Foreword
As defined by the Public Company Accounting Oversight Board (PCAOB), a critical audit matter or “CAM” is “any matter arising from the audit of the financial statements that was communicated or required to be communicated to the audit committee and that relates to accounts or disclosures that are material to the financial statements and involved especially challenging, subjective, or complex auditor judgment.”

The required public reporting of CAMs became effective in 2019. For audits of large accelerated filers with fiscal years ending on or after June 30, 2019, the company’s auditor’s report must include a discussion of the CAMs identified during audit. CAM reporting will become required for audits of most other public companies for fiscal years ending on or after December 15, 2020.

In general, the limited number of CAMs under the new standard to-date are providing less useful disclosure than many investors sought. At the conclusion of this report (starting on page 21), there is a discussion of specific language that would improve reporting on CAMs, from the standpoint of many investors.

Investors are the ultimate risk takers in a public company and the end customers, users and intended beneficiaries of the required annual audit of public company financial reports and the auditor’s report. The auditor’s report is generally the only means by which the auditor communicates with investors. Unfortunately, however, the auditor’s report has historically conveyed little critical information obtained and evaluated by the auditor as part of the audit.  

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2 Id. at 4 (“Provisions related to critical audit matters will take effect for audits of fiscal years ending on or after June 30, 2019, for large accelerated filers”).  
3 Id.  
4 See 17 C.F.R. § 240.12b-2(2) (1948), available at https://www.law.cornell.edu/cfr/text/17/240.12b-2, (“Large accelerated filer. The term large accelerated filer means an issuer after it first meets the following conditions as of the end of its fiscal year: (i) The issuer had an aggregate worldwide market value of the voting and non-voting common equity held by its non-affiliates of $700 million or more, as of the last business day of the issuer's most recently completed second fiscal quarter; (ii) The issuer has been subject to the requirements of section 13(a) or 15(d) of the Act for a period of at least 12 calendar months; and (iii) The issuer has filed at least one annual report pursuant to section 13(a) or 15(d) of the Act.”).  
5 See PCAOB Release No. 2017-001 at 4 (“Provisions related to critical audit matters will take effect . . . for fiscal years ending on or after December 15, 2020, for all other companies to which the requirements apply”).  
6 Id. at 1 (“Investors are the beneficiaries of the audit and the auditor's report is the primary means by which the auditor communicates with them”).  
7 Id. at 1-2 (“Currently, however, the auditor's report conveys little of the information obtained and evaluated by the auditor as part of the audit.”).
As part of the audit, auditors often perform procedures involving challenging, subjective, or complex judgments, including the auditing of estimates of fair values. The auditor’s report has not in the past communicated this information to investors, despite the fact that the auditor is an independent third-party expert whose work is undertaken for the benefit of investors and is paid (albeit indirectly) by the shareowners.

The new CAMs requirements explicitly provide that for each critical audit matter communicated in the auditor's report, the auditor must:

a. Identify the critical audit matter;
b. Describe the principal considerations that led the auditor to determine that the matter is a critical audit matter;
c. Describe how the critical audit matter was addressed in the audit; and
d. Refer to the relevant financial statement accounts or disclosures that relate to the critical audit matter.

The PCAOB intends that communication of CAMs inform investors and other financial statement users of matters arising from the audit that involved especially challenging, subjective, or complex auditor judgement, and how the auditor addressed these matters.

The board also intends that a CAM would likely be identified in areas, such as significant management estimates and judgements, that many investors and investor advocates (such as the Council of Institutional Investors) indicated would be of particular interest to them.

There are a variety of ways in which investors can use the information provided by CAMs. For example, CAMs can add to the total mix of information, providing insights relevant in analyzing and pricing risks in capital valuation and allocation, and

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8 Id. at 2 (“As part of the audit, auditors often perform procedures involving challenging, subjective, or complex judgments, but the auditor's report does not communicate this information to investors.”).
9 Id. at 35 (“investors have consistently asked to hear more from the auditor, an independent third-party expert whose work is undertaken for the investor's benefit”).
10 Id. at A1 – 8-9 (A note to the fourth requirement states: “When describing critical audit matters in the auditor's report, the auditor is not expected to provide information about the company that has not been made publicly available by the company unless such information is necessary to describe the principal considerations that led the auditor to determine that a matter is a critical audit matter or how the matter was addressed in the audit.”). Id. at A1 – 9.
11 Id. at 2.
12 Id. (“The Board believes that these matters will likely be identified in areas that investors have indicated would be of particular interest to them, such as significant management estimates and judgments made in preparing the financial statements; areas of high financial statement and audit risk; significant unusual transactions; and other significant changes in the financial statements.”); Steven B. Harris, Board Member, PCAOB, Statement on Adoption of an Auditing Standard on the Auditor’s Report (June 1, 2017), https://pcaobus.org/News/Speech/Pages/Harris-statement-auditors-report-standard-adoption-6-1-17.aspx (“We anticipate that critical audit matters will likely cover areas that have historically been of particular interest to investors, such as significant management estimates and judgments, significant unusual transactions, and other areas that pose high financial statement and audit risk.”).
13 See PCAOB Release No. 2017-001 at 3 (“Investors and investor advocates have suggested a variety of ways in which investors can use the information provided in critical audit matters.”).
contributing to investment decisions.\textsuperscript{14} Investors, including many institutional investors, can also use CAMs to highlight areas that they may wish to emphasize in their engagement with the company. CAMs are also important information that shareowners may use in their oversight of the audit committee.\textsuperscript{15} Over time institutional investors can look to CAMs for additional information to assist them in making proxy voting decisions, including ratification of the appointment of auditors and the election of audit committee chairs and members.\textsuperscript{16}

While some of the benefits to investors and the capital markets from CAMs will likely become more evident over time, some of the benefits arguably have already been realized.\textsuperscript{17} For example, a report analyzing data from a survey of corporate officials who participated in “dry runs” in connection with implementing the CAM requirements found that (1) 62% of audit committees have identified and are adding, and presumably improving, internal controls over financial reporting or are considering such changes;\textsuperscript{18} and (2) 52% of large accelerated filers and 61% of all other companies are considering updating, and presumably improving, their financial statement disclosures.\textsuperscript{19} The PCAOB had correctly foreseen those types of less visible benefits from CAMs.\textsuperscript{20}

Drawing on a review of the CAMs of more than 190 companies, this report provides some general observations about the utility of the CAMs that have been issued as of December 5, 2019. This report also discusses and provides excerpts from examples of the three most common CAM topics. Additionally, it provides some suggestions on how those CAMs might be enhanced to be more responsive to the information needs and demands of investors consistent with the spirit of the standard.

General Observations

Based on a survey of companies filing under the new standard, this report finds CAM reporting so far to be disappointing. Below, reports at six companies on certain CAMs are

\textsuperscript{14} Id. (“In the view of some investors, critical audit matters will add to the total mix of information, providing insights relevant in analyzing and pricing risks in capital valuation and allocation, and contributing to their ability to make investment decisions.”).

\textsuperscript{15} Id. at 3 (“Some investors believe that critical audit matters will highlight areas that they may wish to emphasize in their engagement with the company and provide important information that they can use in making proxy voting decisions, including ratification of the appointment of auditors.”).

\textsuperscript{16} Id.

\textsuperscript{17} See, e.g., Marc Butler & Alyson Clabaugh, Critical Audit Matters: Public Company Adaption to Enhanced Auditor Reporting, Intelligize 3-4 (Sept. 10, 2019).

\textsuperscript{18} Id. (“43% of audit committees identified additional controls that required implementation, while an additional 19% are still considering such changes”).

\textsuperscript{19} Id. (“52% of large accelerated filers and 61% of other companies facing CAMs are considering updates to financial statement disclosure.”).

\textsuperscript{20} See PCAOB Release No. 2017-001 at 88 (“For instance, the communication of critical audit matters could lead: Audit committees to focus more closely on the matters identified as critical audit matters and to engage the auditor and management about the adequacy of the related disclosures; and Management to improve the quality of their disclosures because they know that investors and the auditor will be scrutinizing more closely the matters identified as critical audit matters”).
discussed that are better and more granular than reporting at other companies reviewed, but that still fall short. This report concludes by offering additional “key observations” that would have made the disclosures more responsive to what many investors were seeking when they asked the PCAOB to develop this standard.

An analysis by The Center for Audit Quality (CAQ) found that approximately 191 issuers filed auditor reports with the SEC that included one or more CAMs as of December 5, 2019. In that analysis, the CAQ found that the average number of CAMs for those companies was 1.73. Of the 330 CAMs contained in the 191 reports, CAQ identified the following 13 accounting and disclosure topics and frequency in which they appeared:

1. Revenue (62/18.8%)
2. Goodwill (59/17.9%)
3. Taxes (43/13.0%)
4. Reserves (32/9.7%)
5. Business Combination (30/9.1%)
6. Intangible Assets (25/7.6%)
7. Valuation (21/6.4%)
8. Allowance for Loans and Lease Losses (10/3.0%)
9. Legal contingencies (8/2.4%)
10. Material weakness (4/1.2%)
11. Related Party Transactions (2/0.6%)
12. Proved/Unproved Oil and Gas Reserves (1/0.3%)
13. Other (33/10%).

Implementation Examples of CAMs Requirements
This section highlights the CAMs from the audit reports of six companies on three topics. The six companies highlighted (and their external auditors) are: The Procter and Gamble Company (Deloitte & Touche LLP), The Hain Celestial Group, Inc. (Ernst & Young LLP), CDK Global, Inc. (Deloitte & Touche LLP), Nutanix, Inc. (Deloitte & Touche

21 The Center for Audit Quality, CAM Analysis (as of Dec. 5, 2019) (on file with the Council of Institutional Investors).
22 By comparison, for the European counterpart—Key Audit Matters (KAMs)—the average per annual report was 2.7 KAMs in 2018. See John Pakaluk, Overview of European Key Audit Matter (KAM), Audit Analytics (Mar. 25, 2019), https://blog.auditanalytics.com/overview-of-european-key-audit-matter-kam-disclosures/.
23 By comparison, for the European counterpart KAMs, 20% of disclosures related to asset impairment and recoverability, with a particular focus on impairment of goodwill and other intangible assets, while 16% referenced revenue, and 11% of disclosures referenced valuation of investments. See id.
Critical Audit Matters Reporting—A First Look

The three CAM topics highlighted are: Goodwill and Intangible Assets; Revenue; and Taxes.

The six companies were selected because their CAM responses to the four CAM requirements appeared to be generally more robust and granular for the topic selected than the CAMs of many other companies for that topic. The three topics were chosen (Goodwill and Intangible Assets combined) because of the higher frequency of those topics among the CAM topics that have been reported by companies as of December 5, 2019.

Goodwill and Intangible Assets

Goodwill is an intangible asset representing future economic benefits arising from a business combination or an acquisition generally resulting from the excess purchase price of the other company. Goodwill impairment is an accounting charge or expense that is incurred when the fair value of goodwill drops below the previously recorded value from the time of an acquisition.

Impairment may occur if the assets acquired no longer generate the cash flows that were previously expected of them at the time of purchase. A test for goodwill impairment under United States generally accepted accounting principles (GAAP) must be undertaken, at a minimum, on an annual basis.

Intangible assets are future economic benefits that result from an economic transaction but lack physical substance. In addition to goodwill, intangible assets include brand

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29 Microsoft Corporation, Form 10-K at 95 (Aug. 2019), https://www.sec.gov/Archives/edgar/data/789019/0001156459019027952/msft-10k_20190630.htm#REPORT_INDEPENDENT_REGISTERED_PUBLIC_ACC.
30 See FASB Accounting Standards Codification, Basic View, Master Glossary, Goodwill (last visited Dec. 12, 2019), https://asc.fasb.org/viewpage (registration required); Marshall Hargrave, Goodwill, Corporate, Finance & Accounting, Investopedia (updated June 24, 2019), https://www.investopedia.com/terms/g/goodwill.asp (“Goodwill is an intangible asset associated with the purchase of one company by another.”).
31 See FASB Accounting Standards Codification, Basic View, 350 Intangibles—Goodwill and Other 350-35-1 (describing annual impairment requirement for goodwill); Alicia Tuovila, Goodwill Impairment, Corporate, Finance & Accounting, Investopedia (updated June 24, 2019), https://www.investopedia.com/terms/g/goodwill-impairment.asp (“Goodwill impairment is an accounting charge that companies record when goodwill's carrying value on financial statements exceeds its fair value.”).
32 See Alicia Tuovila (“Goodwill impairment arises when there is deterioration in the capabilities of acquired assets to generate cash flows, and the fair value of the goodwill dips below its book value.”).
33 FASB Accounting Standards Codification, Basic View, 350 Intangibles—Goodwill and Other 350-35-1 (describing annual impairment requirement for goodwill); Alicia Tuovila (“A test for goodwill impairment aligned with generally accepted accounting principles (GAAP) must be undertaken, at a minimum, on an annual basis.”).
34 See FASB Accounting Standards Codification., Basic View, Master Glossary, Intangible Assets; Will Kenton, Intangible Assets, Corporate, Finance & Accounting, Investopedia (updated Aug. 11,.2019), https://www.investopedia.com/terms/i/intangibleasset.asp (“An intangible asset is an asset that is not physical in nature.”).
recognition and the acquisition of intellectual property such as patents, trademarks and copyrights.  

If an acquired intangible asset has an estimated lifespan, it generally is amortized over time as an expense. Amortization is used to reflect the reduction in value of an intangible asset as an expense over its lifespan.

A company records impairment when an intangible asset is deemed less valuable than the amount stated on the company’s balance sheet after amortization. Like goodwill, under GAAP an indefinite lived intangible must be tested for impairment, at a minimum, on an annual basis.

In order to assess goodwill and intangible assets for impairment, management must compare the fair value to its carrying value, a process that requires significant estimates for items such as cash flow forecasts, revenue growth rates and discount rates. These significant estimates made by management in turn lead to a high degree of auditor judgment when evaluating goodwill and intangible assets.

Goodwill and intangible asset impairment can have a significant effect on a company’s financial reporting. For example, in early November 2019, Cars.com announced that its third quarter results included a goodwill and intangible asset impairment charge of $431.3 million resulting in a net loss of $426.2 million or $6.38 per share.

As indicated, as of December 5, 2019, the CAQ had identified 84 CAMs that address goodwill (59) and intangible assets (25). The following are excerpts from the CAMs from The Procter and Gamble Company and The Hain Celestial Group, Inc. that address the auditing of the impairment of goodwill and intangible assets. The four excerpts from each company correspond to the four requirements for CAMs previously described.

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35 See Will Kenton (“An intangible asset is an asset that is not physical in nature.”), https://www.investopedia.com/terms/i/intangibleasset.asp (“Goodwill, brand recognition and intellectual property, such as patents, trademarks, and copyrights, are all intangible assets.”).

36 See FASB Accounting Standards Codification. Basic View, 350 Intangibles—Goodwill and Other 350-05-04 (describing the accounting for an intangible asset after acquisition).

37 FASB Accounting Standards Codification. Basic View, 350 Intangibles—Goodwill and Other 350-05-04 (describing the accounting for an intangible asset after acquisition).


39 Id.

1. Requirement: Identify the critical audit matter.

**Example: Procter & Gamble Co.** (Deloitte & Touche LLP)

*Goodwill and Intangible Assets - Shave Care Goodwill and Gillette Indefinite Lived Intangible Asset...
We identified the Company’s impairment evaluations of goodwill for the Shave Care reporting unit and the Gillette brand as a critical audit matter...

**Example: The Hain Celestial Group, Inc.** (Ernst & Young LLP)

*Valuation of Goodwill and Trademarks and Trade names...
[M]anagement’s annual goodwill and trademarks and trade names impairment tests...

2. Requirement: Describe the principal considerations that led the auditor to determine that the matter is a critical audit matter.

**Example: Procter & Gamble Co.** (Deloitte & Touche LLP)

[B]ecause of the recent reductions in cash flows and the significant judgments made by management to estimate the fair values of the reporting unit and the brand and to estimate the fair value of the reporting unit’s assets and liabilities for purposes of measuring the impairment of goodwill. A high degree of auditor judgment and an increased extent of effort was required when performing audit procedures to evaluate the reasonableness of management’s estimates and assumptions related to the forecasts of future net sales and earnings as well as the selection of royalty rates and discount rates and the estimation and allocation of fair value to the reporting unit’s assets and liabilities including the need to involve our fair value specialists.

**Example: The Hain Celestial Group, Inc.** (Ernst & Young LLP)

*Auditing management’s annual goodwill and trademarks and trade names impairment tests was complex as considerable management judgment was necessary to estimate fair values of the reporting units and trademarks and trade names. For goodwill, significant assumptions used in management’s evaluations included projections of revenue growth rates and profitability, estimated working capital needs and the weighted average cost of capital. For trademarks and trade names, significant assumptions used in management’s evaluations included projections of future revenues for the associated brands, royalty rates, and the weighted average cost of capital. The aforementioned assumptions are affected by expectations about future market or economic conditions that materially impact the fair value of the reporting units as well as the trademark and trade names.*
3. Requirement: Describe how the critical audit matter was addressed in the audit.

Example: Procter & Gamble Co. (Deloitte & Touche LLP)

Our audit procedures related to forecasts of future net sales and earnings and the selection of the royalty rates and discount rates for the Shave Care reporting unit and the Gillette brand included the following, among others:

- We tested the effectiveness of controls over goodwill and indefinite lived intangible assets, including those over the determination of fair value, such as controls related to management’s development of forecasts of future net sales, earnings, the selection of royalty rates, discount rates and allocation of the reporting unit fair value to its identifiable assets and liabilities.

- We evaluated management’s ability to accurately forecast net sales and earnings by comparing actual results to management’s historical forecasts.

- We evaluated the reasonableness of management’s forecast of net sales and earnings by comparing the forecasts to:
  - Historical net sales and earnings.
  - Underlying analysis detailing business strategies and growth plans.
  - Internal communications to management and the Board of Directors.
  - Forecasted information included in Company press releases as well as in analyst and industry reports for the Company and certain of its peer companies.

- With the assistance of our fair value specialists, we evaluated the reasonableness of the valuation methodology, net sales and earnings growth rates, royalty rates, discount rates and estimation and allocation of the reporting unit fair value to its identifiable assets and liabilities by:
  - Testing the source information underlying the determination of net sales and earnings growth rates, royalty rates, discount rates, estimation and allocation of the reporting unit fair value to its identifiable assets and liabilities and the mathematical accuracy of the calculations.

  - Developing a range of independent estimates for the discount rates and comparing those to the discount rates selected by management.
Example: The Hain Celestial Group, Inc. (Ernst & Young LLP)

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Company’s goodwill and trademark and trade name impairment evaluation process. For example, we tested controls over management’s review of the significant assumptions used in the reporting unit and trademark and trade name valuations as well as management’s review around the reasonableness of the data used in these valuations.

To test the estimated fair value of the Company’s reporting units and trademarks and trade names, we performed audit procedures that included, among others, testing the significant assumptions discussed above, testing the underlying data used by the Company in its analyses by comparing to historical and other industry data, as well as validating certain assertions with data internal to the Company and from other sources. We compared the significant assumptions used by management to current industry and economic trends while also considering changes to the Company’s business model, customer base and product mix. We assessed the historical accuracy of management’s estimates and significant assumptions, such as projections of revenue growth rates and profitability, and estimated working capital needs, by comparing management’s past projections to actual performance. We used our valuation specialists to independently compute a range of reasonableness for the weighted average cost of capital. We also performed sensitivity analyses to evaluate the impact that changes in the significant assumptions would have on the fair value of the reporting units and trademarks and trade names. In addition, we tested the reconciliation of the fair value of the reporting units to the market capitalization of the Company. We also involved a valuation specialist to assist in our evaluation of the Company’s model, valuation methodology and significant assumptions.
4. Requirement: Refer to the relevant financial statement accounts or disclosures that relate to the critical audit matter.

Example: Procter & Gamble Co. (Deloitte & Touche LLP)

Shave Care Goodwill and Gillette Indefinite Lived Intangible Asset - Refer to Notes 1 and 4 to the financial statements

The impairment of the Gillette brand of $1.6 billion before tax and $1.2 billion after tax was measured as the difference between its fair value and carrying value. As of June 30, 2019, after recording of the impairments, the Shave Care reporting unit goodwill was $12.6 billion, and the Gillette brand was $14.1 billion.

Example: The Hain Celestial Group, Inc. (Ernst & Young LLP)

At June 30, 2019, the Company’s goodwill and trademarks and trade names were $1.0 billion and $0.4 billion, respectively. As discussed in Note 9 of the 2019 audited financial statements, goodwill and trademarks and trade names are qualitatively or quantitatively tested for impairment at least annually, or more frequently when necessary.

Revenue

Revenue is at the heart of all business performance and is the quantification of the gross activity generated by a business. Thus, not surprisingly, revenue is one of the most important measures used by investors in assessing a company’s performance and prospects.

In accounting speak, revenue is an increase in assets or decrease in liabilities caused by the provisions of services or products to customers. Revenue is typically the first and largest item listed on an entity’s income statement. A variety of expenses related to the cost of goods sold and selling, general and administrative expenses are then subtracted from revenue to arrive at the net profit of a business.

Previously, many standards governed when an entity was required to recognize revenue. These have been consolidated into the GAAP standard relating to contracts with customers. That standard generally requires that an entity recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration

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41 See Alicia Tuovila, Revenue Recognition, Corporate, Finance & Accounting, Investopedia (updated Nov. 20, 2019), https://www.investopedia.com/terms/r/revenuerecognition.asp (“Revenue is at the heart of all business performance”).
42 Revenue Recognition, Financial Accounting Standards Board (last visited Dec. 15, 2019), https://www.fasb.org/isp/FASB/Page/ImageBridgePage&cid=1176169257359 (“Revenue is one of the most important measures used by investors in assessing a company’s performance and prospects.”).
43 See FASB Accounting Standards Codification, Basic View, Master Glossary, Revenue (defining revenue).
44 See Revenue Recognition, Financial Accounting Standards Board ("GAAP has complex, detailed, and disparate revenue recognition requirements for specific transactions and industries including, for example, software and real estate"); Alicia Tuovila (“ASC 606 provides a uniform framework for recognizing revenue from contracts with customers.”).
to which the entity expects to be entitled in exchange for those goods or services.\textsuperscript{45} Thus, a company generally recognizes revenue as it performs its obligations under the contract—not necessarily when cash is received.\textsuperscript{46}

Determining the amount of revenue to be recognized is a complex process, especially when considering companies can have multiple sources of revenue.\textsuperscript{47} To evaluate revenue, it is necessary to determine a variety of factors including performance obligations, selling prices and when to actually recognize the revenue.\textsuperscript{48}

As indicated, the CAQ has, as of December 5, 2019, identified approximately 19\% of CAMs as relating to revenue. The following are excerpts from the CAMs from CDK Global, Inc. and Nutanix, Inc. that address revenue. Again, the four excerpts from each company correspond to the four requirements for CAMs previously described.

1. **Requirement: Identify the critical audit matter.**

   **Example: CDK Global, Inc. (Deloitte & Touche LLP)**

   \textit{Revenue}

   

   To audit revenue required a high degree of auditor judgment and extensive audit effort . . . .

   **Example: Nutanix, Inc. (Deloitte & Touche LLP)**

   \textit{Revenue Recognition}

   

   We identified revenue recognition as a critical audit matter . . . .

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\textsuperscript{45} See Alicia Tuovila (“The revenue recognition principle of ASC 606 requires that revenue is recognized when the delivery of promised goods or services matches the amount expected by the company in exchange for the goods or services.”).

\textsuperscript{46} \textit{Id.} (“The revenue recognition principle, a feature of accrual accounting, requires that revenues are recognized on the income statement in the period when realized and earned—not necessarily when cash is received.”).

\textsuperscript{47} See Nicole Hallas.

\textsuperscript{48} \textit{Id.}
2. **Requirement:** Describe the principal considerations that led the auditor to determine that the matter is a critical audit matter.

**Example: CDK Global, Inc. (Deloitte & Touche LLP)**

*Due to the multiple element nature of the Company’s contracts, appropriate revenue recognition requires the Company to exercise significant judgment in the following areas:*

- **Determination of whether products and services are considered distinct performance obligations that should be accounted for separately versus together, such as software licenses and related services that are sold in hosted service arrangements.**
- **Determination of stand-alone selling prices for products and services.**
- **Estimation of contract transaction price and allocation of the transaction price to identified performance obligations.**
- **The pattern of delivery (i.e., timing of when revenue is recognized) for each distinct performance obligation.**

*In addition, the Company’s subscription and on-site license and installation revenue consists of a significant volume of transactions, sourced from multiple systems, databases, and other tools across different business entities. The processing and recording of revenue is highly automated and involves migrating, formatting, and combining significant volumes of data across multiple systems and interfaces, partially facilitated by custom-built algorithms. Given the complexity of certain of the Company’s contracts and judgments necessary to evaluate the revenue recognition considerations as noted above, the volume of contracts, and the complex automated systems to process and record revenue, performing procedures to audit revenue required a high degree of auditor judgment and extensive audit effort, including involvement of professionals with expertise in information technology (IT).*
Example: Nutanix, Inc. (Deloitte & Touche LLP)

Significant judgment is exercised by the Company in determining revenue recognition for the Company’s customer contracts, and includes the following:

• Determination of whether promised goods or services, such as hardware and software licenses, are capable of being distinct and are distinct in the context of the Company’s customer contracts which leads to whether they should be accounted for as individual or combined performance obligations.

• Determination of standalone selling prices for each distinct performance obligation and for products and services that are not sold separately.

• Determination of the timing of when revenue is recognized for each distinct performance obligation either over time or at a point in time.

We identified revenue recognition as a critical audit matter because of these significant judgments required by management. This required a high degree of auditor judgment and an increased extent of effort when performing audit procedures to evaluate whether revenue was recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services.
3. **Requirement:** Describe how the critical audit matter was addressed in the audit.

<table>
<thead>
<tr>
<th>Example: CDK Global, Inc. (Deloitte &amp; Touche LLP)</th>
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<tbody>
<tr>
<td>Our audit procedures related to the Company’s accounting for contracts with customers included the following, among others:</td>
</tr>
<tr>
<td>• We tested the effectiveness of the controls over the review of customer contracts, including, among others the identification of performance obligations, determination of stand-alone selling prices, estimating transaction price, and determination of pattern of delivery of performance obligations.</td>
</tr>
<tr>
<td>• With the assistance of our IT specialists, we:</td>
</tr>
<tr>
<td>– Identified the significant systems used to process revenue transactions and tested the general IT controls over each of these systems, including testing of user access controls, change management controls, and IT operations controls. – Performed testing of system interface controls and automated controls within the relevant revenue streams, as well as the controls designed to determine the accuracy and completeness of revenue.</td>
</tr>
<tr>
<td>• We selected a sample of customer contracts and performed the following, among others:</td>
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<tr>
<td>– Obtained contract documents for each selection, including master agreements, and other documents that were part of the agreement. – Analyzed the contract to determine if arrangement terms that may have an impact on revenue recognition were identified and properly considered in the evaluation of the accounting for the contract.</td>
</tr>
<tr>
<td>– Confirmed the contract terms with the counterparty and performed alternative procedures in the event of nonreplies.</td>
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<tr>
<td>– Tested management’s identification of distinct performance obligations by evaluating whether the underlying goods, services, or both were highly interdependent and interrelated.</td>
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<tr>
<td>– Evaluated the total transaction price determined by management based on the terms of the contract, including any variable consideration, and recalculated the allocation of the total transaction price to each distinct performance obligation based on respective standalone selling prices.</td>
</tr>
<tr>
<td>– Evaluated the appropriateness of the selected pattern of revenue recognition for each performance obligation and tested delivery/installation of the goods and services.</td>
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<tr>
<td>– For a sample of revenue transactions, we performed detail transaction testing by agreeing the amounts recognized to source documents and testing the mathematical accuracy of the recorded revenue.</td>
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<tr>
<td>• We evaluated the reasonableness of the Company’s methodology for estimating standalone selling prices by:</td>
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<tr>
<td>– Holding discussions with sales department personnel to understand the Company’s pricing strategy.</td>
</tr>
<tr>
<td>– Comparing a sample of standalone selling price estimates to historical selling prices and investigating estimates with low correlation to historical pricing.</td>
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</tbody>
</table>
Example: Nutanix, Inc. (Deloitte & Touche LLP)

This required a high degree of auditor judgment and an increased extent of effort when performing audit procedures to evaluate whether revenue was recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services. Our audit procedures related to the Company’s revenue recognition for the Company’s customer contracts included the following, among others:

• We tested the effectiveness of controls related to the identification of distinct performance obligations, determination of the standalone selling prices, and the determination of the timing of revenue recognition.

• We evaluated management’s significant accounting policies related to revenue recognition for reasonableness.

• We selected a sample of recorded revenue transactions and performed the following procedures:
  – Obtaining and reading customer source documents and the contract for each selection, including master agreements and related amendments to evaluate if relevant contractual terms have been appropriately considered by management.
  – Evaluating management’s application of their accounting policy and tested revenue recognition for specific performance obligations by comparing management’s conclusions to the underlying master agreement and any related amendments.
  – Testing the mathematical accuracy of management’s calculations of revenue and the associated timing of revenue recognized in the financial statements.

• For a selection of arrangements with original equipment manufacturers ("OEMs"), we confirmed accounts receivable and total billings as of and for the year ended July 31, 2019, respectively, directly with the OEM. In addition, we confirmed a sample of individual revenue orders for the year ended July 31, 2019, to evaluate the accuracy of management’s records.

• We evaluated the reasonableness of management’s estimate of standalone selling prices for products and services that are not sold separately by performing the following:
  – Assessing the appropriateness of the Company’s methodology and mathematical accuracy of the determined standalone selling prices.
  – Testing the completeness and accuracy of the source data utilized in management’s calculations.
4. **Requirement:** Refer to the relevant financial statement accounts or disclosures that relate to the critical audit matter.

**Example: CDK Global, Inc.** (Deloitte & Touche LLP)

*Refer to Notes 2 and 6 to the financial statements*

... . . .

*Revenue recognized for the year ended June 30, 2019, was $1,914.8 million.*

**Example: Nutanix, Inc.** (Deloitte & Touche LLP)

*Refer to Notes 1 and 3 to the financial statements*

... . . .

*Product revenue was $832.4 million and support, entitlements, and other services was $403.7 million for the year ended July 31, 2019.*

**Taxes**

Income tax accounting should recognize (a) the amount of taxes payable or refundable for the current year and (b) deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an enterprise's financial statements or tax returns.\(^{49}\)

In addition, income tax accounting includes “Uncertain Tax Positions” (UTPs). A UTP generally is defined as a position in a previously filed tax return or a position expected to be taken in a future tax return by the company that includes, but is not limited to:

- A decision not to file a tax return (i.e. state tax return);
- An allocation or a shift in income between jurisdictions (i.e. transfer pricing);
- The characterization of income or a decision to exclude reporting taxable income in a tax return (i.e. deferred revenue); or
- A decision to classify a transaction, entity or other position in a tax return as tax exempt.\(^{50}\)

U.S. GAAP generally requires that a company that has taken or expects to take a UTP on its tax returns, should recognize, measure, present and disclose this in its financial statements. A tax benefit from UTP may be recognized in the financial statements only if it is more-likely-than-not that the position is sustainable, based solely on its technical...

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\(^{50}\) See FASB Accounting Standards Codification, Basic View, Master Glossary, Tax Position; Income Taxes, PwC § 15.2.2 (“Identifying uncertain tax positions”).
merits and consideration of the relevant taxing authority’s widely understood administrative practices and precedents.\textsuperscript{51} If the recognition threshold for the tax position is met, only the portion of the tax benefit that is greater than 50% likely to be realized upon settlement with a taxing authority should be reported.\textsuperscript{52}

Not surprisingly, recognizing and measuring UTPs can involve significant estimates and management judgment, in addition to complex considerations of the Internal Revenue Code, regulations, and tax laws.\textsuperscript{53} In an acknowledgment of the complexity of U.S. GAAP for income taxes generally, earlier this year the Financial Accounting Standards Board issued a proposal standard entitled “Simplifying the Accounting for Income Taxes.”\textsuperscript{54}

As of December 5, 2019, the CAQ had determined that approximately 13% of the CAMs issued address taxes. The following are excerpts from the CAMs from Cardinal Health, Inc. and Microsoft Corporation that address taxes. Again, the four excerpts from each company correspond to the four requirements for CAMs previously described.

1. **Requirement: Identify the critical audit matter.**

   \begin{quote}
   **Example: Cardinal Health, Inc.** (Ernst & Young LLP)
   
   *Uncertain Tax Positions*
   
   . . . .
   
   *Auditing the measurement of tax positions related to transfer pricing used in intercompany transactions*
   
   **Example: Microsoft** (Deloitte & Touche LLP)
   
   *Income Taxes — Uncertain Tax Positions*
   
   . . . .
   
   *[E]valuating management’s estimates relating to their determination of uncertain tax positions . . . .
   \end{quote}

\textsuperscript{51} See Income Taxes, PwC § 15.1.
\textsuperscript{52} Id.
\textsuperscript{53} See Nicole Hallas.
2. **Requirement:** Describe the principal considerations that led the auditor to determine that the matter is a critical audit matter.

**Example: Cardinal Health, Inc. (Ernst & Young LLP)**

The Company operates in a multinational tax environment and is subject to tax treaty arrangements and transfer pricing guidelines for intercompany transactions that have pricing subjectivity. For those tax positions that qualify for recognition, the Company uses significant judgment to measure the largest amount of benefit that is more likely than not to be realized upon ultimate settlement. For tax benefits that do not qualify for recognition, the Company recognizes a liability for unrecognized tax benefits. Auditing the measurement of tax positions related to transfer pricing used in intercompany transactions was challenging because the pricing of the intercompany transactions is based on pricing analyses that may produce a number of different outcomes or ranges of outcomes (e.g., the price that would be charged in an arm’s-length transaction).

**Example: Microsoft (Deloitte & Touche LLP)**

Conclusions on recognizing and measuring uncertain tax positions involve significant estimates and management judgment and include complex considerations of the Internal Revenue Code, related regulations, tax case laws, and prior-year audit settlements. Given the complexity and the subjective nature of the transfer pricing issues that remain unresolved with the IRS, evaluating management’s estimates relating to their determination of uncertain tax positions required extensive audit effort and a high degree of auditor judgment, including involvement of our tax specialists.
3. Requirement: Describe how the critical audit matter was addressed in the audit.

<table>
<thead>
<tr>
<th>Example: Cardinal Health, Inc. (Ernst &amp; Young LLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Company’s process to measure tax positions related to transfer pricing from intercompany transactions. For example, we tested management’s review of inputs and calculations of these tax positions, which included evaluation of the ranges of outcomes and pricing conclusions reached within management’s transfer pricing studies. To test the Company’s measurement of tax positions related to transfer pricing used in intercompany transactions, we involved our tax professionals to assess the appropriateness of the ranges of outcomes utilized and the pricing conclusions reached within the transfer pricing studies conducted by the Company. For example, we compared the transfer pricing methodology utilized by management to alternative methodologies and industry benchmarks. We also verified our understanding of the relevant facts by reading the Company’s correspondence with the relevant tax authorities and any third-party advice obtained by the Company. In addition, we used our knowledge of international and local income tax laws, as well as historical settlement activity from income tax authorities, to evaluate the appropriateness of the Company’s measurement of uncertain tax positions related to transfer pricing used in these intercompany transactions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example: Microsoft (Deloitte &amp; Touche LLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our principal audit procedures to evaluate management’s estimates of uncertain tax positions related to unresolved transfer pricing issues included the following:</td>
</tr>
<tr>
<td>• We evaluated the appropriateness and consistency of management’s methods and assumptions used in the identification, recognition, measurement, and disclosure of uncertain tax positions, which included testing the effectiveness of the related internal controls.</td>
</tr>
<tr>
<td>• We read and evaluated management’s documentation, including relevant accounting policies and information obtained by management from outside tax specialists, that detailed the basis of the uncertain tax positions.</td>
</tr>
<tr>
<td>• We tested the reasonableness of management’s judgments regarding the future resolution of the uncertain tax positions, including an evaluation of the technical merits of the uncertain tax positions.</td>
</tr>
<tr>
<td>• For those uncertain tax positions that had not been effectively settled, we evaluated whether management had appropriately considered new information that could significantly change the recognition, measurement or disclosure of the uncertain tax positions.</td>
</tr>
<tr>
<td>• We evaluated the reasonableness of management’s estimates by considering how tax law, including statutes, regulations and case law, impacted management’s judgments.</td>
</tr>
</tbody>
</table>
4. Requirement: Refer to the relevant financial statement accounts or disclosures that relate to the critical audit matter.

**Example: Cardinal Health, Inc. (Ernst & Young LLP)**

As described in Note 7 to the consolidated financial statements, the Company’s unrecognized tax benefits related to its uncertain tax positions were approximately $456 million at June 30, 2019.

**Example: Microsoft (Deloitte & Touche LLP)**

Refer to Note 12 to the Financial Statements

... The Company’s long-term income taxes liability ... 

How to Improve CAMS Reporting

This report highlights the CAM examples above because they appeared to be more robust and granular than the CAMs of many other companies for that topic. While it is clear that the CAMs that have been reported as of December 5, 2019 will be useful tools for investors, shareholders, and analysts when reading financial reports, it is also clear that many investors will be disappointed that the CAMs fall short of what users of financial reports had requested during the development of the PCAOB standard.

As previously indicated, the third PCAOB requirement for CAMs is that the auditor must describe how the critical audit matter was addressed in the audit. A note to that requirement states:

Note: In describing how the critical audit matter was addressed in the audit, the auditor may describe: (1) the auditor's response or approach that was most relevant to the matter; (2) a brief overview of the audit procedures performed; (3) an indication of the outcome of the audit procedures; and (4) key observations with respect to the matter, or some combination of these elements.55

Many of the CAMs issued to-date have complied with the requirement of describing how the CAM was addressed in the audit by providing the “(1) auditor's response or approach that was most relevant to the matter” and providing “(2) a brief overview of the audit procedures performed.” However, to-date, CAMs have not included “(3) an indication of the outcome of the audit procedures” or “(4) key observations with respect to the matter.”

Thus, as indicated, the CAMs issued to-date will be disappointing to many investors, because many users of financial reports had requested that the auditor provide insights or

findings when describing how the CAMs were addressed in the audit. For example, a working group of the PCAOB’s own Investor Advisory Group "stressed the importance to investors of auditor findings, which they described as ‘the one item that [they] believe would provide the greatest value to investors.’" The PCAOB included items (3) and (4) in the aforementioned note to the CAM requirements so that “the auditor may choose to include findings as an indication of the outcome of audit procedures or key observations about a matter . . . [and because the PCAOB shared the view of many investors] that the inclusion of informative, company-specific audit findings related to critical audit matters may, in appropriate circumstances, be valuable to investors and encourages auditors to consider including such findings in their auditor's reports.”

It is perhaps not entirely surprising that to-date, reporting of CAMs under the new standard have not provided insights or findings when describing how the CAM was addressed. During the development of the standard, some accounting firms opposed requiring communication of auditor findings, arguing that such a communication would imply that the auditor was providing a separate opinion or assurance on accounts or disclosures to which the CAMs relate. The PCAOB, however, directly addressed that concern by requiring that the paragraph preceding the CAMs in the auditor’s report contain the following language:

The communication of critical audit matters does not alter in any way our opinion on the financial statement, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Many investors remain hopeful that future reporting of CAMs will be more responsive to the needs and demands of investors by including information in response to the third and fourth items in the note to the CAMs third requirement described previously. In that regard, this report suggests hypothetical text for the six companies discussed above to illustrate what would be more helpful to many investors. The general wording suggested was derived, in part, from language that has appeared in recent audit reports for companies in the United Kingdom (UK) in compliance with the “Key Audit

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56 See id. at 30 (“Several investors suggested that the auditor should be required or encouraged to provide informative, company-specific findings when describing how the critical audit matter was addressed . . .”).
57 Id. at 31 (footnote omitted & emphasis added).
58 Id.
59 Id. at 31-32 (“the language used should not imply that the auditor is providing a separate opinion on the critical audit matter or on the accounts or disclosures to which they relate”).
60 Id. at A1 – 9-10 (emphasis added).
61 Id. at A1 – 9 (§14c).
Matters” counterpart to CAMs and other language considered, but not adopted, by the PCAOB. Among other potential uses, this type of additional information over time would assist institutional investors in making proxy voting decisions, including ratification of the appointment of auditors and the election of audit committee chairs and members.

Example: What Many Investors Would Add on Goodwill and Intangible Assets at Procter & Gamble Company (Deloitte & Touche LLP)

**Key Observations:** As a result of our work, we found the Company’s impairment evaluations of goodwill for the Shave Care reporting unit and the Gillette brand, including the related estimates and assumptions, to be balanced except for the estimates and assumptions regarding [insert] which were [mildly optimistic/mildly pessimistic]. We also found that it was appropriate that a before tax impairment charge of $6.8 billion was recognized by the Company for the goodwill related to the Shave Care reporting unit and a $1.6 billion before tax impairment charge was recognized by the Company to reduce the value of the Gillette brand indefinite-lived intangible asset.

Example: What Many Investors Would Add on Goodwill and Intangible Assets at The Hain Celestial Group, Inc. (Ernst & Young LLP)

**Key Observations:** As a result of our work, we found that the significant assumptions used in management’s evaluations of goodwill and trademarks, and trade names for impairment, including the data used for the valuations, to be balanced except for the significant assumptions related to [insert] which were [mildly optimistic/mildly pessimistic]. We also found that it was appropriate that no impairment charge was recognized by the Company for goodwill and trademarks, and a pre-tax impairment charge of $17.9 million was recognized by the Company for certain tradenames of the Company.

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64 PCAOB Release No. 2017-001 at 30 (“Several investors suggested that the auditor should be required or encouraged to provide informative, company-specific findings when describing how the critical audit matter was addressed in the audit, such as whether management’s significant accounting estimates and judgments were balanced, mildly optimistic, or mildly pessimistic.”).
Example: What Many Investors Would Add on Revenue at CDK Global, Inc.  
(Deloitte & Touche LLP)

**Key Observations:** Based on our audit work, we found the Company’s methodology for estimating standalone selling prices to be balanced except for the selling price estimates for [insert] contracts which were [mildly optimistic/mildly pessimistic]. We did not identify any material instances of revenue not being recognized in accordance with the Company’s stated accounting policies.

Example: What Many Investors Would Add on Revenue at Nutanix, Inc.  
(Deloitte & Touche LLP)

**Key Observations:** Based on our audit work, we found management’s determination of the timing of when revenue is recognized for each distinct performance obligation, and management’s estimate of standalone selling prices for products and services that are not sold separately, to be balanced except for the timing of when revenue was recognized for [insert] performance obligations and management’s estimate of standalone selling prices for [insert] products or services which were [mildly optimistic/mildly pessimistic]. We did not identify any material instances of revenue not being recognized in accordance with the Company’s stated accounting policies.

(Ernst & Young LLP)

**Key Observations:** Based on the procedures performed, we found that the Company’s measurement of uncertain tax positions related to transfer pricing used in its intercompany transactions to be balanced except for the measurements of [insert] which were [mildly optimistic/mildly pessimistic]. We determined the provision reflects the Company’s current best estimate of the expected economic outflow. Based on the procedures performed, we noted no material issues arising from our work.

Example: What Many Investors Would Add on Taxes at Microsoft.  
(Deloitte & Touche LLP)

**Key Observations:** Based on the procedures performed, we found that management’s methods and assumptions used in the identification, recognition, measurement, and disclosure of uncertain tax positions, management’s judgments regarding the future resolution of the uncertain tax positions, the appropriateness of management’s consideration of new information that could significantly change the recognition, measurement or disclosure of the uncertain tax positions, and the reasonableness of management’s estimates and judgments to be balanced except for [insert] which were [mildly optimistic/mildly pessimistic]. We determined the provision reflects management’s current best estimate of the expected economic outflow. Based on the procedures performed, we noted no material issues arising from our work.