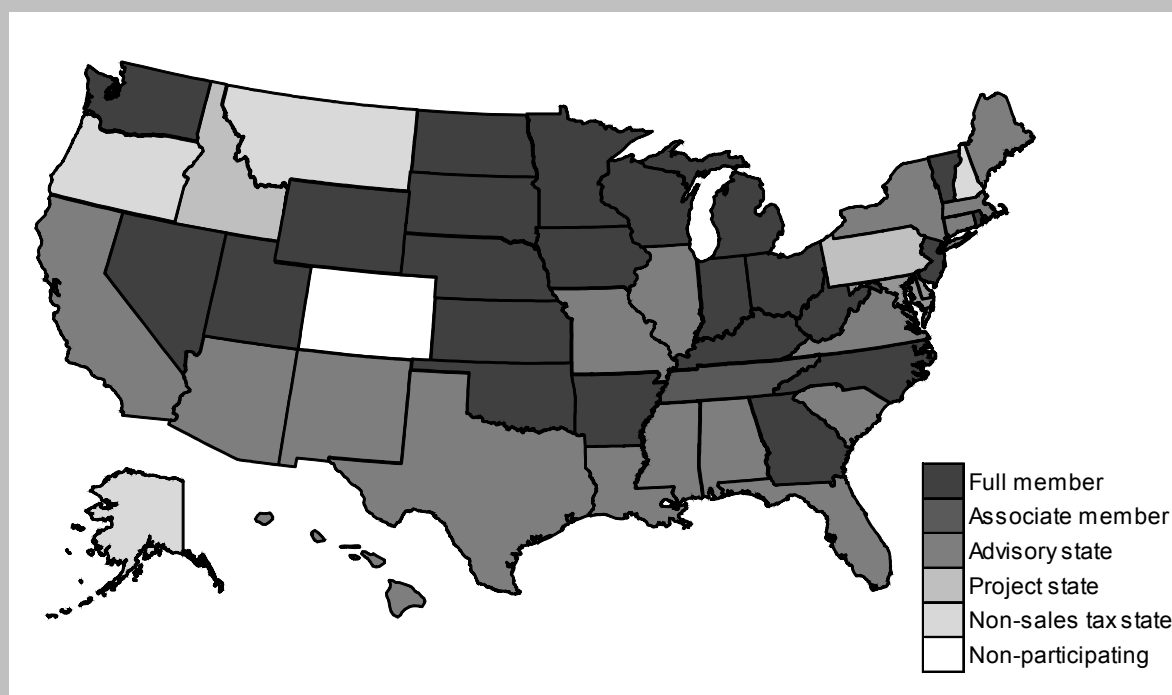
In February 2012, the Obama Administration proposed its own Privacy Bill of Rights. The National Telecommunications and Information Administration led a review of the proposed Privacy Bill of Rights, in conjunction with an order from President Obama. In February 2015, the White House offered the updated Consumer Privacy Bill of Rights Act, intended to restrict how companies, including Internet giants such as Google and Facebook, could use personal data and information. Many criticized the draft document. Companies called it overreaching, and politicians suggested it was poised to restrict protections.

European regulators have arguably been more aggressive on this front. In 2009, the European Commission established and implemented the Data Protection Directive (to ensure data and information are amassed “under strict conditions and for legitimate purposes”) and the ePrivacy Directive (to preserve privacy for communications over public networks). In 2012, the Commission proposed reforms for personal data protection.

Taxation

After considerable debate, the Internet Tax Non-Discrimination Act was enacted in November 2001. The proponents of this law believed that it promoted greater health and growth for the Internet economy. Many others, however, believe that the ban on Internet taxes unfairly disadvantaged government entities.

STREAMLINED SALES TAX STATUS*



*Latest available data as of July 15, 2015.

Source: Streamlined Sales Tax Governing Board.

The latest version of the law prevents states from taxing Internet access services, but allows levies on fee-based consumer voice or video offerings. It does not specifically address the issue of a sales tax on goods purchased online.

In April 2008, the state of New York implemented a law requiring out-of-state companies to collect state sales taxes on items they send to New York addresses. Amazon.com sued to overturn the new law. In March 2013, the state's highest court rejected the company's arguments. In August 2013, Amazon filed an appeal for the US Supreme Court to consider the case. The Supreme Court declined to hear the case at the end of 2013.

Since the New York law went into effect, a number of other states have taken similar actions, and Amazon has moved to distance itself from sales affiliates in those states. Amazon has been working on a state-by-state basis to resolve some of these issues, such as offering local jobs in return for a temporary moratorium on local taxes.

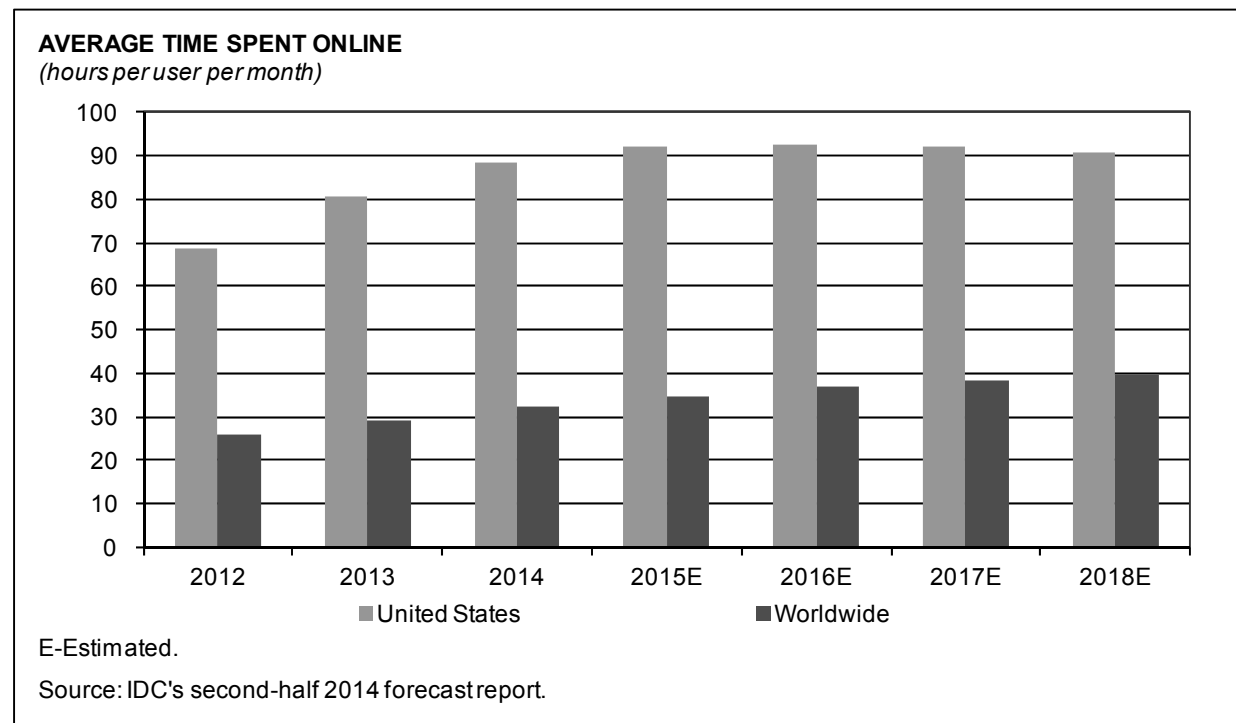
As of July 2015, 23 states were full members and one state (Tennessee) was an associate member of the Streamlined Sales Tax Governing Board, which wants to tax online purchases, and two more states were associate members. S&P Capital IQ thinks many related state efforts reflect the recent challenging economic backdrop and the need for greater tax receipts.

The US is not alone in focusing more on Internet-related taxes. France and Mexico have implemented such levies. Reportedly, over the last few years, the United Nations and the European Union have considered comparable actions.

KEY INDUSTRY RATIOS AND STATISTICS

◆ **Gross domestic product (GDP).** GDP, the broadest measure of aggregate economic activity, is the market value of all goods and services produced by labor and capital in the US. To arrive at GDP, four major expenditure categories are totaled: consumption, investment, government purchases of goods and services, and net exports of goods and services. Growth in the economy is measured by changes in inflation-adjusted (or real) GDP. The US Department of Commerce reports GDP data each quarter.

The health of the overall economy affects the performance of Internet-related industries. As economic activity increases, the volume of communications traffic rises. This increased traffic requires that telephone, cable, and wireless companies raise the capacity of their networks, which spurs demand for network equipment. Healthy economic activity also spurs consumption of personal computers (PCs), servers, Internet access, and goods and services offered online.



◆ **PC unit sales.** PC industry growth is a key element in determining the overall growth of the Internet. PCs are the primary gateway devices for users accessing the World Wide Web, and Internet access is becoming the primary driver for home PC sales.

Historically low and declining PC prices, the popularity of the Internet, and advances in broadband technologies will continue to promote PC growth in US and international markets, in our opinion. Nonetheless, S&P Capital IQ thinks that the increasing accessibility and functionality of mobile devices, as well as material economic issues touched upon earlier will restrain growth, especially domestically.

◆ **Mobile devices.** Wireless technologies and rapid adoption have made smartphones and tablets increasingly relevant in accessing the Internet.

◆ **Internet and broadband penetration.** This is the percentage of a population in a given geographic area that has online and high-speed Internet access. Lower penetration indicates greater subscriber growth potential; higher penetration generally contributes to more favorable usage metrics.

◆ **Growth of Internet usage.** Some growth figures describe the number of online subscribers, while data on page views offer more details about traffic patterns and behavior. Higher traffic rates could affect expenditures on hardware used to enhance the Internet's capacity.

HOW TO ANALYZE A COMPANY IN THIS INDUSTRY

When analyzing a company in the Internet software & services industry, which throughout this section is referred to as the Internet industry, it is important to remember that the industry was created relatively recently—over the last decade or so. Of all the new entrants, only a small number have managed to establish critical mass and sustain profitability. For these companies, analysts can use traditional measures when conducting comparative analyses, but they must pay close attention to quickly evolving market dynamics.

Different techniques should be used to evaluate start-up companies and those with more limited revenue and earnings profiles. Analyzing any relatively young business, especially one with a focus on the rapidly changing Internet segment, poses special challenges. Traditional methods of determining financial standing and underlying value may not be readily applicable. As a result, companies are often valued largely on their prospects for future growth.

In addition to the uncertainty surrounding specific companies, it is often difficult to estimate the potential size of the markets in which they compete, and forecasting category growth may be something of a guessing game. For these reasons, in S&P Capital IQ's view, qualitative judgments are crucial in helping to determine an Internet company's competitive position, growth opportunities, and value.

Making Qualitative Assessments

Rigorous financial statement analysis should be part of a review of any publicly traded company. For Internet-related firms, due emphasis should be placed on considerations regarding business models, competitive standing, and management expertise and ethics.

A Model Business Model

Although Internet businesses of the past were conceived mostly to capitalize on significant growth opportunities, the dot-com crash and subsequent global macroeconomic woes from 2000 into 2003 changed the priorities of online companies and their investors. Internet firms must do more now than simply generate growth in users and revenues; they also must deliver on the promise of profitability. The recent credit crunch and economic downturn have forced Internet companies to better prioritize spending and focus more on balance sheet strength.

The most successful Internet business models generally have diversified revenue streams, scalable expense structures, and limited capital requirements. Many online companies that were once high profile, including At Home Corp., Pets.com Inc., and Webvan Group Inc., were able to garner noteworthy growth and brand recognition, but ultimately failed because they could not generate sustainable earnings.

In addition, the most profitable online companies often have business models that capitalize on the Internet's unique benefits, such as the ability to offer an extensive virtual inventory of products that can be easily searched, researched, and purchased. An example is eBay Inc., which serves as a platform used by more than 150 million active registered users to buy and sell goods. Once the chosen item is located, a transaction can be completed in a matter of minutes. As more would-be purchasers flock to eBay, more sellers set up shop to win their business, which results in heightened consumer interest. This build-up of a greater number of buyers, begetting more sellers

and leading to even more shoppers, is an example of the network effect. The power of this phenomenon is one of the reasons that eBay has been so successful, in S&P Capital IQ's opinion.

Management Expertise and Ethics Are Key

When analyzing an Internet software & services company, it is essential to focus on the quality of its management. As much as any area, the Internet demands managerial excellence, with a particular focus on vision and execution. Being able to generate new ideas, market new products, and foster an entrepreneurial, innovative, and vibrant corporate culture are invaluable skills when managing a young business in a rapidly evolving new industry.

S&P Capital IQ thinks that consideration of corporate governance is critical to investment analysis and decision-making, and consistently employs such considerations in making assessments related to stock recommendations.

Watch the Competitive Landscape

As with any high-tech industry, analysts need to monitor the competitive landscape closely. Because of constant innovation, relatively low barriers to entry, and an emphasis on human capital, Internet companies face substantial competition. Market positions shift rapidly, and new products and business models are developed frequently. The costs of switching providers of content and services are generally extremely low, which makes for relatively high customer turnover, or churn, as it is called in the industry.

For example, in the late 1990s, Internet companies that were initially focused largely on search offerings, such as Yahoo! Inc., turned their attention to becoming multifaceted mass-media portals. This created a huge opportunity for Google Inc., which was solely an Internet search company at the time. Yahoo actually retained Google to power its search offerings in 2000. Overture Services, which Yahoo acquired in 2003 (and is now called Yahoo Search Marketing), created the concept of sponsored search—but Google perfected the process by marrying its powerful search technology and related advertising. Google remains the worldwide leader in search services, while Yahoo is still trying to recover from its strategic oversights.

Market Position

The sheer size of a company has a significant bearing on its ability to succeed as an Internet player. For example, Amazon.com Inc. has bolstered its customer base by undercutting competitors on price and offering free shipping promotions and subscriptions. Most other Internet retailers are not large enough to be able to absorb the resultant reduced revenues and higher expenses.

Yahoo has leveraged its leading market share positions in a number of global online content and communications categories to capture significant online advertising revenues. Google's No. 1 position in the search segment has enabled the company to generate substantial profits and invest in the enhancement of existing offerings, the development of new products and services, and the acquisition of complementary technologies and businesses.

New Products and Services

Internet industry companies must convert new ideas into saleable offerings quickly in order to capture and retain market share. Given the entrepreneurial nature of most Internet industry companies, competition is cutthroat and the companies that can achieve expeditious "time to market" often win.

However, there is a caveat. A company that wins share initially does not necessarily thrive over the long term. As the Internet evolves, a company's vision could fall out of step with consumer

tastes and/or market realities. Alternatively, an upstart could develop and provide a new and more compelling offering. Google is a good example of what a great new service and fortuitous timing can mean.

Internet industry companies place huge bets on their vision of the medium's future. Therefore, in addition to monitoring which companies are the most nimble and effective over the short term, investors must be mindful of the long-term viability of these businesses.

Foreign Operations

Many Internet industry players have significant operations in international markets. Success in these markets is likely to play an important role in the long-term competitive positions of dot-coms. Google and eBay derive about half of their revenues from international operations. S&P Capital IQ expects larger Internet industry companies to increasingly rely on international revenues for growth, particularly as they pursue acquisitions and alliances abroad.

Multinational companies are subject to foreign currency risk. For firms based in the US, overseas sales are translated from local currencies into dollars. A strong dollar hurts reported earnings, a weak dollar helps. Additionally (as described later in this section), overseas operations often generate profits that cannot be repatriated (*i.e.*, returned to the US) without material tax implications and impacts. Moreover, companies with global operations often benefit from lower corporate tax rates outside the US. Analysts and investors also should keep in mind other international risks, such as government regulation and political instability.

Financial Statements: Line by Line

Financial statement analysis offers important insights into a company's current position and prospects for future growth. The following discussion highlights some of the key line items found on the income statement and the balance sheet, as well as some useful financial ratios. It then addresses valuation methods based on financial measures and other data.

Income Statement Analysis

The income statement portrays the operating results of a company over a stated period. Trends in growth rates, and any aberrations from the norm, should be assessed. In particular, analysts look at sales, gross margins, and operating expenses.

◆ **Revenues.** Quarterly results should be compared with the year-earlier quarter and on a sequential basis (*i.e.*, with the preceding quarter). Year-to-year changes reveal longer-term trends, while sequential fluctuations provide clues about sales momentum, seasonality, short-term events, and emerging trends. In reviewing these comparisons, an analyst must remember that most Internet-related companies enjoy more robust revenue growth in the short term because comparisons are made against a relatively small sales base. It is unrealistic to project continued growth at this pace over the long term.

It is helpful to analyze sales data by segments—which might include advertising revenues, license revenues, service revenues, and subscriber revenues, for instance—in order to focus on the specific contributions to sales growth. For example, Amazon.com expects its service revenues, generated from providing technology and support to other retailers, to grow at a faster rate than its core media segment.

◆ **Gross margin.** This measure—the percentage of revenues remaining after subtracting the cost of goods sold—is a key item to watch when examining income statement trends. Unlike other

operating expenses, which are generally under the direct control of the company, costs of goods or services are more a function of demand for those products or services, as demand affects volume. Typically, a company with rising gross margins has either raised prices or achieved improvements in its supply chain.

In general, Internet industry companies enjoy high gross margins because their fixed costs are low. Historically, software and portal companies, for example, have enjoyed gross margins of 80% or more. However, online retailers selling products over the Internet have considerably lower gross margins, closer to those of traditional vendors. Gross margins are also affected by changes in shipping costs, in response to fluctuations in fuel prices.

When considering gross margins, it is important to know the components of cost of goods sold, particularly for purposes of peer analysis. Some Internet companies, such as Amazon.com, exclude fulfillment expenses from costs of goods sold. Although this practice does not affect a company's bottom line, it does have a favorable impact on gross margins.

◆ **Operating expenses.** The major operating expense line items—selling, general, and administrative (SG&A) expenses, and research and development (R&D) outlays—can yield important information regarding the efficiency and technological leadership of an Internet industry company.

For many Internet industry companies, SG&A represents the majority of total expenses. Since the industry is still in a relatively early stage, companies are trying to position themselves for future growth by generating traffic and building strong brands. The best way to accomplish these goals is through effective sales and marketing efforts. Increases in SG&A, either in absolute dollars or as a percentage of sales, should be examined closely to determine the effects of additional spending on traffic or revenues. For example, heavy spending on R&D, followed by product delays or the introduction of inferior services, could indicate poor management.

Balance Sheet Analysis

The balance sheet provides valuable clues about demand for a company's products. Areas to watch include inventories and the net cash position.

◆ **Inventories.** The inventory turnover ratio (cost of goods sold divided by average inventory) provides a measure of a company's inventory management. A higher ratio indicates that inventory turns over rapidly, as product moves from manufacture to sale.

The number of days of inventory in stock (365 days divided by inventory turnover) is used to determine how long inventory is retained until it is sold. The lower the number of days sales outstanding (DSO), the faster products are getting to customers, which can signal a pick-up in demand or improved productivity. A higher DSO could reflect delayed purchases in anticipation of a new product upgrade release, or longer sales cycles, which might result from selling into larger and more bureaucratic organizations. If DSO gets too low, it might portend an inventory shortfall.

Absolute inventory levels should be monitored, given the Internet industry's rapid product cycles and technological advancements that can render older inventory obsolete. If inventory levels are increasing faster than sales, this might indicate that existing products are not selling well. However, many high-tech companies build inventories in the early stages of a new product cycle.

◆ **Net cash position.** The level of cash, cash equivalents, and marketable securities should be followed closely to assess the short-term liquidity of a company. Larger, more established companies with strong cash flows generally have cash available to repurchase shares and/or make

acquisitions. A declining cash balance over time could signal competitive pricing pressures or company-specific operational problems.

In considering a company's cash position, the assessment of payment obligations—generally referred to on a balance sheet as long-term debt or convertible notes or securities—is increasingly important. These obligations need to be identified, aggregated, and subtracted from the value of liquid assets to calculate a company's true cash position (referred to as net cash). Although a company might carry significant cash on its books, this apparent balance sheet strength might be attributable to prior debt and/or convertible financing not yet paid off. S&P Capital IQ advises investors to assess the dates when company obligations become due. This information is found in SEC filings, especially 10-Ks.

Additionally, companies with significant overseas operations likely have substantial cash and equivalents in international markets. Repatriating these assets would trigger notable domestic tax obligations, and as a result, Internet multinationals like Google, eBay, and Yahoo have often targeted non-US acquisitions as a way to efficiently deploy this capital.

Amid a period of historically low interest rates, Internet industry companies have increasingly pursued debt offerings to provide additional financial flexibility.

Equity Valuations

The price-to-earnings (P/E) ratio, when calculable and material, can be compared with the estimated long-term earnings growth rate for an individual company (the PEG ratio). A company's shares may be undervalued if its P/E ratio is significantly below its long-term annual growth rate and if, after careful analysis, the investor or analyst concludes that the company's fundamental position is healthy. Historical considerations can also be helpful.

After taking into account the high potential growth rates of many companies within the Internet industry, price-to-earnings multiples are often well above those of other publicly traded companies, even following the sharp correction from 2000 into 2003. One of the reasons for this discrepancy is investors' keen interest in Internet-related stocks, perhaps due to their significant appreciation in the late 1990s and promise of future growth. In addition, some of these stocks have only limited floats (the amount of stock that is actively traded), so the available supply is significantly less than the actual demand. Such a disparity contributes to higher valuation. However, quantitative techniques still play an important role in understanding and properly valuing an Internet company.

Because some dot-coms do not have material earnings, price-to-sales (P/S) ratios, based on projected sales for the current year, offer a useful alternative method for evaluating Internet stocks. A variety of additional methods can be used to assess Internet companies. S&P Capital IQ considers metrics such as revenue per subscriber and revenue per employee, for example.

Analysts sometimes forecast future earnings, assign a multiple, and discount the projected price back to the present using a high discount rate. The same can be done with free cash flow, which is operating cash flow (net income plus amortization and depreciation) minus capital expenditures.

Interestingly, some Internet companies have started to pay dividends, detracting from their cash balances. Companies that initiated dividends over the past few years include EarthLink Inc., Expedia Inc. and IAC. Others have paid special dividends over the years.

GLOSSARY

App—Short for application or application software (most recently popularized by Apple Inc. and its iTunes App Store); generally refers to a small program designed to be downloaded to a mobile device (*e.g.*, iPhone) or tablet (iPad).

ARPAnet—The Advanced Research Projects Agency (ARPA) network, which was the precursor to the Internet. Developed in the late 1960s and early 1970s by the US Department of Defense, ARPAnet was designed as a distributed network of computers that could survive a nuclear war.

B2B—Business-to-business (B2B) e-commerce companies enable customers to engage in wholesale transactions electronically. B2B websites allow for the streamlining of intercorporate communications and commerce.

B2C—Business-to-consumer (B2C) e-commerce companies sell or promote the sale of goods and services directly to individuals.

Bandwidth—The range of frequencies a device can handle without distortion. The amount of bandwidth a channel is capable of carrying is a measure of capacity and determines what kinds of communications can be carried on it.

Blog—Contraction of “web log,” which is generally a somewhat less formal way for a corporation or individual to communicate. Often, readers can comment on entries, which could result in a kind of community forum. Also used as a verb, to refer to the authoring of a blog. In recent years, the blog has evolved from a mostly personal method to communicate, to one adopted by companies and executives around the world.

Botnet—A number of Internet-connected computers that have been secretly set up by a remote “master” to forward harmful transmissions, such as spam or viruses, to other computers. “Botnet” refers to a robot network, sometimes called a “zombie army.” A computer that is part of a botnet is referred to as a “bot” or a “zombie.”

Broadband—A high-speed, large-capacity transmission channel capable of transmission speeds of 200 kilobits per second (Kbps) or more. Broadband channels are carried on coaxial or fiber-optic cables or other communications connections that have a wider bandwidth than conventional telephone lines, giving them the ability to carry video, voice, and data simultaneously.

Browser—A software program that retrieves and displays information from the web, allowing users to interact with the Internet.

Burn rate—How quickly a company uses its available cash reserves; employed in assessing a company’s financial health and viability.

Client—A personal computer (PC), workstation, personal digital assistant (PDA), wireless phone, or any other device that accesses data and programs from a server. Client computers are used to perform work, display images, and input data.

Digital certificate—An electronic method of verifying the identity of a person or corporation; essentially, a digital signature. The certificate is designed to prevent fraud or impersonation in Internet-related transactions.

Digital subscriber line (DSL)—A method of providing connectivity at speeds of up to eight Mbps using the existing phone network.

Dot-com—Shorthand term for an Internet company.

E-commerce—Business conducted over the Internet.

Encryption—The process of scrambling data using keys of a specified length. Encryption makes a file unreadable by anyone not in possession of the key needed to decipher it.

Extensible markup language (XML)—A specification for Internet documents. XML allows designers to create customized tags, enabling the definition, transmission, validation, and interpretation of data among both applications and organizations.

Firewall—A barrier or gateway that separates the Internet from a private network or local area network and restricts certain data from passing to or from external networks.

Home page—The first or front page on a website that serves as the starting point for navigation; it is where the presentation of the site's information actually begins.

Host—The name often given to an Internet server.

Hot spot—A place where Wi-Fi Internet access is available. (*See Wi-Fi.*)

Hypertext markup language (HTML)—A simple system of codes (called tags) used to format documents for viewing by computers that are connected to the World Wide Web.

Internet—The global network of computer networks that grew out of ARPAnet.

Internet service provider (ISP)—An entity that provides access to the Internet.

Intranet—A private network within an organization that is only for internal or specified third-party use.

Malware—Short for “malicious software,” this software is intended to secretly access a computer system or device without the owner/user's knowledge or consent.

Net (network) neutrality—A phrase used to describe the notion that a network, such as the Internet, does not favor a certain online application or website over others. Certain Internet companies have argued that government entities should promulgate legislative and/or regulatory mandates for net neutrality.

Network effect—The concept that a network becomes more valuable as its number of constituents, such as users, increases. An example is eBay; its growing population of would-be buyers has attracted a larger number of sellers, which leads to even more prospective purchasers and additional vendors. This effect raises the value of the eBay network.

Peer-to-peer (P2P) network—System where each PC or client has equivalent capabilities and responsibilities, as opposed to client/server networks. These networks are often used for the sharing of files, most notably digital music.

Plug-in—A software module that adds a specific feature or functionality to a larger software program or platform.

Podcast—An automated transfer of a digital audio file directly to a user's computer. A portable digital audio player, such as an iPod, is often used to listen to the file. Also a verb that refers to the act of creating a podcast.

Protocol—A common language among computers on a network.

Search engine—A software application embedded within a website that is designed to aid users in searching for and retrieving information on the web. A search engine maintains a database of abstracts from hundreds of millions of web pages.

Server—A computer that allows other computers to connect to it. Servers store information and allow client devices to retrieve information for users. (*See Client.*)

Social media—Also known as social networking, a category of digital offerings (such as Facebook and Twitter) that are notably social in nature, allowing users to create and share content. (*See Web 2.0.*)

Spam—Junk e-mail; also, any unsolicited e-mail.

Sponsored or keyword search—A practice whereby Internet advertisers bid to receive priority placement in a search engine's results; also known as pay-for-performance search. Advertisers bid on keywords or phrases relevant to what they are selling, and are charged for each instance in which a user clicks on a result listing. Sponsored searches enable vendors to find and market to users interested in their offerings.

URL—“Uniform Resource Locator”; it is the address of a resource on the Internet. World Wide Web URLs begin with http://.

Virus—A piece of a code or a program loaded onto a computer without one's knowledge that can interrupt the functionality of a PC and/or network. Some viruses replicate themselves, causing memory overloads. Others bypass security systems and transmit themselves across networks.

VoIP (Voice over Internet Protocol)—A technology that uses the Internet instead of traditional telecommunications systems for voice conversations. Various communications and cable companies are rolling out VoIP service as an alternative to more expensive voice options.

Web 2.0—A second generation of online offerings that allow people to more easily collaborate and share information. According to Tim O'Reilly, who is largely credited with originating the concept, aspects of Web 2.0 include the Internet as a platform, harnessing collective intelligence, the importance and use of data, web services, simple programming models, flexible software, and appealing user experiences.

Website—The virtual location for an individual's or organization's presence on the World Wide Web.

Wi-Fi—Contraction of wireless fidelity. Generally refers to technology that enables a wireless connection between a computer or device and the Internet; also known as 802.11.

Wiki—A type of website that enables users to add, remove, or revise content. The most popular wiki is Wikipedia.org, which is a community-maintained online encyclopedia.

WiMAX—A protocol for connecting computers that is similar to Wi-Fi, but offers faster connections speeds and has better range. Short for "Worldwide interoperability for microwave access," it is also referred to as IEEE 802.16.

World Wide Web—A segment of the Internet that combines graphics and text into interactive pages. Usually referred to simply as the web, it contains documents (or "pages"), most of which are connected via hypertext links.

INDUSTRY REFERENCES

PERIODICALS

Wired

<http://www.wired.com>

Monthly; covers the people, companies, and ideas that are changing the world technologically.

BOOKS

Delivering Happiness: A Path to Profits, Passion, and Purpose

Tony Hsieh

Business Plus, 2010

Tony Hsieh, CEO of Zappos, describes his experience as a dot-com entrepreneur and the way he took Zappos to new and unanticipated heights; he also offers some interesting anecdotes about, and perspectives on, success.

Empowered: Unleash Your Employees, Energize Your Customers, and Transform Your Business

Josh Bernoff and Ted Schadler

Harvard Business School Press, 2010

A follow-up to *Groundswell*, this book describes how organizations can marry the potential and power of social technologies with internal company champions to achieve business success.

The Facebook Effect: The Inside Story of the Company That Is Connecting the World

David Kirkpatrick

Simon & Schuster, 2010

Publishers Weekly wrote, "Written with the full cooperation of founder Mark Zuckerberg, the book follows the company from its genesis in a Harvard dorm room through its successes over Friendster and MySpace, the expansion of the user base, and Zuckerberg's refusal to sell."

Free: The Future of a Radical Price

Chris Anderson

Hyperion, 2009

The former editor-in-chief of *Wired* magazine offered some interesting and compelling thoughts about why free might make sense as a price point in the digital world in which we live, where many simply won't pay for online content in traditional ways.

Googled: The End of the World As We Know It

Ken Auletta

Penguin, 2010

A well-known writer focused on the media business offers an extensive history of the company's rise, profiling many of the people who made Google what it is today.

I'm Feeling Lucky: The Confessions of Google Employee Number 59

Douglas Edwards

Houghton Mifflin Harcourt, 2011

The author, employee number 59 at the company, "offers the first inside view of Google, giving readers a chance to fully experience the bizarre mix of camaraderie and competition at this phenomenal company."

In The Plex: How Google Thinks, Works, and Shapes Our Lives

Steven Levy

Simon & Schuster, 2011

An inside-out look at the world largest Internet company, which is "driven by its engineering mind-set and adoption of such Internet values as speed, openness, experimentation, and risk taking."

Inside Apple

Adam Lashinsky

Business Plus, 2012

This long-time technology sector journalist offers a glimpse inside Apple following the loss of its former leader, Steve Jobs.

Newton's Telecom Dictionary

Harry Newton

CMP Books, 2011

Best-selling reference on telecommunications, data communications, computing, and the Internet. Includes terms related to e-commerce, wireless, broadband, intranets, and IT. Written as a business book; de-emphasizes the complex nature of specific technologies.

The Oxford Handbook of Internet Studies

William Dutton

Oxford University Press, 2013

Designed to provide a resource for academics and students, with scholarly perspectives on how the Internet has been studied and how research should be pursued.

GOVERNMENT AGENCIES

Federal Communications Commission (FCC)

<http://www.fcc.gov>

Regulates interstate and international communications by radio, television, wire, satellite, and cable.

Federal Trade Commission (FTC)

<http://www.ftc.gov>

Ensures that the nation's markets function competitively, and are vigorous, efficient, and free of undue restrictions; educates the public about the importance of personal information privacy.

US Department of Commerce

<http://www.commerce.gov>

Promotes US competitiveness and manages resources to ensure sustainable economic opportunities; oversees national e-commerce policy; works to provide all Americans with access to the Internet and other crucial information technologies.

MARKET RESEARCH FIRMS**comScore Inc.**

<http://www.comscore.com>

Provides a variety of data, information, and insights regarding a number of different aspects of the Internet economy, with a focus on e-commerce and audience measurement.

Digital Content Next

<http://digitalcontentnext.org>

Industry trade organization dedicated to representing online content providers to the advertising community, the media, government entities, and the public; disseminates relevant research online.

eMarketer

<http://www.emarketer.com>

Comprehensive, objective, and easy-to-use resource on the Internet; provides statistics, news, and other information on e-business, online marketing, and emerging technologies.

Forrester Research Inc.

<http://www.forrester.com>

Independent research firm that analyzes technology's impact on businesses.

Gartner, Inc.

<http://www.gartner.com/technology/home.jsp>

Researches and analyzes trends and developments in the information technology industry.

IDC

<http://www.idc.com>

Leading provider of information technology data, analysis, and consulting services.

Interactive Advertising Bureau (IAB)

<http://www.iab.net>

Association dedicated to helping online, interactive broadcasting, e-mail, wireless, and interactive television media companies increase their revenues. Provides the quarterly *IAB Internet Advertising Revenue Report* (based on research by PricewaterhouseCoopers), which is an industry standard for online ad revenue data and information.

Pew Research Center

<http://www.pewinternet.org>

Opinion research group that studies attitudes toward the press, politics, and public policy issues; launched the Internet & American Life Project, which issues reports based on its research, surveys, and analysis.

ONLINE RESOURCES**Bloomberg West**

<http://www.bloomberg.com/shows/bloomberg-west>

The content appears on Bloomberg TV as well as online, focusing on "innovation, technology, media and the future of business," often featuring prominent personalities and companies that are shaping the digital economy.

CNBC, Technology section

<http://www.cnbc.com/technology>

Original and third-party articles and CNBC videos focused on technology, with considerable content related to the Internet, with areas dedicated to social media, gaming, and cybersecurity.

CNET

<http://www.cnet.com/news>

Comprehensive source for technology news, with an emphasis on the Internet.

Gigaom

<http://www.gigaom.com>

Leading destination site for "technology industry insiders, movers and shakers, and early adopter consumers."

PandoMedia Inc.

<https://pando.com>

Refers to itself as the "site of record for Silicon Valley." PandoDaily was started by Sarah Lacy, a journalist, author, and speaker who has focused on Silicon Valley and technology since the 1990s. The site includes video interviews with Silicon Valley luminaries and leaders.

Re/code

<http://www.recode.net>

Re/code is an "independent tech news, reviews and analysis site, from the most informed and respected journalists in technology and media. Because everything in

tech and media is constantly being rethought, refreshed, and renewed, Re/code's aim is to reimagine tech journalism." Led by long-time technology-focused journalist Kara Swisher and personal technology guru Walt Mossberg, Re/code emerging after All Things Digital announced in September 2013 that its relationship with *The Wall Street Journal* and its owner News Corp. was going to lapse by late 2013. While News Corp. retained the All Things Digital Brand, Mossberg and Swisher introduced Re/Code in January 2014.

Tech Trader Daily

<http://blogs.barrons.com/techtraderdaily>

News, analysis, and insights on technology investing from the Silicon Valley bureau of *Barron's*.

TechCrunch

<http://techcrunch.com>

Owned by AOL, this network of technology-focused sites offers a wide range of content and new media. It profiles and reviews new Internet products and companies.

TechCrunch had been the subject of controversy, and its influential founder, Michael Arrington, left AOL in September 2011.

Webopedia

<http://www.webopedia.com>

Online dictionary and search engine for computer and Internet technology.

COMPARATIVE COMPANY ANALYSIS

Operating Revenues

Ticker	Company	Yr. End	Million \$							CAGR (%)			Index Basis (2004 = 100)				
			2014	2013	2012	2011	2010	2009	2004	10-Yr.	5-Yr.	1-Yr.	2014	2013	2012	2011	2010
INTERNET SOFTWARE & SERVICES†																	
AKAM	AKAMAI TECHNOLOGIES INC	DEC	1,963.9	1,577.9	1,373.9	1,158.5	1,023.6	859.8	210.0	25.1	18.0	24.5	935	751	654	552	487
BCOR	BLUCORA INC	DEC	580.7	574.0 A	406.9 A	228.8	214.3 A	207.6	249.4 A,C	8.8	22.8	1.2	233	230	163	92	86
SCOR	COMSCORE INC	DEC	329.2 A	286.9	255.2	234.0 A	178.9 A	127.7	NA	NA	20.8	14.7	**	**	**	**	NA
TRAK	DEALERTRACK TECHNOLOGIES INC	DEC	854.4 A	481.5 A	388.9 A	353.3 A	243.8	225.6 A	70.0 A	28.4	30.5	77.4	1,220	687	555	504	348
DHX	DHI GROUP INC	DEC	262.6	213.5 A	195.4 A	179.1	129.0 A	110.0	NA	NA	19.0	23.0	**	**	**	**	NA
EBAY	EBAY INC	DEC	17,902.0	16,047.0	14,072.0	11,651.7 A	9,156.3	8,727.4 C	3,271.3	18.5	15.5	11.6	547	491	430	356	280
FB	FACEBOOK INC	DEC	12,466.0 A	7,872.0	5,089.0	3,711.0	1,974.0	NA	NA	NA	NA	58.4	**	**	**	**	NA
GOOG	GOOGLE INC	DEC	66,001.0 D	59,825.0	50,175.0 A,C	37,905.0	29,321.0	23,650.6 A	3,189.2 A	35.4	22.8	10.3	2,070	1,876	1,573	1,189	919
JCOM	J2 GLOBAL INC	DEC	599.0 A	508.2 A	371.4 A	340.5	255.4 A	244.9	106.3	18.9	19.6	17.9	563	478	349	320	240
LQDT	LIQUIDITY SERVICES INC	SEP	495.7	505.9	475.3 A	327.4 A,C	286.8 A	236.3	75.9	20.6	16.0	(2.0)	653	667	626	432	378
LPSN	LIVEPERSON INC	DEC	209.9 A	177.8	157.4	133.1	109.9	87.5	17.4	28.3	19.1	18.1	1,207	1,022	905	765	632
LOGM	LOGMEIN INC	DEC	222.0	166.3	138.8	119.5 A	98.6	74.4	NA	NA	24.4	33.5	**	**	**	**	NA
MWW	MONSTER WORLDWIDE INC	DEC	770.0 C	807.6	890.4 D	1,042.8	919.2	907.4	845.5 A,C	(0.9)	(3.2)	(4.7)	91	96	105	123	109
EGOV	NIC INC	DEC	272.1	249.3	211.1	180.9	161.5	132.9 A	55.8	17.2	15.4	9.2	488	447	379	324	290
QNST	QUINSTREET INC	JUN	282.5	305.1	370.5 A	403.0 A	334.8 A	260.5 A	NA	NA	1.6	(7.4)	**	**	**	**	NA
RAX	RACKSPACE HOSTING INC	DEC	1,794.4	1,534.8	1,309.2	1,025.1 A	780.6 A	629.0	NA	NA	23.3	16.9	**	**	**	**	NA
STMP	STAMPS.COM INC	DEC	147.3 A	127.8	115.7	101.6	85.5	82.1	38.1	14.5	12.4	15.2	386	335	303	267	224
VRSN	VERISIGN INC	DEC	1,010.1	965.1	873.6	772.0	680.6 D	1,030.6 D	1,166.5 A	(1.4)	(0.4)	4.7	87	83	75	66	58
XOXO	XO GROUP INC	DEC	143.7	133.8 A	129.1	124.3	111.9	106.4	41.4	13.2	6.2	7.4	347	323	312	300	270
YHOO	YAHOO INC	DEC	4,618.1	4,680.4	4,986.6	4,984.2	6,324.7	6,460.3	3,564.5	2.6	(6.5)	(1.3)	130	131	140	140	177
INTERNET RETAIL‡																	
AMZN	AMAZON.COM INC	DEC	88,988.0 A	74,452.0	61,093.0 A	48,077.0 A	34,204.0	24,509.0 A	6,921.1	29.1	29.4	19.5	1,286	1,076	883	695	494
NILE	BLUE NILE INC	DEC	473.5	450.0	400.0	348.0	332.9	302.1	169.2	10.8	9.4	5.2	280	266	236	206	197
EXPE	EXPEDIA INC	DEC	5,763.5	4,771.3	4,030.3	3,449.0 D	3,348.1	2,955.4 C	1,843.0	12.1	14.3	20.8	313	259	219	187	182
FTD	FTD COMPANIES INC	DEC	640.5 A	627.3	613.5	587.2	NA	NA	397.1 A	4.9	NA	2.1	161	158	155	148	NA
NFLX	NETFLIX INC	DEC	5,504.7	4,374.6	3,609.3	3,204.6	2,162.6	1,670.3	506.2	27.0	26.9	25.8	1,087	864	713	633	427
NTRI	NUTRISYSTEM INC	DEC	403.1	358.1	396.9	401.3	509.5 D	527.7	38.0 A	26.6	(5.2)	12.6	1,061	942	1,045	1,056	1,341
PETS	PETMED EXPRESS INC	# MAR	229.4	233.4	227.8	238.3	231.6	238.3	108.4	7.8	(0.8)	(1.7)	212	215	210	220	214
PCLN	PRICELINE GROUP INC	DEC	8,442.0	6,793.3	5,261.0	4,355.6	3,084.9 A	2,338.2	914.4 A	24.9	29.3	24.3	923	743	575	476	337
TRIP	TRIPADVISOR INC	DEC	1,246.0	944.7	763.0	637.1	484.6	NA	NA	NA	NA	31.9	**	**	**	**	NA

Note: Data as originally reported. CAGR-Compound annual growth rate. ‡S&P 1500 index group. †Company included in the S&P 500. ‡Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.
 **Not calculated; data for base year or end year not available. A - This year's data reflect an acquisition or merger. B - This year's data reflect a major merger resulting in the formation of a new company. C - This year's data reflect an accounting change
 D - Data exclude discontinued operations. E - Includes excise taxes. F - Includes other (nonoperating) income. G - Includes sale of leased depts. H - Some or all data are not available, due to a fiscal year change.

Net Income

Ticker	Company	Yr. End	Million \$							CAGR (%)			Index Basis (2004 = 100)				
			2014	2013	2012	2011	2010	2009	2004	10-Yr.	5-Yr.	1-Yr.	2014	2013	2012	2011	2010
INTERNET SOFTWARE & SERVICES‡																	
AKAM	AKAMAI TECHNOLOGIES INC	DEC	333.9	293.5	204.0	200.9	171.2	145.9	34.4	25.5	18.0	13.8	972	854	594	585	498
BCOR	BLUCORA INC	DEC	(35.5)	24.4	22.5	31.5	9.3	7.4	51.0	NM	NM	NM	(70)	48	44	62	18
SCOR	COMSCORE INC	DEC	(9.9)	(2.3)	(11.8)	(15.8)	(1.6)	4.0	NA	NA	NM	NM	**	**	**	**	NA
TRAK	DEALERTRACK TECHNOLOGIES INC	DEC	(17.3)	5.9	20.5	65.1	(27.8)	(4.3)	11.3	NM	NM	NM	(153)	52	182	579	(247)
DHX	DHI GROUP INC	DEC	27.6	16.2	38.1	34.1	18.9	13.5	NA	NA	15.4	70.0	**	**	**	**	NA
EBAY	EBAY INC	DEC	46.0	2,856.0	2,609.0	3,229.4	1,801.0	2,389.1	778.2	(24.6)	(54.6)	(98.4)	6	367	335	415	231
FB	FACEBOOK INC	DEC	2,940.0	1,500.0	53.0	1,000.0	606.0	NA	NA	NA	NA	96.0	**	**	**	**	NA
GOOG	GOOGLE INC	DEC	13,928.0	12,214.0	10,788.0	9,737.0	8,505.0	6,520.4	399.1	42.7	16.4	14.0	3,490	3,060	2,703	2,440	2,131
JCOM	J2 GLOBAL INC	DEC	125.3	107.5	121.6	114.8	83.0	66.8	31.6	14.8	13.4	16.6	397	340	385	363	263
LQDT	LIQUIDITY SERVICES INC	SEP	30.4	41.1	48.3	20.7	12.0	5.7	5.3	19.2	39.7	(26.1)	577	780	917	392	228
LPSN	LIVEPERSON INC	DEC	(7.3)	(3.5)	6.4	12.0	9.3	7.8	2.1	NM	NM	NM	(351)	(167)	304	575	443
LOGM	LOGMEIN INC	DEC	8.0	(7.7)	3.6	5.8	21.1	8.8	NA	NA	(2.0)	NM	**	**	**	**	NA
MWW	MONSTER WORLDWIDE INC	DEC	(289.3)	3.3	58.2	53.8	(32.4)	18.9	74.3	NM	NM	NM	(389)	4	78	72	(44)
EGOV	NIC INC	DEC	39.1	32.0	26.3	22.9	18.4	13.9	7.1	18.6	22.9	21.9	550	451	371	323	258
QNST	QUINSTREET INC	JUN	(146.4)	(67.4)	13.0	27.2	20.6	17.3	NA	NA	NM	NM	**	**	**	**	NA
RAX	RACKSPACE HOSTING INC	DEC	110.6	86.7	105.4	76.4	46.4	30.2	NA	NA	29.6	27.5	**	**	**	**	NA
STMP	STAMPS.COM INC	DEC	36.9	44.2	38.6	26.3	5.5	6.2	(4.7)	NM	43.0	(16.5)	NM	NM	NM	NM	NM
VRSN	VERISIGN INC	DEC	355.3	544.5	312.5	138.6	70.0	197.5	186.2	6.7	12.5	(34.7)	191	292	168	74	38
XOXO	XO GROUP INC	DEC	0.5	5.8	8.7	6.0	3.7	(4.9)	1.3	(9.7)	NM	(92.0)	36	454	683	474	287
YHOO	YAHOO INC	DEC	7,521.7	1,366.3	3,945.5	1,048.8	1,231.7	598.0	839.6	24.5	65.9	450.5	896	163	470	125	147
INTERNET RETAIL‡																	
AMZN	AMAZON.COM INC	DEC	(241.0)	274.0	(39.0)	631.0	1,152.0	902.0	588.5	NM	NM	NM	(41)	47	(7)	107	196
NILE	BLUE NILE INC	DEC	9.7	10.9	8.4	11.4	14.1	12.8	10.0	(0.3)	(5.3)	(10.5)	97	109	84	114	142
EXPE	EXPEDIA INC	DEC	398.1	232.9	302.7	324.0	421.5	299.5	163.5	9.3	5.9	71.0	244	142	185	198	258
FTD	FTD COMPANIES INC	DEC	22.8	12.5	21.2	15.7	NA	NA	(6.1)	NM	NA	82.6	NM	NM	NM	NM	NA
NFLX	NETFLIX INC	DEC	266.8	112.4	17.2	226.1	160.9	115.9	21.6	28.6	18.2	137.4	1,235	521	79	1,047	745
NTRI	NUTRISYS INC	DEC	19.3	7.4	(2.8)	12.3	33.9	29.0	1.0	34.2	(7.8)	162.0	1,895	723	(275)	1,203	3,325
PETS	PETMED EXPRESS INC	# MAR	17.5	18.0	17.2	16.7	20.9	26.0	8.0	8.1	(7.7)	(2.9)	218	224	214	208	261
PCLN	PRICELINE GROUP INC	DEC	2,421.8	1,892.7	1,419.6	1,056.4	527.5	489.5	31.5	NM	37.7	28.0	NM	NM	4,505	3,353	1,674
TRIP	TRIPADVISOR INC	DEC	226.0	205.4	194.1	177.7	138.8	NA	NA	NA	NA	10.0	**	**	**	**	NA

Note: Data as originally reported. CAGR-Compound annual growth rate. ‡S&P 1500 index group. [Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600.
#Of the following calendar year. **Not calculated; data for base year or end year not available.

Ticker	Company	Yr. End	Return on Revenues (%)					Return on Assets (%)					Return on Equity (%)				
			2014	2013	2012	2011	2010	2014	2013	2012	2011	2010	2014	2013	2012	2011	2010
INTERNET SOFTWARE & SERVICES‡																	
AKAM	AKAMAI TECHNOLOGIES INC	DEC	17.0	18.6	14.8	17.3	16.7	9.6	10.6	8.2	8.6	7.7	12.0	11.8	9.1	9.3	8.7
BCOR	BLUCORA INC	DEC	NM	4.3	5.5	13.8	4.3	NM	3.1	4.6	8.4	2.7	NM	5.2	5.8	9.6	3.2
SCOR	COMSCORE INC	DEC	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
TRAK	DEALERTRACK TECHNOLOGIES INC	DEC	NM	1.2	5.3	18.4	NM	NM	0.6	2.6	11.6	NM	NM	1.0	3.8	14.4	NM
DHX	DHI GROUP INC	DEC	10.5	7.6	19.5	19.0	14.7	6.5	4.2	11.2	10.6	6.5	16.0	9.1	19.1	17.6	11.6
EBAY	EBAY INC	DEC	0.3	17.8	18.5	27.7	19.7	0.1	7.3	8.1	13.1	8.9	0.2	12.8	13.5	19.4	12.4
FB	FACEBOOK INC	DEC	23.6	19.1	1.0	26.9	30.7	10.1	9.1	0.5	21.5	NA	11.4	11.0	0.7	34.3	NA
GOOG	GOOGLE INC	DEC	21.1	20.4	21.5	25.7	29.0	11.5	11.9	13.0	14.9	17.3	14.5	15.4	16.6	18.7	20.7
JCOM	J2 GLOBAL INC	DEC	20.9	21.2	32.7	33.7	32.5	8.8	10.0	14.8	19.4	17.5	16.4	16.5	21.2	23.3	21.6
LQDT	LIQUIDITY SERVICES INC	SEP	6.1	8.1	10.2	6.3	4.2	7.1	10.0	15.4	10.5	7.9	9.6	14.6	23.5	15.1	11.1
LPSN	LIVEPERSON INC	DEC	NM	NM	4.0	9.0	8.4	NM	NM	3.4	8.1	7.9	NM	NM	4.1	9.9	10.0
LOGM	LOGMEIN INC	DEC	3.6	NM	2.6	4.8	21.4	2.7	NM	1.4	2.8	12.8	4.7	NM	2.1	4.0	18.4
MWW	MONSTER WORLDWIDE INC	DEC	NM	0.4	6.5	5.2	NM	NM	0.2	3.1	2.7	NM	NM	0.4	5.7	4.7	NM
EGOV	NIC INC	DEC	14.4	12.9	12.5	12.7	11.4	22.1	19.7	18.2	17.9	15.6	39.8	37.5	36.6	38.8	30.6
QNST	QUINSTREET INC	JUN	NM	NM	3.5	6.8	6.1	NM	NM	2.5	5.7	6.4	NM	NM	3.7	8.4	11.3
RAX	RACKSPACE HOSTING INC	DEC	6.2	5.7	8.1	7.5	5.9	7.1	6.2	9.1	8.5	6.5	10.4	9.1	14.6	14.7	11.8
STMP	STAMPS.COM INC	DEC	25.0	34.5	33.3	25.9	6.5	16.7	27.8	32.3	31.8	7.5	19.6	31.0	37.3	38.0	9.2
VRSN	VERISIGN INC	DEC	35.2	56.4	35.8	17.9	10.3	14.8	23.1	15.9	6.4	2.9	NA	NA	NA	47.1	11.4
XOXO	XO GROUP INC	DEC	0.3	4.3	6.7	4.9	3.3	0.2	3.0	4.7	2.9	1.6	0.3	3.9	5.9	3.3	1.8
YHOO	YAHOO INC	DEC	162.9	29.2	79.1	21.0	19.5	19.1	8.1	24.7	7.1	8.2	29.0	9.9	29.1	8.4	9.8
INTERNET RETAIL‡																	
AMZN	AMAZON.COM INC	DEC	NM	0.4	NM	1.3	3.4	NM	0.8	NM	2.9	7.1	NM	3.1	NM	8.6	19.0
NILE	BLUE NILE INC	DEC	2.1	2.4	2.1	3.3	4.2	5.8	6.7	5.8	7.7	10.0	35.8	39.8	34.2	27.0	30.6
EXPE	EXPEDIA INC	DEC	6.9	4.9	7.5	9.4	12.6	4.8	3.1	4.5	4.9	6.7	20.3	10.5	13.5	13.3	15.7
FTD	FTD COMPANIES INC	DEC	3.6	2.0	3.5	2.7	NA	2.3	1.9	3.1	NA	NA	4.8	4.4	7.9	NA	NA
NFLX	NETFLIX INC	DEC	4.8	2.6	0.5	7.1	7.4	4.3	2.4	0.5	11.2	19.4	16.7	10.8	2.5	48.5	65.7
NTRI	NUTRISYSTEM INC	DEC	4.8	2.1	NM	3.1	6.6	18.2	7.3	NM	8.2	21.1	35.9	13.1	NM	16.4	33.2
PETS	PETMED EXPRESS INC	# MAR	7.6	7.7	7.5	7.0	9.0	21.7	23.7	20.9	16.9	19.8	24.0	26.8	23.6	18.7	21.5
PCLN	PRICELINE GROUP INC	DEC	28.7	27.9	27.0	24.3	17.1	19.1	22.2	26.9	30.7	22.3	31.3	35.0	43.9	48.2	33.7
TRIP	TRIPADVISOR INC	DEC	18.1	21.7	25.4	27.9	28.6	13.2	14.8	18.2	22.8	NA	22.7	25.8	38.0	42.7	NA

Note: Data as originally reported. ‡S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.

			Current Ratio					Debt / Capital Ratio (%)					Debt as a % of Net Working Capital				
Ticker	Company	Yr. End	2014	2013	2012	2011	2010	2014	2013	2012	2011	2010	2014	2013	2012	2011	2010
INTERNET SOFTWARE & SERVICES‡																	
AKAM	AKAMAI TECHNOLOGIES INC	DEC	3.8	3.9	3.6	7.6	5.9	16.9	0.0	0.0	0.0	0.0	65.1	0.0	0.0	0.0	0.0
BCOR	BLUCORA INC	DEC	5.0	1.5	3.1	8.2	5.8	34.2	16.5	13.5	0.0	0.0	89.4	81.3	48.0	0.0	0.0
SCOR	COMSCORE INC	DEC	1.2	1.3	1.2	1.1	1.1	6.9	6.3	3.2	3.4	4.6	47.9	30.4	23.5	95.6	135.6
TRAK	DEALERTRACK TECHNOLOGIES INC	DEC	2.9	2.4	2.9	2.3	6.9	41.2	20.2	20.0	0.0	0.0	251.4	125.4	94.3	0.1	0.1
DHX	DHI GROUP INC	DEC	0.7	0.7	0.8	1.0	0.9	35.8	39.1	18.3	4.6	15.8	NM	NM	NM	NM	NM
EBAY	EBAY INC	DEC	1.5	1.8	2.0	1.9	2.4	25.4	14.8	16.4	7.8	8.9	75.3	38.7	39.2	25.7	22.8
FB	FACEBOOK INC	DEC	9.6	11.9	10.7	5.1	5.8	0.3	1.5	14.5	7.5	14.5	1.0	2.0	19.5	10.7	19.8
GOOG	GOOGLE INC	DEC	4.8	4.6	4.2	5.9	4.2	2.9	2.4	3.9	4.9	0.0	5.1	3.9	6.5	6.8	0.0
JCOM	J2 GLOBAL INC	DEC	4.1	3.4	4.8	3.7	2.0	40.2	24.9	27.8	0.0	0.0	121.9	89.6	82.1	0.0	0.0
LQDT	LIQUIDITY SERVICES INC	SEP	1.7	1.9	1.5	2.9	2.2	0.0	0.0	11.3	0.0	0.0	0.0	0.0	60.2	0.0	0.0
LPSN	LIVEPERSON INC	DEC	1.6	3.0	3.8	4.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOGM	LOGMEIN INC	DEC	1.7	1.9	2.6	2.9	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MWW	MONSTER WORLDWIDE INC	DEC	1.0	1.0	1.0	0.9	0.9	32.4	13.2	14.2	0.0	3.4	NM	NM	NM	NM	NM
EGOV	NIC INC	DEC	2.5	2.0	2.0	1.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
QNST	QUINSTREET INC	JUN	2.7	2.7	2.5	3.3	3.4	29.1	21.7	21.4	21.3	21.2	53.9	69.6	89.3	59.1	50.3
RAX	RACKSPACE HOSTING INC	DEC	1.5	1.7	1.7	1.1	1.0	9.4	2.2	6.4	9.8	12.9	82.0	13.9	36.7	281.9	NM
STMP	STAMPS.COM INC	DEC	2.0	6.3	3.1	5.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VRSN	VERISIGN INC	DEC	0.8	0.9	2.4	2.2	3.3	-561.9	229.7	64.9	74.4	37.1	NM	NM	73.6	87.5	38.1
XOXO	XO GROUP INC	DEC	4.0	4.2	3.8	4.3	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YHOO	YAHOO INC	DEC	2.1	3.7	4.4	2.9	2.7	2.9	7.7	0.0	0.0	0.0	22.6	30.1	NM	NM	NM
INTERNET RETAIL‡																	
AMZN	AMAZON.COM INC	DEC	1.1	1.1	1.1	1.2	1.3	51.5	33.4	31.9	15.4	8.5	385.7	315.0	167.0	54.5	19.0
NILE	BLUE NILE INC	DEC	1.0	1.2	1.0	1.2	1.3	3.4	1.4	4.2	1.9	1.5	NM	2.5	NM	3.4	2.1
EXPE	EXPEDIA INC	DEC	0.7	0.7	0.9	0.9	0.9	38.4	29.8	32.4	33.5	36.0	NM	NM	NM	NM	NM
FTD	FTD COMPANIES INC	DEC	1.0	1.1	1.0	1.1	NA	28.2	38.8	40.7	43.6	NA	NM	NM	NM	NM	NA
NFLX	NETFLIX INC	DEC	1.5	1.4	1.3	1.5	1.6	33.3	28.4	35.6	40.2	44.7	72.7	58.5	72.9	71.3	92.8
NTRI	NUTRISYSTEM INC	DEC	1.5	1.5	1.9	2.9	2.9	0.0	0.0	0.0	28.6	28.6	0.0	0.0	0.0	39.3	40.5
PETS	PETMED EXPRESS INC	# MAR	10.8	9.2	7.8	9.3	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PCLN	PRICELINE GROUP INC	DEC	3.8	5.4	3.9	2.8	4.2	28.6	19.4	17.5	0.0	19.9	99.0	28.6	20.9	0.0	32.0
TRIP	TRIPADVISOR INC	DEC	2.0	2.6	3.2	2.1	1.2	18.3	25.5	31.5	55.1	0.0	71.0	77.4	77.8	256.9	0.0

Note: Data as originally reported. ‡S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.

Ticker	Company	Yr. End	Price / Earnings Ratio (High-Low)					Dividend Payout Ratio (%)					Dividend Yield (High-Low, %)				
			2014	2013	2012	2011	2010	2014	2013	2012	2011	2010	2014	2013	2012	2011	2010
INTERNET SOFTWARE & SERVICES‡																	
AKAM	AKAMAI TECHNOLOGIES INC	DEC	35 - 24	32 - 20	36 - 23	48 - 17	56 - 25	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
BCOR	BLUCORA INC	DEC	NM - NM	51 - 24	33 - 19	14 - 9	47 - 25	NM	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
SCOR	COMSCORE INC	DEC	NM - NM	NM - NM	NM - NM	NM - NM	NM - NM	NM	NM	NM	NM	NM	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
TRAK	DEALERTRACK TECHNOLOGIES INC	DEC	NM - NM	NM - NM	67 - 49	18 - 9	NM - NM	NM	0	0	0	NM	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
DHX	DHI GROUP INC	DEC	22 - 12	36 - 24	18 - 11	36 - 14	49 - 18	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
EBAY	EBAY INC	DEC	NM - NM	26 - 22	26 - 15	14 - 11	23 - 14	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
FB	FACEBOOK INC	DEC	73 - 46	94 - 37	NM - NM	NA - NA	NA - NA	0	0	0	NA	NA	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	NA - NA	NA - NA
GOOG	GOOGLE INC	DEC	56 - 24	31 - 19	23 - 17	21 - 16	24 - 16	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
JCOM	J2 GLOBAL INC	DEC	25 - 16	24 - 13	13 - 9	13 - 10	17 - 10	42	42	33	16	0	2.7 - 1.7	3.2 - 1.7	3.7 - 2.6	1.6 - 1.2	0.0 - 0.0
LQDT	LIQUIDITY SERVICES INC	SEP	28 - 8	34 - 16	42 - 20	53 - 17	39 - 23	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
LPSN	LIVEPERSON INC	DEC	NM - NM	NM - NM	NM - NM	65 - 40	69 - 32	NM	NM	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
LOGM	LOGMEIN INC	DEC	NM - 94	NM - NM	NM - NM	NM - NM	52 - 18	0	NM	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
MWW	MONSTER WORLDWIDE INC	DEC	NM - NM	NM - NM	20 - 10	59 - 14	NM - NM	NM	0	0	0	NM	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
EGOV	NIC INC	DEC	42 - 25	53 - 32	42 - 25	41 - 27	35 - 21	85	71	62	71	196	3.3 - 2.0	2.3 - 1.3	2.5 - 1.5	2.7 - 1.7	9.3 - 5.6
QNST	QUINSTREET INC	JUN	NM - NM	NM - NM	42 - 20	42 - 14	46 - 21	NM	NM	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
RAX	RACKSPACE HOSTING INC	DEC	62 - 34	NM - 52	96 - 52	79 - 50	88 - 41	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
STMP	STAMPS.COM INC	DEC	22 - 12	18 - 8	14 - 8	19 - 6	43 - 23	0	0	0	0	526	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	22.7 - 12.2
VRSN	VERISIGN INC	DEC	22 - 17	16 - 10	25 - 16	45 - 32	95 - 54	0	0	0	327	769	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	10.2 - 7.3	14.1 - 8.1
XOXO	XO GROUP INC	DEC	NM - NM	66 - 37	29 - 21	58 - 32	95 - 63	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
YHOO	YAHOO INC	DEC	7 - 4	32 - 15	6 - 4	23 - 14	21 - 14	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
INTERNET RETAIL‡																	
AMZN	AMAZON.COM INC	DEC	NM - NM	NM - NM	NM - NM	NM - NM	72 - 41	NM	0	NM	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
NILE	BLUE NILE INC	DEC	59 - 29	56 - 33	70 - 36	81 - 38	66 - 42	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
EXPE	EXPEDIA INC	DEC	30 - 20	40 - 26	28 - 12	28 - 11	20 - 12	21	32	42	23	19	1.1 - 0.7	1.2 - 0.8	3.4 - 1.5	2.1 - 0.9	1.5 - 0.9
FTD	FTD COMPANIES INC	DEC	31 - 23	55 - 44	NA - NA	NA - NA	NA - NA	0	NA	NA	NA	NA	0.0 - 0.0	NA - NA	NA - NA	NA - NA	NA - NA
NFLX	NETFLIX INC	DEC	NM - 67	NM - 47	NM - NM	71 - 15	68 - 16	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
NTRI	NUTRISYSTEM INC	DEC	30 - 20	79 - 28	NM - NM	51 - 24	28 - 13	104	269	NM	159	61	5.1 - 3.5	9.7 - 3.4	9.7 - 4.5	6.7 - 3.1	4.6 - 2.2
PETS	PETMED EXPRESS INC	# MAR	19 - 14	20 - 12	16 - 11	22 - 11	26 - 16	78	73	186	65	51	5.6 - 4.1	6.0 - 3.7	17.5 - 11.4	6.2 - 2.9	3.2 - 1.9
PCLN	PRICELINE GROUP INC	DEC	30 - 22	32 - 17	27 - 16	26 - 19	39 - 16	0	0	0	0	0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
TRIP	TRIPADVISOR INC	DEC	70 - 42	63 - 29	34 - 18	23 - 18	NA - NA	0	0	0	0	NA	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	NA - NA

Note: Data as originally reported. ‡S&P 1500 index group. ¶Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.

Ticker	Company	Yr. End	Earnings per Share (\$)					Tangible Book Value per Share (\$)					Share Price (High-Low, \$)									
			2014	2013	2012	2011	2010	2014	2013	2012	2011	2010	2014		2013		2012		2011		2010	
INTERNET SOFTWARE & SERVICES†																						
AKAM	AKAMAI TECHNOLOGIES INC	DEC	1.87	1.65	1.15	1.09	0.97	9.88	10.05	8.61	9.34	8.91	65.39 -	45.59	53.61 -	32.63	41.88 -	25.90	52.72 -	18.25	54.65 -	24.50
BCOR	BLUCORA INC	DEC	(0.86)	0.59	0.56	0.83	0.26	0.13	(0.31)	1.28	7.82	7.01	29.33 -	12.97	30.12 -	14.25	18.63 -	10.67	11.95 -	7.83	12.16 -	6.62
SCOR	COMSCORE INC	DEC	(0.29)	(0.07)	(0.35)	(0.49)	(0.05)	1.64	1.78	1.46	1.03	0.93	48.16 -	25.98	29.86 -	13.84	23.93 -	11.30	31.28 -	12.50	24.47 -	12.64
TRAK	DEALERTRACK TECHNOLOGIES INC	DEC	(0.33)	0.14	0.48	1.58	(0.69)	(10.58)	1.95	3.19	3.83	5.40	58.84 -	36.43	50.30 -	26.28	31.98 -	23.31	28.46 -	14.01	21.27 -	13.33
DHX	DHI GROUP INC	DEC	0.53	0.29	0.62	0.52	0.30	(2.64)	(2.70)	(1.27)	(0.36)	(1.00)	11.49 -	6.50	10.43 -	6.83	10.99 -	6.95	18.75 -	7.02	14.82 -	5.55
EBAY	EBAY INC	DEC	0.04	2.20	2.02	2.50	1.38	8.37	10.39	8.66	6.34	6.60	59.70 -	46.34	58.04 -	48.06	53.15 -	29.55	35.35 -	26.86	31.64 -	19.06
FB	FACEBOOK INC	DEC	1.12	0.62	0.02	0.47	0.28	5.07	5.40	4.37	3.10	1.24	82.17 -	51.85	58.58 -	22.67	45.00 -	17.55	NA -	NA -	NA -	NA
GOOG	GOOGLE INC	DEC	20.55	18.30	16.44	15.04	13.31	123.59	103.56	81.15	75.54	60.43	1,141.67 -	487.66	558.97 -	346.81	386.13 -	277.50	322.49 -	235.86	314.56 -	216.22
JOOM	J2 GLOBAL INC	DEC	2.60	2.31	2.63	2.46	1.86	(2.68)	0.55	0.48	3.80	1.11	64.05 -	41.09	56.24 -	30.49	33.37 -	23.55	32.67 -	25.15	30.96 -	18.79
LQDT	LIQUIDITY SERVICES INC	SEP	0.97	1.30	1.57	0.75	0.44	3.04	2.36	0.96	4.06	2.58	27.33 -	7.41	44.40 -	20.37	66.57 -	31.00	39.76 -	12.58	17.32 -	10.00
LPSN	LIVEPERSON INC	DEC	(0.13)	(0.06)	0.11	0.23	0.18	1.18	2.08	2.18	2.08	1.52	15.24 -	8.84	15.19 -	8.03	19.60 -	11.37	14.95 -	9.18	12.43 -	5.71
LOGM	LOGMEIN INC	DEC	0.33	(0.32)	0.14	0.24	0.91	4.79	5.47	6.42	5.92	5.41	53.38 -	31.08	34.56 -	16.12	42.95 -	18.74	49.50 -	26.74	47.54 -	16.71
MWW	MONSTER WORLDWIDE INC	DEC	(3.29)	0.03	0.52	0.44	(0.27)	(1.71)	(1.41)	(0.36)	(0.17)	(0.50)	8.50 -	3.41	7.30 -	4.02	10.40 -	5.01	25.90 -	6.34	25.01 -	10.01
EGOV	NIC INC	DEC	0.59	0.49	0.40	0.35	0.28	1.56	1.39	1.21	1.00	0.81	24.97 -	15.00	25.99 -	15.51	16.83 -	9.95	14.48 -	9.39	9.81 -	5.90
QNST	QUINSTREET INC	JUN	(3.36)	(1.57)	0.28	0.59	0.46	1.32	1.82	0.53	1.64	1.87	9.09 -	3.78	9.71 -	5.41	11.90 -	5.66	24.91 -	8.43	21.38 -	9.79
RAX	RACKSPACE HOSTING INC	DEC	0.78	0.63	0.78	0.59	0.37	6.93	6.73	5.45	3.89	2.93	48.48 -	26.18	81.36 -	32.62	74.78 -	40.57	46.49 -	29.52	32.69 -	15.15
STMP	STAMPS.COM INC	DEC	2.30	2.81	2.40	1.78	0.38	7.41	10.55	7.29	5.76	2.99	51.07 -	27.18	49.40 -	22.35	33.29 -	18.62	33.73 -	10.95	16.45 -	8.81
VRSN	VERISIGN INC	DEC	2.80	3.77	1.99	0.84	0.39	(7.90)	(3.56)	(0.40)	(0.89)	3.60	62.96 -	46.45	59.89 -	37.55	50.15 -	32.81	37.73 -	27.00	37.18 -	21.21
XOXO	XO GROUP INC	DEC	0.02	0.24	0.35	0.21	0.11	4.29	4.22	3.91	3.77	4.79	18.60 -	8.82	15.78 -	8.81	10.04 -	7.22	12.18 -	6.67	10.49 -	6.90
YHOO	YAHOO INC	DEC	7.61	1.30	3.31	0.82	0.91	35.34	7.86	9.49	7.05	6.59	52.62 -	32.15	41.05 -	18.89	19.97 -	14.35	18.84 -	11.09	19.12 -	12.94
INTERNET RETAIL‡																						
AMZN	AMAZON.COM INC	DEC	(0.52)	0.60	(0.09)	1.39	2.58	14.32	14.04	10.83	11.33	10.98	408.06 -	284.00	405.63 -	245.75	264.11 -	172.00	246.71 -	160.59	185.65 -	105.80
NILE	BLUE NILE INC	DEC	0.80	0.87	0.64	0.80	0.98	1.15	3.13	1.11	2.53	3.36	47.22 -	23.10	49.13 -	28.90	44.99 -	22.94	64.45 -	30.32	64.38 -	40.70
EXPE	EXPEDIA INC	DEC	3.09	1.73	2.26	2.39	2.98	(27.24)	(20.27)	(11.50)	(10.64)	(12.90)	92.08 -	62.76	69.76 -	45.69	62.80 -	28.02	65.78 -	27.28	59.70 -	36.60
FTD	FTD COMPANIES INC	DEC	1.18	0.67	1.17	0.87	NA	(13.79)	(11.82)	NA	NA	NA	37.14 -	27.60	36.99 -	29.42	NA -	NA	NA -	NA	NA -	NA
NFLX	NETFLIX INC	DEC	4.44	1.93	0.31	4.28	3.06	30.75	22.37	13.40	11.60	5.47	489.29 -	299.50	389.16 -	90.69	133.43 -	52.81	304.79 -	62.37	209.24 -	48.52
NTRI	NUTRISYSTEM INC	DEC	0.67	0.26	(0.10)	0.44	1.14	1.93	1.82	2.10	2.66	2.67	19.97 -	13.62	20.54 -	7.18	15.55 -	7.21	22.64 -	10.45	31.90 -	15.26
PETS	PETMED EXPRESS INC	# MAR	0.87	0.90	0.86	0.81	0.93	3.68	3.43	3.14	3.95	4.31	16.75 -	12.07	17.75 -	11.01	14.03 -	9.15	18.04 -	8.51	24.63 -	14.68
PCLN	PRICELINE GROUP INC	DEC	46.30	37.17	28.48	21.27	11.00	55.95	79.25	63.49	37.54	21.78	1,378.96 -	1,017.28	1,198.75 -	627.67	774.96 -	469.28	561.88 -	402.25	428.10 -	173.32
TRIP	TRIPADVISOR INC	DEC	1.58	1.44	1.39	1.33	1.04	1.24	2.18	1.52	(1.63)	NA	111.24 -	67.14	90.43 -	42.04	47.81 -	24.57	30.62 -	23.99	NA -	NA

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J-This amount includes intangibles that cannot be identified.

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