Technology Institute
August 2014

Benchmarking of
technology company
disclosures

Stay informed
2014 technology
financial reporting trends

pwc
# Table of contents

- **Message from Cory Starr** 2
- **Methodology** 3
- **Management’s discussion & analysis** 3
  - Non-GAAP measures 4
  - Operating metrics 7
  - Backlog and deferred revenue 9
  - Operating expenses 10
  - Liquidity and income taxes 11
  - Social media 13
  - Disclosure effectiveness 14
  - Critical accounting policies and estimates 16
- **Risk factors** 18
- **Financial statement presentation and disclosures** 20
  - ICFR reporting 20
  - Revenue recognition 21
  - Goodwill impairment 23
  - Segment and geographical disclosures 25
  - Fair value of financial instruments 26
  - Earnings per share 28
  - Stock-based compensation 29
- **Acknowledgments** 30
- **About PwC’s Technology Institute** 30
- **PwC can help** 31
Message from Cory Starr

To our clients and friends:

With the continued focus on high-quality financial reporting as well as the importance of transparency in communicating with investors and other stakeholders, companies, more than ever, need to strike a balance between providing the right information and too much information. Over the past year, we have heard messages from regulators and standard setters that more isn’t always better; it’s about “getting it right” and that means preparers should concentrate on clear and understandable disclosures that are both relevant and material.

We are pleased to introduce this inaugural publication, which focuses on financial reporting trends in the technology sector.

We analyzed the annual and periodic filings of 135 registrants in the software & internet, computers & networking, and semiconductors subsectors posted on EDGAR from April 1, 2013 to March 31, 2014. We hope our benchmarking study provides useful and thought-provoking insights that will aid you in the preparation of your upcoming filings.

Please don’t hesitate to reach out to your engagement teams and the PwC contacts listed at the end of our study to discuss this information in more detail.

Best regards,

Cory Starr
US Technology Assurance Leader
Methodology

This financial reporting trends study was based on an analysis of registrant filings posted to the US Securities and Exchange Commission’s (SEC) EDGAR website from April 1, 2013 to March 31, 2014, by 135 technology companies reporting under accounting principles generally accepted in the United States (US GAAP or GAAP) on Forms 10-K and 10-Q. We analyzed disclosures primarily included in annual filings on Form 10-K and some limited information from quarterly filings on Form 10-Q and current reports on Form 8-K. Companies were grouped into one of three subsectors by the following SIC codes:

- **software & internet**—7370, 7371, 7372, 7373, 7374, and 7389
- **computers & networking**—3570, 3571, 3572, 3576, 3577, 3578, 3661, 3663, 3669, 3812, 3825, 3861, 4899, 5045, and 5065
- **semiconductors**—3670, 3672, 3674, and 3679

The study included an even distribution of companies within each of the aforementioned subsectors with an equal representation of companies with revenues below $500 million, between $500 million–$1.0 billion and greater than $1.0 billion.
Registrants in the technology sector frequently use non-GAAP measures to describe the performance and liquidity of their business. Authoritative guidance for the use of non-GAAP measures is provided mainly in Regulation G and Item 10(e) of Regulation S-K and includes requirements to provide a reconciliation between the non-GAAP measure and the most directly comparable GAAP measure, to present the most directly comparable GAAP measure with equal or greater prominence than the non-GAAP measure, and to disclose the reasons why management believes that the non-GAAP measure is useful to investors. While there is no new authoritative guidance in this area, the use of non-GAAP measures remains an area of focus in SEC comment letters to ensure that the disclosure requirements are followed.

The results of our study indicate that while only 38% of technology companies disclose non-GAAP measures in their Form 10-K filings, nearly all (93%) include one or more non-GAAP measures in their earnings release. A deeper look at the subsectors reveals that software & internet companies have a higher propensity to report non-GAAP measures in their Form 10-K filings with 58%, compared to 33% of computers & networking companies and just 24% of semiconductor companies.

Furthermore, we found that even when registrants disclose non-GAAP measures in their Form 10-K filings, they tend to include more such measures in their earnings releases (an average of four as compared to two).
The most commonly reported non-GAAP measures include non-GAAP earnings per share, net income, operating income, gross profit, adjusted EBITDA, and free cash flow. This was consistent across all subsectors included in the study.
Non-GAAP performance measures exclude one or more income or expense items from a corresponding GAAP measure. The technology companies in our survey most frequently exclude the following items from their GAAP operating results: share-based compensation expense, amortization of acquired intangible assets, restructuring charges, and acquisition, integration, and divestiture related costs.

**Top 10 non-GAAP adjustments:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share-based compensation expense</td>
<td>105</td>
</tr>
<tr>
<td>Amortization of acquired intangible assets</td>
<td>90</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>73</td>
</tr>
<tr>
<td>Acquisition, integration and divestiture-related costs</td>
<td>66</td>
</tr>
<tr>
<td>Significant tax matters</td>
<td>60</td>
</tr>
<tr>
<td>Goodwill, intangible and other impairment losses</td>
<td>46</td>
</tr>
<tr>
<td>Acquisition-related adjustments*</td>
<td>33</td>
</tr>
<tr>
<td>Debt-related items</td>
<td>30</td>
</tr>
<tr>
<td>Legal expenses, settlement gains/losses</td>
<td>29</td>
</tr>
<tr>
<td>Gain/loss on investments/assets</td>
<td>29</td>
</tr>
</tbody>
</table>

*Includes fair value adjustments to revenue, inventory and contingent consideration.
Operating metrics

Operating metrics provide insight to investors into how management evaluates and measures a company’s performance. When using such operating metrics in their filings, the SEC expects companies to define the metric, describe how it is calculated, discuss any limitations, and, importantly, explain how the metric links back to the financial statements. SEC Chair Mary Jo White commented recently that technology companies use “unique financial or operating metrics to illustrate the size and growth of their businesses.” Examples of such metrics include “the number of users, the number of players of an online game, or the number of people who “liked” the company.” The SEC staff’s concern is that some of these metrics may be quantitatively very large and that it may be misleading for investors to think that such numbers will translate into increased profits in the future. For example, a company may report significant growth in customers but only a small fraction of them may be paying customers and, therefore, there may be minimal direct impact on the company’s financial performance. In this scenario, the SEC staff may request further breakdown of the customer growth separately by paying and non-paying customers.

Our survey shows that nearly 45% of software & internet companies use one or more operating metrics, while both computers & networking and semiconductor companies are significantly lower at 16% and 13%, respectively. Overall, about 25% of technology companies use one or more operating metrics in their Form 10-K.

We found that the operating metrics commonly used by technology companies fall within a few different broad categories. In the category of number of customers, we saw metrics such as number of users, subscribers, and unique visitors. While not as frequent, revenue per customer metrics include revenue per user, revenue per subscriber, and variations such as daily, monthly and even lifetime revenue per customer. Continuing with the customer-centric theme, another category looks at how often customers come back to buy the goods or services of the company. Customer retention metrics include churn, customer retention rate, and recurring revenues.
The SEC's disclosure rules regarding management’s discussion and analysis of financial condition and results of operations (MD&A) require companies to discuss significant changes in revenue attributable to pricing and volume. Some operating metrics are designed primarily to provide insight into how the company’s pricing changes from period to period. Interestingly, all of these were in the software & internet subsector and include revenue per click, ad, or download. On the volume side, we saw various metrics used, including unit sales, number of impressions, transaction count, and ads sold.

About 10% of the companies in our study from all technology subsectors use an operating metric called bookings, usually defined as firm orders or new contracts, in their Form 10-K filings. Another operating metric worth pointing out is the book-to-bill ratio, which is primarily used in the semiconductor subsector (four of the companies we surveyed used this metric). It is usually defined as the ratio of orders received to units shipped and billed during a period. A ratio of above 1 implies that more orders were received than filled, indicating strong demand, while a ratio below 1 implies weaker demand.
Investors and analysts reading a registrant’s filing are primarily focused on the company’s ability to generate future cash flows. One of the indicators that they look to is backlog—a quantification of customer orders received but not yet filled and, therefore, not yet recognized into revenue. The SEC’s Regulation S-K requires registrants to disclose the dollar amount of firm backlog orders. Depending on the company’s contracting practices, this disclosure may not be material. For example, some companies operate only with very short-term purchase orders rather than with contracts covering purchases for an extended period of time, such as months or even years. Although often cancelable, the amount of backlog disclosed provides some visibility to investors into the company’s revenue for the upcoming year.

Not surprisingly, the results of our benchmarking study indicated that only 22% of software & internet companies disclosed backlog information. Almost twice as many (42%) semiconductor companies disclosed backlog, with computers & networking companies coming in at 31%. In order to compare the relative size of the backlog reported, we looked at backlog as a percentage of the company’s most recent year’s revenues. This ratio was quite high for both software & internet, and computer & networking companies at 66% and 59%, respectively. In contrast, semiconductor companies reported much lower backlog of about 30% on average. The lower backlog likely reflects, in part, the continuing decline in semiconductor revenues, which, for the companies we surveyed, decreased nearly 4% over the past three years. The range of backlog across all companies in the survey was very wide, with the lowest being 5% and the highest 251%.

Similar to backlog, deferred revenue is another metric in a company’s filing that provides a glimpse into future revenues. Deferred revenue is recognized on a company’s balance sheet and reflects amounts billed or even collected, for which the service has not yet been performed or the product has not yet been shipped. It is not uncommon for analysts to ask questions about the nature and changes in deferred revenue balances. A growing deferred revenue balance may be indicative of future revenue growth, although understanding how that balance unwinds into revenue is essential for investors to make accurate projections about the company’s future performance. Some of the best practices we identified in this regard included providing a breakdown of the various components within deferred revenue, by revenue stream or by product or service. About 16% of the companies surveyed included such an analysis either in their MD&A or in the notes to the financial statements. An even smaller number of registrants (about 7%) provided a rollforward of deferred revenue, showing how the balance changed from the prior year-end by quantifying separately revenues earned during the year and new additions to deferred revenue.
Investment in R&D is the lifeblood of technology companies—it enables companies to stay competitive and increase productivity. Maintaining a high level of R&D activities supports a company’s future growth by developing new products or processes to improve and expand its operations. We saw an increase in R&D expenses as a percent of revenue across all three subsectors—nearly 200 basis points for semiconductors and about 30 basis points for the other subsectors. Interestingly, semiconductors also had the highest absolute percentage of all subsectors—an average of 17.7% of revenue in 2013 while computers & networking had the lowest at 11.1% of revenue in 2013, although that appears to be a reflection of the significant pricing pressures experienced in the semiconductor subsector over the last couple of years. These have resulted in an average 3.7% decline in semiconductor revenues since 2011 compared to an average 10.7% increase in computers & networking, and 23% increase in revenue on average for software & internet companies.

In addition to backlog and deferred revenue, analysts and investors also compare performance across companies on metrics such as cost of sales, selling, general and administrative (SG&A) expenses, and research and development (R&D) expenses as a percentage of revenue.

In our study, we compared how such ratios changed by subsector over the course of the past three years. Starting with the software & internet subsector, we noted decreases in the averages of both cost of revenues and SG&A expenses as a percent of revenue by about 70 to 80 basis points over the three-year period. In the computers & networking subsector, we saw cost of sales as a percent of revenues remain flat, although SG&A as a percent of revenue increased by 100 basis points on average.

### Expense trend as a % of revenue by subsector:

<table>
<thead>
<tr>
<th>Subsector</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computers &amp; Networking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Revenue</td>
<td>53.2%</td>
<td>52.8%</td>
<td>52.7%</td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>27.3%</td>
<td>27.1%</td>
<td>28.3%</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>10.5%</td>
<td>10.7%</td>
<td>11.0%</td>
</tr>
<tr>
<td><strong>Software &amp; Internet</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Revenue</td>
<td>33.5%</td>
<td>33.6%</td>
<td>32.8%</td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>39.6%</td>
<td>39.0%</td>
<td>38.8%</td>
</tr>
<tr>
<td><strong>Semiconductors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Revenue</td>
<td>56.7%</td>
<td>58.6%</td>
<td>58.9%</td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>15.4%</td>
<td>16.1%</td>
<td>16.6%</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>15.8%</td>
<td>17.1%</td>
<td>17.7%</td>
</tr>
</tbody>
</table>
Liquidity and income taxes

In the current volatile economic environment, transparent disclosure with respect to liquidity is critically important to investors. Discussion of liquidity is required by Section 303 of Regulation S-K. Further guidance is provided in Financial Reporting Release No. 72. The discussion should include sources of liquidity and known trends, or events that may impact a company’s liquidity position on both a short-term and long-term basis. A discussion of working capital and other metrics used for assessing a company’s liquidity position may be useful. In that regard, we believe a best practice is to provide analysis of key working capital metrics such as days’ sales outstanding (DSO), days in inventory or inventory turns, and days in payables. Of the companies surveyed, 25% disclosed and analyzed the change in their DSO, while only 4% addressed the changes in days in payables. Of those registrants surveyed that had inventory, 25% disclosed days in inventory or inventory turns and how it impacted their working capital.

Many companies in the technology sector have a far-reaching global footprint and there are certain related income tax considerations that could impact their liquidity disclosures. For example, companies must record deferred taxes with respect to undistributed foreign earnings unless they can demonstrate the ability and intent to reinvest such foreign earnings indefinitely. When an indefinite reinvestment assertion is made, companies are expected to disclose the amount of unrecognized deferred tax liability on undistributed earnings or state that such quantification is not practicable and why. The SEC staff also frequently asks registrants to quantify the amount of cash balances held overseas to highlight the fact that those amounts may be unavailable to fund domestic obligations without incurring significant tax liabilities. Eighty-seven percent of the companies surveyed made a permanent reinvestment assertion with respect to all or part of undistributed foreign earnings. Of those, 23% quantified the potential deferred tax liability upon repatriation, 58% stated it was impracticable to do so, with the remainder being silent. A significant majority of these companies, 72%, disclosed their cash balances held overseas.

% of companies disclosing key working capital metrics:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days’ sales outstanding</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Days in inventory/inventory turns</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Days in payables</td>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Liquidity and income taxes

Of registrants asserting indefinite reinvestment, % disclosing tax impact:

<table>
<thead>
<tr>
<th></th>
<th>Quantified</th>
<th>Not practicable</th>
<th>Not disclosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>23%</td>
<td>58%</td>
<td>19%</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>15%</td>
<td>64%</td>
<td>21%</td>
</tr>
<tr>
<td>Software &amp; Internet</td>
<td>31%</td>
<td>51%</td>
<td>18%</td>
</tr>
<tr>
<td>Total</td>
<td>24%</td>
<td>58%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Of registrants asserting indefinite reinvestment, % disclosing the amount of cash held domestically versus internationally:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>Software &amp; Internet</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Total</td>
<td>76%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Foreign jurisdictions may sometimes offer tax holidays to registrants in order to entice them to make significant financial investments, which could lead to considerable benefits for the local economy. Such tax holidays are typically for a set period of time and their renewal is subject to meeting certain investment or employment conditions.

If and when the tax holidays expire, a company’s tax expense will normally increase, which would impact both cash flows and net income. We found that 22% of companies surveyed enjoyed such beneficial tax rates, with 86% of those companies disclosing the per share or aggregate dollar benefit of such holidays on the income statement.
Social media

Social media is everywhere. While this phenomenon may have started as a way for individuals to communicate with each other, more and more companies use social media channels to promote their business. Not only is it now an indispensable marketing tool, but in July 2012, social media saw its first major use as a way to communicate significant information to investors. The chief executive officer of Netflix announced that monthly viewing exceeded one billion hours for the first time in the company’s history. This wouldn’t be so unusual, if it weren’t for the fact that the announcement was made on the CEO’s personal Facebook page.

The ensuing SEC investigation determined that while the use of social media channels for communicating with investors is not prohibited, such communications (like any others) must be analyzed for compliance with Regulation FD. Companies have to be cognizant of how they distribute significant information to investors and other stakeholders. Specifically, it must be provided in a manner reasonably designed to achieve broad and non-selective distribution to the public. The SEC’s investigation concluded that registrants should take sufficient steps to alert investors as to the specific social media channels they intend to use to disseminate material information. What steps are sufficient and how the communication should be made was not specifically prescribed.

Interestingly, our study found that, although clearly not common practice, three of the companies surveyed disclosed in their filings on Form 10-K the specific social media accounts they use to communicate with their investors and the public on Facebook, Twitter, or LinkedIn.
Disclosure effectiveness

There has been a lot of discussion over the past year about disclosure effectiveness and how investors can get the right information at the right time and without unnecessary clutter that detracts from the key messages. Representatives from the SEC and standard setters have reiterated that more is not always better. Instead, preparers should focus on clear, transparent and understandable disclosures that are both relevant and material to the investor. In practice, many companies tend to add disclosures and keep disclosures long after they are no longer relevant (such as disclosures added in response to a SEC Staff comment letter issued many reporting cycles earlier).

As mandated by the Jumpstart Our Business Startups (JOBS) Act, the SEC staff completed a comprehensive review of its non-financial statement disclosure requirements included in Regulation S-K to determine how those requirements could be simplified and modernized, while simultaneously reducing the cost of compliance for emerging growth companies (EGCs). Even though this review was specifically required for EGC disclosures, it has presented an opportunity for improving the disclosure system for all public companies alike by decreasing repetition, eliminating outdated information, and potentially reducing costs. Furthermore, the SEC staff has expanded the scope of its review to certain discrete areas within Regulation S-X, which governs financial statement disclosures. The Financial Accounting Standards Board (FASB) has also been working on a Disclosure Framework project for the past couple of years focused on the disclosures in the notes to the financial statements. The objective is clear—companies need to look for ways to cut down on unnecessary disclosures that clutter their filings and potentially divert the reader’s attention away from the really important information.
In light of this recent focus on disclosure overload, our study analyzed four areas that present an opportunity to avoid duplicative disclosures. We found that over 36% of technology companies surveyed disclose more than 40 risk factors with one company disclosing 62. Companies can eliminate boilerplate risk factors that could apply to any company or any industry and are not specific to the company itself. Furthermore, we found that over half of the companies surveyed repeated all of their risk factors in their quarterly filings on Form 10-Q, even though the requirement is to disclose only significant changes from the most recent annual filing.

Only 30% of technology companies surveyed cross-reference their disclosure of legal proceedings in Item 3 of Form 10-K to the contingencies disclosure in the notes to the financial statements, while many others repeat the exact same disclosure twice in the filing. We found that rate increased when we looked at the disclosures of recent accounting pronouncements, with 55% of companies cross-referencing from MD&A to the notes to the financial statements.

Striking the right balance between the interests of preparers of financial statements and investors has always been a challenge but if done right, both preparers and investors mutually benefit, as companies may be in a position to reduce costs while simultaneously providing more relevant information to investors.
Registrants are required to discuss their most critical accounting policies and estimates, preparer judgments, and risks and uncertainties within MD&A. Financial Reporting Release No. 60 further clarifies the need for more robust and transparent discussion of critical accounting policies and the likelihood of materially different reported results if different assumptions or conditions were to occur. This differs from the requirement for disclosure of accounting policies within the footnotes to the financial statements, which is broader and covers all relevant accounting policies.

Given the aforementioned requirements, the results depicted in the table below are not surprising. The number of critical accounting policies disclosed in MD&A range from two to 16 and averaged seven. This compares to a significantly higher number of accounting policies in the notes to the financial statements, ranging from nine to 34, with an average of 17.

The top five critical accounting policies disclosed by registrants in our survey were:

- **revenue recognition**—including discussion of multiple-element arrangements, distributor sales, and deferred revenue;
- **income taxes**—mainly focused on deferred tax asset valuation allowances and uncertain tax positions;
- **goodwill and intangible assets**—primarily covering the impairment testing methodology and the key assumptions used;
- **stock-based compensation**—mostly discussing the judgments involved in determining the key inputs into the stock-option valuation model; and
- **inventory**—exclusively centered around the valuation of inventory and the process for estimating excess and obsolete inventory.

As expected, the only significant variance noted among subsectors was the absence of inventory from the software & internet subsector.
Top 10 critical accounting policies disclosed:

- **Business combinations**: 41
- **Contingencies**: 58
- **Fair value and financial instruments**: 74
- **Accounts receivable and allowances**: 92
- **Long-lived assets**: 102
- **Inventory**: 29
- **Stock-based compensation**: 42
- **Goodwill/Intangibles**: 56
- **Income tax**: 61
- **Revenue**: 61

---

**Number of registrants disclosing policy**

**Software & Internet** | **Computers & Networking** | **Semiconductors** | **Total**
The current economic and regulatory environment is uncertain, complex, and fast-changing, which is contributing to the increase in risks that a company needs to manage. When raising capital or providing periodic disclosures to existing investors, registrants have to disclose the risk factors that make their securities speculative or risky. Only the most significant factors need to be discussed and registrants should avoid disclosing risks that could apply to any issuer or any offering. Common categories of risk factors include industry risks, company risks, and investment risks.

Registrants in our study averaged 35 risk factors in their annual reports, with no discernable difference among subsectors in that regard. However, the range was very wide from a low of 12 risk factors all the way up to 62.

One of the emerging risks that many registrants, and particularly those in the technology sector, face is cybersecurity. Actual and attempted cyber-attacks may cause material immediate financial damage to a company and create reputational risks with a much longer-lasting impact. In 2011, the SEC issued guidance related to cybersecurity that covers disclosure in areas such as risk factors, management’s discussion and analysis, description of the business, legal proceedings, and the financial statements. More recently, the SEC staff has requested more detailed disclosures in cases where actual cyber-attacks have occurred, although this can present a tricky balance between providing transparent and meaningful disclosure and charting a roadmap for potential hackers. Almost 90% of all companies surveyed disclosed cybersecurity as a risk: 93 of them discussed it as a separate risk factor while 27 incorporated it in a broader information technology risk factor.
In August 2012, the SEC approved its final rule on conflict minerals as mandated by Section 1502 of the Dodd-Frank Act, which requires companies to disclose the source of certain minerals in their products, if known. Many technology companies are in the scope of this rule and began their compliance efforts during 2013, ahead of the initial reporting which was due by May 31, 2014. This rule created new risks for registrants, such as significant cost of compliance, reputational damage, loss of customers, and negative impact on pricing, sourcing, and availability of the specific minerals. Over 75% of semiconductor companies surveyed included a conflict minerals risk factor in their filings. Such a risk factor was found in approximately half of the filings in the computers & networking subsector and, as expected, in almost no filings by companies in the software & internet subsector.

Another risk this study reviewed was the risk of a potential failure to maintain effective internal control over financial reporting (ICFR). Forty-six percent of registrants included such a risk factor in their filings even though less than 5% had an actual material weakness in their internal control over financial reporting as of the end of the most recent fiscal year. See also the discussion related to certain other ICFR-related disclosures in the ICFR reporting section.
As the US stock markets have broken new records consistently over the past 18 months, mergers and acquisitions activity has heated up. Almost 60% of the technology companies surveyed completed one or more acquisitions during their most recent fiscal year. If a registrant completes a business combination during the year, the SEC does not object if management (and the auditor) excludes the acquired business from their report on internal control over financial reporting. This “grace period” cannot exceed 12 months from the date of the acquisition. Management must identify the acquired business excluded and indicate the significance of that business to the registrant’s consolidated financial statements. Even when registrants take advantage of this accommodation, they must disclose any material changes to their internal controls due to the acquisition and any known material weaknesses in the acquired business’s controls.

Only 18% of registrants that completed acquisitions during the year took advantage of the permitted exclusion. These acquisitions were completed anywhere from the first month all the way to the last month of the fiscal year. The significance of the excluded acquired businesses varied significantly, ranging from 0.3% to 32% of total assets and from 0.2% to 23% of total revenues.

Internal control over financial reporting continues to be a focus for the SEC staff. At the December 2013 AICPA conference on recent SEC and PCAOB developments, Brian Croteau from the SEC’s Office of the Chief Accountant expressed surprise at how rarely management identifies a material weakness that did not result in a material misstatement. This could indicate that either management’s assessment is not properly identifying material weaknesses or that the conclusions regarding the severity of identified deficiencies may be wrong. In the sample of companies we surveyed, only six registrants (less than 5%) reported ineffective internal control over financial reporting for their most recent fiscal year. Material weaknesses were identified in the areas of income taxes, derivative valuations, key reconciliations, inventory, deferred revenue, and business combinations. Only one material weakness resulted from a restatement. Other material weaknesses represented failures in the design or operation of controls, which could have, but did not actually lead to material misstatements in the financial statements.
Revenue recognition was unanimously the top critical accounting policy across all subsectors. Within this broad topic, there were a couple of specific areas that we benchmarked: multiple-element revenue arrangements and reseller arrangements.

**Multiple-element arrangements**

Technology companies often sell a combination of software, hardware, and services to their customers as part of a single arrangement. Eighty-one percent of technology companies surveyed within the software & internet, and computers & networking subsectors disclosed having multiple-element arrangements while only 22% of semiconductor companies did.

When companies enter into multiple-element arrangements that are not within the scope of software revenue recognition, companies are required to allocate arrangement consideration among deliverables using their best estimate of selling price (BESP) when vendor-specific objective evidence (VSOE) or third-party evidence (TPE) of the selling price is not available.

Establishing and maintaining VSOE can be challenging because the stand-alone selling price has to fall within an acceptable narrow range and this often requires extensive monitoring to ensure VSOE is maintained. Of the technology companies that disclosed having multiple-element arrangements, over 78% had VSOE for one or more of their deliverables. VSOE of selling price is defined as either the price charged for a deliverable when it is sold separately or, for a deliverable not yet being sold separately, the price established by management having the relevant authority.

About 38% of the companies reporting VSOE for one or more of their deliverables went on to describe the pricing range used to establish VSOE. We observed only a small number of companies (5%) disclosing in detail the volume and range of stand-alone sales used to establish VSOE.

As discussed above, the authoritative guidance describes a hierarchy that must be followed to establish the selling price of a deliverable, whereby, if VSOE does not exist, the next step is to determine whether TPE of selling price is available. Most of the companies surveyed were not able to establish TPE of selling price, citing differences in service and product offerings compared to competitors and other third-party vendors as well as the lack of relevant third-party pricing information. On the other hand, a majority (88%) disclosed using best estimate of selling price. Furthermore, approximately 78% of those companies provided a detailed discussion of the market and entity-specific factors and assumptions considered in developing its estimated selling price.

<table>
<thead>
<tr>
<th>% of companies with multiple-element arrangements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software &amp; Internet: 76% 24%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of companies using VSOE, TPE and BESP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSOE: 78% 22%</td>
</tr>
</tbody>
</table>
Reseller arrangements

In addition to selling directly to end customers, technology companies also sell their products through resellers, distributors, and channel partners. Such arrangements are particularly common for semiconductor companies that sell their products not only to original equipment manufacturers (OEMs) but also to electronic contract manufacturers (ECMs) and distributors. We refer to these collectively as reseller arrangements. Although less frequent, computers & networking and software & internet companies may also sell to resellers and distributors. Revenue from reseller arrangements may be recognized either upon the initial sale (often called the sell-in model) or it may be deferred until the distributor resells the product to an end customer (referred to as the sell-through model). The decision to use the sell-in model or the sell-through model is determined primarily by whether the selling price is fixed or determinable at the time of the initial sale. That, in turn, is generally dependent on the nature of the return rights given by the company to the reseller and whether the company is able to estimate reliably the expected returns at the time of the initial sale.

Approximately 66% of technology companies in the study report having reseller arrangements. Of those companies, semiconductor companies lead the way with 82%, software & internet companies are on the low end of the range at 47%, and computers & networking companies fall in between at around 69%. Of the semiconductor companies studied, 41% recognize revenue on a sell-in basis and 65% on a sell-through basis (the total exceeds 100% because some companies reported using different models for different reseller arrangements).
In 2011, new accounting guidance was introduced which provides companies with the option to perform a qualitative assessment of goodwill (informally referred to as Step 0) to determine whether further impairment testing is necessary. The purpose of this guidance was to address concerns about the cost and complexity of performing the quantitative goodwill impairment test. Although not explicitly required, the SEC staff often requests registrants to disclose which method was used and the specific factors considered in qualitative assessments. Our study looked at the timing of the annual impairment test, the type of test performed in the most recent year (quantitative or qualitative), and whether companies using the qualitative approach have “refreshed” the fair values of their reporting units quantitatively in subsequent years.

Goodwill is not amortized but is required to be tested for impairment at least annually. There is no prescribed timing for this test, although the timing should be consistent each year. When establishing the timing for the annual test, companies should consider the availability of information, the company’s budget cycle, and the time it takes to complete the test, among others factors. If the first day of a reporting period is the testing date and impairment is determined to exist, it could call into question whether an impairment should have been reported in the preceding period. We noted that an overwhelming majority of the companies surveyed (86%) perform their annual test during the fourth quarter of their fiscal year. While not all companies disclose the exact date as of which they perform their annual test, of those that provided such disclosure, almost half performed the test as of the first day of a quarterly period, while the rest performed their test as of the end of or during a quarterly period.
We found that 27% of companies elected to use the Step 0 approach for at least one of their reporting units. The more time that has elapsed since the most recent fair value calculation, the harder it may be to obtain sufficient comfort based on qualitative factors alone that goodwill is not more likely than not to be impaired. There is no specific guidance about how frequently this should be done, so it’s a matter of professional judgment for those performing the assessment. Nearly three years after the issuance of this guidance, our study found that 13% of companies performed a quantitative test in the most recent year after only qualitatively assessing goodwill for impairment in the prior year. Based on the disclosures provided, it did not appear that this was driven by an adverse change in facts and circumstances. We expect more companies using a qualitative assessment will update their fair values in the coming years.

% of companies performing different goodwill impairment tests:
Segment and geographical disclosures

Segment reporting is another area that consistently remains a source of comments from the SEC staff. The identification of operating segments is important in determining the reportable segments to be disclosed as well as in identifying the reporting units to be tested for goodwill impairment. When identifying operating segments, registrants need to assess their organizational structure and the information regularly reviewed by the chief operating decision maker (CODM). Aggregation of operating segments into reportable segments should be supported by a robust analysis of economic similarities along with consideration of the other aggregation criteria in the authoritative guidance. The majority of the companies in our study have just one segment. This is likely due, in part, to the fact that many technology companies are smaller in size and relatively young. Less than half of the technology companies we surveyed, or about 48%, reported more than one segment.

Depending on how the CODM assesses operating performance and allocates resources, the basis of segmentation used by registrants may vary, for example, based on geography, line of business, product or service type, or a combination thereof. In our benchmarking study, we analyzed the basis of segmentation disclosed by each registrant. Of those registrants reporting more than one segment, nearly half (43%) determined their segments based on different product or service types, another 35% based them on lines of business, with geographical breakdowns coming in third at 20%. There were no meaningful differences in this distribution by subsector with the exception of semiconductors, where segmentation was even more heavily weighted towards product type at 67%.

Companies are also required to disclose the amount of revenues attributed to the entity’s country of domicile and to other countries if they exceed 10% of total revenues. Furthermore, registrants need to disclose their revenues by geographical area in the Business section of the Form 10-K. There is, however, no prescribed basis in GAAP for the geographical attribution of revenues from external customers to individual countries. Our survey found that 64% of companies attributed revenues based on customer location. Within that group, some companies were more specific about defining the customer’s location as a “bill to” location or a “ship to” location. The second most popular basis for attributing revenues, coming in at 15%, was by sales origin, sometimes referred to as the “bill from” location.

### Basis for geographical attribution of revenues:

<table>
<thead>
<tr>
<th>Customer Location</th>
<th>Sales Location</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
<td>Ship to</td>
</tr>
<tr>
<td>Software &amp; Internet</td>
<td>33%</td>
<td>5%</td>
</tr>
<tr>
<td>Computers &amp; Networking</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>36%</td>
<td>31%</td>
</tr>
<tr>
<td>Total</td>
<td>33%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Fair value accounting continues to be a topic of significant interest for preparers and users of financial information as well as for regulators. The accounting guidance establishes a fair value hierarchy for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. Registrants are required to categorize all assets and liabilities measured or disclosed at fair value within the appropriate level of the fair value hierarchy, which involves significant judgment. This determination should reflect an understanding of the types of inputs used to calculate fair value, their significance and observability. A common misconception is that securities that are “less risky” should be categorized as level 1. For instance, many might perceive US Treasury securities as essentially risk free and should, therefore, be categorized as level 1 within the fair value hierarchy. However, certain US Treasury securities are more appropriately categorized in level 2 because they do not trade in an active market.

Two types of securities commonly held by companies are US government securities and corporate bonds. About half of the companies surveyed held each of these types of securities as of their most recent year-end. A majority (54%) considered government securities to be a level 2 security, while an additional 28% presented those securities as both level 1 and level 2. As it relates to corporate bonds, the overwhelming majority (nearly 83%) classified these securities within level 2 with an additional 8% presenting them as both level 1 and level 2. The fact that companies split the same type of securities between levels indicates that companies are performing the necessary security-by-security assessment, considering the factors mentioned above.
About 40% of the companies surveyed had one or more level 3 valuations disclosed. Sixty-three percent reported a contingent consideration liability, 28% held auction rate securities, while some reported derivatives and asset-backed or mortgage-backed securities. Because of the significant judgment involved, there are incremental disclosure requirements for level 3 financial instruments, including (i) all significant inputs used in the valuation; (ii) the weighted average of the significant unobservable inputs to supplement any wide ranges; (iii) the amount for each valuation technique used within a class of assets or liabilities when multiple valuation techniques are used; (iv) the controls in place to support the completeness and accuracy of the prices received from third-party pricing sources; and (v) the procedures performed to validate valuations obtained from third-party vendors.
Companies are required to present basic and diluted earnings per share (EPS) for both income from continuing operations and net income on the face of the income statement. For those companies with participating securities or multiple classes of common stock, the two-class method is required for computing EPS.

A participating security is a security that may participate in undistributed earnings with common stock. Participation does not have to be in the form of a dividend—that is, any form of participation in undistributed earnings, such as an adjustment to conversion or exercise prices, could constitute participation by that security.

The two-class method is an earnings allocation formula that treats a participating security as having rights to earnings that otherwise would have been available to common shareholders but does not require the separate presentation of basic and diluted EPS for securities other than common stock. Under the two-class method, earnings for the period (but typically not losses) are allocated between the common shareholders and the participating security shareholders based on their respective rights to receive dividends as if all undistributed book earnings for the period were distributed. As a result, a participating security will reduce reported EPS regardless of whether dividends are actually paid.

We found that 28 of the companies surveyed apply the two-class method for calculating EPS. Of those companies, more than two-thirds (68%) have restricted stock entitled to non-forfeitable dividend rights, 39% have preferred stock which qualifies as a participating security, and about 11% have more than one class of common stock with different economic rights.

<table>
<thead>
<tr>
<th>Number of companies with different types of participating securities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted stock</td>
</tr>
<tr>
<td>Preferred stock</td>
</tr>
<tr>
<td>A different class of common stock</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Stock-based compensation

The market for initial public offerings (IPO) has been very strong for the past two years, with a record number of deals in the second calendar quarter of 2014, and this trend is expected to continue for the rest of the year.

One of the key accounting challenges for companies during the “going public” process is related to estimating stock-based compensation expense in the absence of a public trading market for the company’s common stock. In addition to the value of the underlying stock, other key assumptions that are included in the estimate of the fair value of stock option awards are the expected volatility, the expected term, the dividend yield, and the risk-free interest rate. The accounting guidance provides for certain accommodations in those circumstances where a company does not have sufficient reliable historical data of its own. For example, to estimate the expected term for “plain vanilla” options management can use a simplified approach, which takes the mid-point between the vesting date and contractual expiration date in lieu of the actual experience of the company with its own employees exercising stock options. Also, a newly public company typically does not have robust information about the volatility of its own stock price. In that case, management is allowed to use the volatility of a peer group instead. These accommodations are expected to be used for a limited time. After accumulating sufficient own historical experience, a company should not rely solely on peer information for the volatility assumption or use the simplified method for the expected term assumption. While there is no bright line as to what constitutes sufficient company-specific historical experience, based on comments issued by the SEC staff to registrants, that period should generally not exceed three years.

With so many technology companies entering the public market in recent years, we saw that 27 companies in our study use the simplified method for the expected term assumption. The majority, or 63%, have filed three or fewer annual reports since their IPO. We also noted that fewer companies, only 18, use solely peer data for the volatility assumption and all of them had filed three or fewer annual reports since their IPO.

% of companies using accommodations for stock-based compensation:

<table>
<thead>
<tr>
<th></th>
<th>Simplified method for expected term</th>
<th>Peer volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>80%</td>
<td>87%</td>
</tr>
<tr>
<td>No</td>
<td>20%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Acknowledgments

The following PwC professionals contributed their experience and knowledge to produce this paper.

Anil Persad  
Senior Manager/Technology  
646 471 1006  
anil.persad@us.pwc.com

Jennifer Y Chen  
Senior Manager/Technology  
973 236 4735  
jennifer.y.chen@us.pwc.com

Kathy Maloney  
Director/Technology, SEC Services  
408 817 4135  
kathy.maloney@us.pwc.com

Special thanks

Special thanks to all the other resources in the National Professional Services Group, Technology Sector, Marketing and US Studio who contributed substantially to the final editing, production and overall quality of this technical publication.

About PwC’s Technology Institute

The Technology Institute is PwC’s global research network that studies the business of technology and the technology of business with the purpose of creating thought leadership that offers both fact-based analysis and experience-based perspectives. Technology Institute insights and viewpoints originate from active collaboration between our professionals across the globe and their first-hand experiences working in and with the technology industry. For more information please contact Tom Archer, Technology Industry Leader.
PwC can help

If you would like to discuss how the technology sector financial reporting trends might impact your company, please contact one of our practice leaders:

Cory Starr
US Technology Assurance Leader
408 817 1215
cory.j.starr@us.pwc.com

Mila Petrova
Partner, SEC Services
973 236 5601
mila.p.petrova@us.pwc.com

Let’s talk

Please reach out to any of our technology leaders to discuss this or other challenges. We’re here to help.

Tom Archer
US Technology Industry Leader
408 817 3836
thomas.archer@us.pwc.com

Kayvan Shahabi
US Technology Advisory Leader
408 817 5724
kayvan.shahabi@us.pwc.com

Cory Starr
US Technology Assurance Leader
408 817 1215
cory.j.starr@us.pwc.com

Diane Baylor
US Technology Tax Leader
408 817 5005
diane.baylor@us.pwc.com