

REVENUE RECOGNITION ACCOUNTING: UNDERSTANDING THE IMPACT OF ASC 606

Brent McCallum, State University of New York Polytechnic Institute, Utica
Chloe McCallum, University of Maryland, College Park

ABSTRACT

This case contrasts revenue recognition accounting under the previous standard, the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 605, and the subsequent guidance (ASC 606). This case is appropriate for undergraduate or graduate business courses focusing on corporate financial reporting. Accounting and finance professionals will find the case beneficial in understanding the application of the new pronouncement to common revenue recognition issues. Utilizing a putative Audit Partner who is auditing the environmental controls division of a manufacturing company, the case requires the procurement of information related to recently implemented revenue recognition accounting standards. The case employs a series of questions to ensure student comprehension of a variety of aspects of accounting for revenue recognition under the new standards, and the preparation of journal entries for fact patterns related to many typical transactions entered into by the auditee company (e.g. recognition of discounts.) The case makes extensive use of the FASB ASC references and guidance from the global professional accounting firms. Students should plan to spend 5-10 hours outside of class addressing the case requirements; in-class discussion of the case will run approximately 2 hours. Students may also present their findings in class for feedback and debate.

JEL: M41, M42

KEYWORDS: Revenue Recognition Accounting, Accounting Standards Codification (ASC) 606, International Financial Reporting Standards (IFRS) 15, International Accounting Standards Board (IASB), Financial Accounting Standards Board (FASB), Manufacturing Industry

INTRODUCTION

Revenue is one of the most important and pervasive measures of financial performance. The effects of revenue recognition impact numerous aspects of the financial statements via gross profit, operating income, net income, and earnings per share, to name a few. Therefore, it is critical that revenue recognition guidelines be applied consistently and comparably.

Unfortunately, previous revenue recognition guidance was difficult to implement in practice. Under ASC 605, revenue was to be recognized when it was “earned and realized or realizable.” This required the application of considerable judgment and resulted in a piecemeal methodology with industry-specific reporting anomalies that resulted in over 100 variations for revenue and gain recognition (the International Accounting Standards Board (IASB), 2008). Over time and in practice, revenue recognition was characterized by a lack of comparability and consistency amongst entities, industries, jurisdictions, and capital markets. The problematic nature of revenue recognition came to a head in the late 1990s/early 2000s as globalization, cross-border capital flows and aggressive and sometimes fraudulent revenue recognition approaches emerged. A series of fraudulent reporting schemes got the attention of financial statement users, standard setters and regulators (Carmichael, 2019.)

In an attempt to remedy these revenue recognition deficiencies, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) began the joint project of converging revenue recognition guidance in 2002 (Carmichael, 2019.) In May 2014, the FASB and IASB jointly issued ASC 606 and the IASB issued International Financial Reporting Standard (IFRS) 15, both entitled, “*Revenue from Contracts with Customers.*”

ASC 606 and IFRS 15 adopt the asset/liability approach, consistent with the conceptual framework, whereby revenue is recognized based on changes in assets and liabilities arising with contacts from customers. It is believed that the pronouncement should improve comparability and consistency between and among entities, industries, jurisdictions, and capital markets. The robust framework simplifies the preparation of financial statements and reduces the sources of guidance to which an organization must refer, thereby providing financial statement users with more useful information regarding the amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. (Deloitte, 2020)

Note: The FASB ASC is available at a nominal fee to academic institutions, their instructors and students here: <https://asc.fasb.org/>. We recommend using the academic ASC to enhance the classroom experience. For those without the access to the ASC, we have provided the section of the ASC where the information can be found using alternative methods.

Earnings management, “the planned timing of revenues, expenses, gains, and losses to smooth out bumps in earnings [usually to] increase income in the current year at the expense of income in future years” (Kieso et al, 2019 p. 4-5), is a form of fraud and decreases trust in public financial reporting and financial markets. Preventing revenue recognition fraud and abuse was “one of the original motives for the standard” (Carmichael, 2019). In 2002, in the aftermath of the Enron and other dotcom/tech bubble busts, many of which were revenue and earning management-related, the FASB noted that revenue recognition issues have “been a major source of restatements and prominently identified in Securities and Exchange Commission (SEC) enforcement actions” (Carmichael, 2019). In 2021, the Center for Audit Quality noted that “the most common type of fraud incident was improper revenue recognition (43%).” The Association of Certified Fraud Examiners in its annual Report to the Nations (ACFE, 2020) financial statement fraud schemes were the costliest, with a median loss of \$954,000 per episode.

ASC 606 applies to annual reporting periods beginning after December 15, 2017, including interim reporting periods within the annual period of adoption, for a public business entity and certain other organizations. Early application is permitted, but not earlier than the original effective date: annual reporting periods beginning after December 15, 2016 (FASB, 2022.)

In summary, revenue recognition guidance was contradictory and difficult to apply. In a globalized world, this affected comparability and led to aggressive or fraudulent practice and consequent SEC-mandated restatements. The FASB and IASB issued converged guidance in the form of ASC 606 and IFRS 15, “*Revenue from Contracts with Customers,*” in 2014 with implementation largely taking place in 2017 and 2018.

What will be the impact of implementing ASC 606, “*Revenue from Contracts with Customers*”?

The Company

Table 1 provides a brief description of the key operational and revenue recognition facts and circumstances of Olympic Environmental Solutions, Inc. (“Olympic” or “the Company”).

Table 1: Key Operational and Revenue Recognition Facts and Circumstances of Olympic

1	Olympic is a United States domiciled manufacturing company that began operations in 1969
2	Olympic is a leading global provider of equipment (hardware and embedded software), subscription Software as a Service (SaaS) solutions, and technologies that enable building owners to digitally manage their facilities to use space intelligently, cut operating expenses, and reduce maintenance. Equipment and services include everything from control systems for energy management, to cyber and other security systems and measures. Olympic offers various equipment and services to a diverse set of global customers and as a result, their earning process and revenue recognition processes have multiple aspects that are affected by the new guidance.
3	The Company sells a variety of color-coded solution configurations which provide equipment, supplies, accessories, installation, training and maintenance services. The color codes, in ascending cost and degree of customization of the configuration, are Bronze, Silver, and Gold. They correspond to differing levels of equipment quality, functionality and customer support services.

Table 1 shows some of the relevant operational and revenue recognition facts and circumstances of Olympic Environmental Solutions, Inc.

The Audit Partner (the Partner) of Olympic wants to know what the impact on assets, liabilities, and the income statement will be upon adoption of ASC 606. Table 2 notes the revenue recognition accounting guidance the Partner requires on several issues:

Table 2: Revenue Recognition Accounting Guidance the Audit Partner Requires

1	What are the new revenue recognition guidelines according to ASC 606?
2	How do the new revenue recognition guidelines impact the balance sheet, income statement, and disclosures?
3	What, if anything, needs to change, operationally and administratively, in terms of the accounting information system and data collection?

Table 2 displays the revenue recognition accounting guidance the Audit Partner requires.

The Partner has asked a member of the accounting staff to report on the new ASC 606 guidelines in order to bring the staff up-to-date and assess their impact on the financials of Olympic.

QUESTIONS

Question 1: The Partner is looking for an introduction to the new ASC 606 rules. Access the website of one of the global accounting, tax, and professional services firms (e.g. Deloitte, EY, KPMG, PwC, RSM/McGladrey, Baker-Tilley, etc.) Utilizing their ASC 606/Revenue Recognition publications, collect your findings and attach them as a file to your responses to the case questions herein.

Question 2: Use the Accounting Standards Codification or refer to one of the professional sources referred to in Question 1 to answer this question. Indicate the ASC standard followed by Olympic prior to the adoption of ASC 606. What is the number of the recently issued IFRS standard that corresponds to ASC 606? What is the meaning of, “The revenue recognition standard is converged”? Of what value is “convergence” to users?

Question 3: Describe the main differences when accounting for revenue recognition on contracts with customers between the prior standards (ASC 605) and the standard to be implemented (ASC 606).

Question 4: What is the key objective of the new revenue recognition guidance? What are the steps in the five-step process for implementing the revenue recognition principle under ASC 606?

Question 5: Using the Codification, briefly detail the significant elements of the five-step revenue recognition process under ASC 606.

Question 6: Perform various analyses related to specific issues in the revenue recognition process under ASC 606 that will affect the Company.

Table 3: Typical Revenue Recognition Issues with Which Olympic Will Have to Contend

The Company sells a variety of color-coded solution configurations which provide the equipment (hardware and software), installation, and various services (including SaaS) for total indoor environmental control. The color codes, in ascending cost and degree of customization of the configuration, are Bronze, Silver, and Gold. They correspond to differing levels of equipment quality, functionality, service and customer support. Respond to the requirements related to the following independent revenue arrangements for the Company’s equipment and services.

a. The equipment and support service of the Bronze Package is being offered for a total price of \$1,600. On its own, the equipment sells for \$1,400 (cost \$840). The Company estimates the standalone selling price of the support service (based on the adjusted market assessment approach) is \$300. The Company sold 100 Bronze packages on June 30, 2021, on account. The equipment was delivered and installed on July 25, 2021, and the company received payment the same day. Prepare journal entries for the Company for Bronze in June and July 2021. (Assume the company analyzes the sale of the equipment and support services and determines they should be considered two performance obligations.)

b. A customer is renovating a variety of buildings that require complete indoor environmental solutions in 2021. The customer purchases 800 Silver Packages from the Company during 2021. The equipment sale price and cost are \$2,000 and \$1,400, each, respectively. There is a 10% volume discount if the customer purchases 600 Silver Packages during 2021. On June 1, 2021, the Company delivered 520 Silver Packages on account. Assume the customer pays for the Silver Package purchases on June 30, 2021. Experience indicates the delivery of this many Silver Packages makes it certain the customer will be entitled to the volume discount. Prepare the journal entries for the customer for June 2021. Assume revenues are recorded net.

c. On January 1, 2021, Olympic enters into a three-year noncancelable subscription contract with a capable customer to provide access to its energy management control application software (a SaaS offering). On January 1 of each calendar year (2021, 2022 and 2023) of the contract, the customer will make the following nonrefundable payments: \$20,000, \$22,000 and \$24,000, respectively. The Company determines the \$66,000 total transaction price should be recognized evenly over the contract term (i.e., \$22,000 per annum) and equals the subscription’s Vendor Specific Objective Evidence (VSOE)-based and Standalone Selling Prices (SSPs) for the three-year subscription is \$66,000. The Company has contracted with the same customer for necessary implementation services for the SaaS subscription. The implementation contract calls for a \$9,000, one-time payment to be made on signing of the contract on January 1, 2021. Olympic reliably estimates the time and effort and expects to complete the implementation January 31, 2021. The VSOE and SSP for implementation services is \$12,000.

For simplicity, assume Olympic makes only one entry per year and ignore the cost of services. Prepare the journal entries on December 31, 2021, December 31, 2022, and December 2023 under ASC 606 and ASC 605.

Table 3 notes important revenue recognition considerations for certain typical transactions at Olympic. The solutions to these questions will utilize relevant portions of the five-step revenue recognition process in accordance with the requirements of ASC 606.

Question 7: If the company has to allocate the transaction price to separate performance obligations, what is required? While they need to use standalone selling prices, the contract will typically get a “bundled”/“basket purchase” (or “less than standalone”) price. How do companies develop their best estimate of what the good or service might sell for as a standalone offering of goods or services?

Question 8: In your opinion, does the new method of revenue recognition accounting provide a clearer picture of the company’s financial position?

Question 9: What are some of the implementation activities Olympic will need to plan on?

Questions 10 and 11 are optional and may be completed time-permitting.

Question 10: Discuss and analyze four articles written by the large multinational accounting, tax and professional services firms identified in Question 1. Evaluate the strengths and weakness of the new revenue recognition pronouncement. Make sure to answer the following questions:

1. In what ways are the quantitative and qualitative disclosure requirements more rigorous under ASC 606?
2. What does “due process” mean? How does the converged “Revenue from Contracts with Customers” reflect due process?
3. What types of entities will be more affected by the new revenue recognition accounting guidance? What are some of the areas that will be problematic for a sampling of, say, five of the industries (one issue per industry)?
4. What are the similarities and differences between the new revenue recognition accounting under US GAAP, ASC 606, as opposed to IFRS 15?

Question 11: Working in groups or individually, identify and discuss earnings management and revenue recognition issues found in any of the following classic texts or at the SEC’s Accounting and Audit Enforcement Release web site (number 4, below.) Using the guidance from one of the large multinational audit, tax and business advisory firms, identify any aspects of ASC 606 that would enhance or detract from

the earnings management and fraudulent or erroneous revenue recognition in the text or web site and related topic or case you select. Write a brief report detailing your findings.

-
- 1 Knapp, Michael C. (2017). *Contemporary Auditing* (11th ed.). Cengage Learning, Inc.
 - 2 Schilit, H. M., Perler, J., & Engelhart, Y. (2018). *Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud in Financial Reports* (4th ed.). McGraw-Hill.
 - 3 Mulford, C. W., & Comiskey, E. E. (2005). *The Financial Numbers Game: Detecting Creative Accounting Practices* (1st ed.). Wiley.
 - 4 U.S. Securities and Exchange Commission (2022). "Accounting and Auditing Enforcement Releases," U.S. Securities and Exchange Commission. Retrieved April 28th, 2022 at: <https://www.sec.gov/divisions/enforce/friactions.htm>
-

REFERENCE

American Institute of Certified Public Accountants (AICPA) (2019). *Audit and Accounting Guide: Revenue Recognition*. Wiley.

Association of Certified Fraud Examiners (ACFE) (2020). "Report to the Nations: 2020 Global Study on Occupational Fraud and Abuse." *Association of Certified Fraud Examiners*. Retrieved April 21st, 2022 at: <https://legacy.acfe.com/report-to-the-nations/2020/>

Baker Tilly (2016). "The ASC 606 Transition: A Revenue Recognition Primer," *Baker Tilly*. Retrieved December 2nd, 2021 at: <https://www.bakertilly.com/insights/webinar-the-revenue-recognition-transition-a-primer-webinar/>

Baker Tilly (2017). "ASC 606 Revenue Recognition E-book," *Baker Tilly*. Retrieved December 2nd, 2021, at: <https://www.bakertilly.com/insights/asc-606-revenue-recognition-ebook/>

Baker Tilly (2021). "ASC 606 Revenue Recognition Accounting," *Baker Tilly*. Retrieved December 2nd, 2021, at: <https://www.bakertilly.com/specialties/asc-606-revenue-recognition>

Carmichael, Doug (2019). "New Revenue Recognition Guidance and the Potential for Fraud and Abuse." *The CPA Journal*. Retrieved April 20th, 2022 at: <https://www.cpapjournal.com/2019/04/08/new-revenue-recognition-guidance-and-the-potential-for-fraud-and-abuse/>

Center for Audit Quality (2021). "New Report Reveals Common Themes in SEC Enforcement of Financial Statement Fraud." *Center for Audit Quality*. Retrieved April 21st, 2022 at: <https://www.theacaq.org/news/new-report-reveals-common-themes-in-sec-enforcement-of-financial-statement-fraud/>

Deloitte (2019). "Key Differences Between ASC 605-35 (Formerly SOP 81-1) and ASC 606." *Deloitte*. Retrieved April 21st, 2022 at: <https://www.iasplus.com/en/publications/us/industry-spotlight/ad/key-diff-605-and-606/file>

Deloitte (2020). "A Roadmap to Applying the New Revenue Recognition Standard," *Deloitte*. Retrieved April 20th, 2022 at: <https://dart.deloitte.com/USDART/pdf/8241a203-a4b3-11e7-bf31-d9d01b34306d>

Deloitte (2021). "On the Radar: ASC 606, Revenue Recognition Methods," *Deloitte*. Retrieved December 5th, 2021 at: <https://www2.deloitte.com/us/en/pages/audit/articles/a-roadmap-to-applying-the-new-revenue-recognition-standard.html>

Ernst & Young (2021). "Financial Reporting Developments - Revenue from Contracts with Customers (ASC 606)," *Ernst & Young*. Retrieved December 2nd, 2021 at:

https://www.ey.com/en_us/assurance/accountinglink/financial-reporting-developments---revenue-from-contracts-with-c

Financial Accounting Standards Board (2021). "Revenue Recognition," *Financial Accounting Standards Board*. Retrieved April 22nd, 2022 at:

<https://fasb.org/page/PageContent?pageId=/standards/implementing/revrec.html&bcpath=tff>

Financial Accounting Standards Board (2022). "ASC 606-10: Revenue from Contracts with Customers," *Financial Accounting Standards Board*. Retrieved December 1st, 2021 at:

<https://asc.fasb.org/subtopic&trid=49130389> (Sign up for access to ASC at: <https://asc.fasb.org/>)

Flood, J.M. (2017). *Revenue Recognition: Understanding and Implementing the New Standard*. Wiley.

Grant Thornton (2018). "Revenue from Contracts with Customers: Navigating the Guidance in ASC 606 and ASC 340-40," *Grant Thornton*. Retrieved August 4th, 2021 at: <https://www.grantthornton.com/-/media/content-page-files/audit/pdfs/revenue-from-contracts-with-customers-navigating-guidance.ashx?la=en&hash=E7A609939EDED53D5E78CF0F7B16BECFFFB4A585>

Grant Thornton (2019). "Audit Alert: ACS 606 - Revenue from Contracts with Customers," *Grant Thornton*. Retrieved August 5th, 2021 at: <https://www.grantthornton.pr/insights/kevane-grant-thornton/articles/08.05.19-audit-alert-acs-606--revenue-from-contracts-with-customers/>

International Accounting Standards Board (2008). "Preliminary Views on Revenue Recognition in Contracts with Customers." *International Accounting Standards Board*. Retrieved April 21st, 2022 at:

<https://www.ifrs.org/content/dam/ifrs/project/revenue-from-contracts-with-customers/discussion-paper/published-documents/dp-revenue-recognition.pdf>

Kieso, D. E., Weygandt, J. J., & Warfield, T. D. (2019). *Intermediate Accounting* (17th ed.). Wiley.

Knapp, Michael C. (2017). *Contemporary Auditing* (11th ed.). *Cengage Learning, Inc.*

KPMG (2021). "Revenue Recognition: KPMG In-Depth Guide to the Revenue Standard, ASC 606,"

KPMG. Retrieved December 5th, 2021 at: <https://frv.kpmg.us/reference-library/2021/handbook-revenue-recognition.html.html>

Mulford, C. W., & Comiskey, E. E. (2005). *The Financial Numbers Game: Detecting Creative Accounting Practices* (1st ed.). Wiley.

PricewaterhouseCoopers (2021). "Revenue from Contracts with Customers Guide,"

PricewaterhouseCoopers. Retrieved December 5th, 2021 at:

https://viewpoint.pwc.com/dt/us/en/pwc/accounting_guides/revenue_from_contrac/revenue_from_contrac_US/rr_pdf.html

Rampulla, Renee. (2019). *Revenue Recognition: Mastering the New FASB Requirements*. AICPA.

RSMUS (2016). "Revenue Recognition Under ASC 606," *RSMUS*. Retrieved December 1st, 2021 at:

<https://rsmus.com/insights/financial-reporting/a-guide-to-revenue-recognition.html>

Schilit, H. M., Perler, J., & Engelhart, Y. (2018). *Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud in Financial Reports* (4th ed.). McGraw-Hill.

U.S. Securities and Exchange Commission (2022). "Accounting and Auditing Enforcement Releases," *U.S. Securities and Exchange Commission*. Retrieved April 28th, 2022 at: <https://www.sec.gov/divisions/enforce/friactions.htm>

REVENUE RECOGNITION ACCOUNTING: UNDERSTANDING THE IMPACT OF ASC 606

TEACHING NOTES

Brent McCallum, State University of New York Polytechnic Institute, Utica

Chloe McCallum, University of Maryland, College Park

ABSTRACT

This case contrasts revenue recognition accounting under the previous standard, the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 605, and the subsequent guidance (ASC 606). This case is appropriate for undergraduate or graduate business courses focusing on corporate financial reporting. Accounting and finance professionals will find the case beneficial in understanding the application of the new pronouncement to common revenue recognition issues. Utilizing a putative Audit Partner who is auditing the environmental controls division of a manufacturing company, the case requires the procurement of information related to recently implemented revenue recognition accounting standards. The case employs a series of questions to ensure student comprehension of a variety of aspects of accounting for revenue recognition under the new standards, and the preparation of journal entries for fact patterns related to many typical transactions entered into by the auditee company (e.g. recognition of discounts.) The case makes extensive use of the FASB ASC references and guidance from the global professional accounting firms. Students should plan to spend 5-10 hours outside of class addressing the case requirements; in-class discussion of the case will run approximately 2 hours. Students may also present their findings in class for feedback and debate.

GENERAL COMMENTS

This case is designed to be used in an Intermediate Financial Accounting class. However, with slight modification, it might be useful to finance classes on financial statement analysis, a senior strategic management class, an MBA financial management or financial reporting course, or an appropriate section of one of the certification exam prep courses (CPA, CMA, CFA, etc.) The case was developed for use in a country that uses US GAAP and the Accounting Standards Codification (ASC). However, the International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB) standards were developed in concert (converged) and are thus very similar. Thus, the case can be modified very slightly to reflect IASB guidance. This case is not designed for students to understand the intricacies of revenue recognition accounting, but rather as an introductory look at the new process for, and basics of, revenue recognition accounting. Any changes, amendments or updates to the standards may change the approach under ASC 606 and the case would need to be modified appropriately.

SOLUTIONS

Question 1: The Partner is looking for an introduction to the new ASC 606 rules. Access the website of one of the global accounting, tax, and professional services firms (e.g. Deloitte, EY, KPMG, PwC, RSM/McGladrey, Baker-Tilley, etc.) Utilizing their ASC 606/Revenue Recognition publications, collect your findings and attach them as a file to your responses to the case questions herein.

Solution 1: This step in the case allows the user to see that there are many sources of information about the FASB ASC 606 guidance as well as at the ASC itself (FASB, 2022.)

Table 1: Relevant Publications Related to ASC 606 – Revenue from Contracts with Customers

-
- a. **PWC**: https://viewpoint.pwc.com/dt/us/en/pwc/accounting_guides/revenue_from_contrac/revenue_from_contrac_US/rr_pdf.html This link (PricewaterhouseCoopers, 2021) brings the user to the PWC site so that they may download a guide to revenue from contracts with customers.
- b. **Deloitte**: <https://dart.deloitte.com/USDART/pdf/8241a203-a4b3-11e7-bf31-d9d01b34306d> This link (Deloitte, 2020) brings the user to the Deloitte site that has both detailed guidance and summarized lease accounting guidance. There are also highlights for different aspects of revenue recognition accounting (Deloitte, 2021) towards the bottom of the page here: <https://www2.deloitte.com/us/en/pages/audit/articles/a-roadmap-to-applying-the-new-revenue-recognition-standard.html>.
- c. **KPMG**: <https://frv.kpmg.us/reference-library/2020/handbook-revenue-recognition.html>. This link (KPMG, 2021) brings the user to a KPMG Revenue Recognition Handbook.
- d. **EY**: https://www.ey.com/en_us/assurance/accountinglink/financial-reporting-developments---revenue-from-contracts-with-c. This link (Ernst & Young, 2021) brings the user to the EY website and a downloadable guide on ASC 606.
- e. **Baker Tilley**: <https://www.bakertilly.com/insights/webinar-the-revenue-recognition-transition-a-primer-webinar/> This link (Baker Tilley, 2016) provides the user an overview on ASC 606.
- f. **Grant Thornton**: <https://www.grantthornton.com/-/media/content-page-files/audit/pdfs/revenue-from-contracts-with-customers-navigating-guidance.ashx?la=en&hash=E7A609939EDED53D5E78CF0F7B16BECFFFB4A585> This link (Grant Thornton, 2018) provides a thorough guide to the ASC 606 guidance.
- g. **RSM McGladrey**: <https://rsmus.com/insights/financial-reporting/a-guide-to-revenue-recognition.html> This link (RSMUS, 2016) provides further guidance on ASC 606.
-

Table 1 provides a listing of relevant publications related to ASC 606, “Revenue from Contracts with Customers” from each of the Big Four websites and the relevant websites of several other large international public accounting firms. Some additional links are included in the References section.

Key items that students should address include the various items included in the answers to the questions that follow—revenue accounting issues under ASC 605 (the superseded guidance), the five-step revenue recognition process, presentation and disclosure. See <https://www.fasb.org/revrec> for a complete listing of the main topics to be covered in the overview of the guidance.

Question 2: Use the Accounting Standards Codification or refer to one of the professional sources referred to in Question 1 to answer this question. Indicate the ASC standard followed by Olympic prior to the adoption of ASC 606. What is the number of the recently issued IFRS standard that corresponds to ASC 606? What is the meaning of, “The revenue recognition standard is converged”? Of what value is “convergence” to users?

Solution 2: This step in the case allows the user to see that in addition to the guidance from the large professional accounting firms, the Accounting Standards Codification is a rich source of information regarding revenue recognition guidance and serves some of the same function as the firm-specific guidance. Alternatively, students see that the professional guidance typically includes a reference to the appropriate section of the ASC.

Olympic previously followed ASC 605. The newly minted IFRS standard for revenue recognition is IFRS 15. Converged standards are US GAAP/IFRS rules that, because of collaboration between the FASB and the IASB, are nearly identical. Converged standards greatly enhance revenue recognition comparability and consistency across entities, industries, geographic locales and accounting standard-setting regimes, which is particularly important in an environment of widespread and intense globalization, cross-border capital flows, and equity-linked executive compensation schemes.

Question 3: Describe the main differences when accounting for revenue recognition on contracts with customers between the prior standards (ASC 605) and the standard to be implemented (ASC 606).

Solution 3: The main differences between ASC 605 and ASC 606 are delineated in Table 2.

Table 2: Brief Description of the Key Differences Between ASC 605 and ASC 606

	ASC 606	ASC 605
Basis	Principle-based	Rule based, <i>ad hoc</i> , piece meal, varies by entity, industry, jurisdiction and capital market
Proliferation of Methodologies	One methodology for recognizing revenue	Massive proliferation of inconsistent methodologies for recognizing revenue
Convergence status	Converged with IFRS	Not converged
Comparability/Consistency	Enhanced consistency and comparability	Industry/Geographic variances, numerous inconsistencies and lack of comparability
Conceptual Framework Basis	Conceptual Framework compliant--Account for revenue based on the asset or liability arising from contracts with customers and the changes thereto.	Less Conceptual Framework compliant as applying it required knowledge of more than 200 standards/rules/guidelines varying by revenue earning process, entity, industry, geographic location/accounting standard regime which results in widespread diversity in practice.
Revenue Recognition	Detailed, Five Step Revenue Recognition Process. Contract-based. Recognize revenue when each performance obligation is satisfied.	Highly judgmental earned and realized/realizable criteria. Led to over 200 varieties of acceptable revenue recognition methodologies and diversity in practice.
Presentation and Disclosure	Presentation of Contracts--assets and liabilities; modifications/modification approaches; costs to fulfill; significant judgments. Numerous other disclosures.	Very limited disclosure

Table 2 provides a listing of main differences between ASC 606 and ASC 605 (Deloitte, 2019.)

Question 4: What is the key objective of the new revenue recognition guidance? What are the steps in the five-step process for implementing the revenue recognition principle under ASC 606?

Solution 4: “The core principle is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.” (ASC 606-10-65-1; Deloitte, 2020.)

The five-step process for reporting on contracts with customers mandates that revenues are recognized to depict the transfer of goods and services to customers in an amount that reflects the consideration that the company receives, or expects to receive, for the exchange of the goods and services.

The five-step process for revenue recognition is as follows:

1. Identify the contract with customers.
2. Identify the separate performance obligations in the contract.
3. Determine the transaction price.
4. Allocate the transaction price to the separate performance obligations.
5. Recognize revenue when each performance obligation is satisfied.

Question 5: Using the Codification, briefly detail the significant elements of the five-step revenue recognition process under ASC 606.

Solution 5: The 5-step process referred to above is described in detail, including summaries and graphics, in *A Roadmap to Applying the New Revenue Recognition Standard* (Deloitte, 2020.) Students will likely also discuss key terms such as the asset-liability approach, collectability, contract assets/liabilities, contract modifications, distinct/interdependent, performance obligation, and transaction price.

Question 6: Perform various analyses related to specific issues in the revenue recognition process under ASC 606 that will affect the Company.

Solution 6: Solutions are included below each lettered portion of the Question.

Table 3: Typical Revenue Recognition Issues with Which Olympic Will Have to Contend

The Company sells a variety of color-coded solution configurations which provide the equipment (hardware and software), installation, and various services (including SaaS) for total indoor environmental control. The color codes, in ascending cost and degree of customization of the configuration, are Bronze, Silver, and Gold. They correspond to differing levels of equipment quality, functionality, service and customer support. Respond to the requirements related to the following independent revenue arrangements for the Company's equipment and services.

a. The equipment and support service of the Bronze Package is being offered for a total price of \$1,600. On its own, the equipment sells for \$1,400 (cost \$840). The Company estimates the standalone selling price of the support service (based on the adjusted market assessment approach) is \$300. The Company sold 100 Bronze packages on June 30, 2021, on account. The equipment was delivered and installed on July 25, 2021, and the company received payment the same day. Prepare journal entries for the Company for Bronze in June and July 2021. (Assume the company analyzes the sale of the equipment and support services and determines they should be considered two performance obligations.)

(a) Total revenue was \$160,000 (\$1,600 X 100). This is allocated to the two performance obligations (the equipment and the support services based on standalone selling prices). The standalone selling prices are: equipment \$140,000 (\$1,400 X 100); and, support services \$30,000 (\$300 X 100). Total standalone selling price is \$170,000. The allocation would then be:

Sales Revenue (\$140,000 / \$170,000) X \$160,000 =	131,764.71	82.35%
Service Revenue (\$30,000 / \$170,000) X \$160,000 =	28,235.29	17.65%

Both the sale of the equipment and the service revenue are recognized once the installation is completed on June 30, 2020.

The entries would be:

6/30/2021

Accounts Receivable	131,765	
Sales Revenue (Equipment)		131,764.71
Service Revenue (Support Services)		28,235.29
Cost of Goods Sold	84,000	
Inventory (\$840 X 100)		84,000

7/25/2021

Cash	131,765	
Accounts Receivable		131,764.71

b. A customer is renovating a variety of buildings that require complete indoor environmental solutions in 2021. The customer purchases 800 Silver Packages from the Company during 2021. The equipment sale price and cost are \$2,000 and \$1,400, each, respectively. There is a 10% volume discount if the customer purchases 600 Silver Packages during 2021. On June 1, 2021, the Company delivered 520 Silver Packages on account. Assume the customer pays for the Silver Package purchases on June 30, 2021. Experience indicates the delivery of this many Silver Packages makes it certain the customer will be entitled to the volume discount. Prepare the journal entries for the customer for June 2021. Assume revenues are recorded net.

(b) Consideration is variable based on the size of the customer (in terms of contracts signed/dollar value). The Company will decrease revenue recognized by \$104,000 which is calculated as the selling price of the Packages \$936,000 $[(\$2,000 \times 520) - (\$1,040,000 \times .10)]$, because it is highly likely that it will implement the 10% discount. The entries would be:

6/1/2021

Accounts Receivable		936,000	
	Sales Revenue $[(\$2,000 \times 520) \times (1.0 - .10)]$		936,000
Cost of Goods Sold		728,000	
	Inventory $(\$1,400 \times 520)$		728,000

6/30/2021

Cash		936,000	
	Accounts Receivable		936,000

c. On January 1, 2021, Olympic enters into a three-year noncancelable subscription contract with a capable customer to provide access to its energy management control application software (a SaaS offering). On January 1 of each calendar year (2021, 2022 and 2023) of the contract, the customer will make the following nonrefundable payments: \$20,000, \$22,000 and \$24,000, respectively. The Company determines the \$66,000 total transaction price should be recognized evenly over the contract term (i.e., \$22,000 per annum) and equals the subscription's Vendor Specific Objective Evidence (VSOE)-based and Standalone Selling Prices (SSPs) for the three-year subscription is \$66,000. The Company has contracted with the same customer for necessary implementation services for the SaaS subscription. The implementation contract calls for a \$9,000, one-time payment to be made on signing of the contract on January 1, 2021. Olympic reliably estimates the time and effort and expects to complete the implementation January 31, 2021. The VSOE and SSP for implementation services is \$12,000. For simplicity, assume Olympic makes only one entry per year and ignore the cost of services. Prepare the journal entries on December 31, 2021, December 31, 2022, and December 2023 under ASC 606 and ASC 605.

(c) Under legacy GAAP (ASC 605), multiple deliverables are allocated based on their relative selling price using Vendor Specific Objective Evidence (VSOE). Under ASC 606 it is allocated based on relative Standalone Selling Price (SSP). Under legacy GAAP, future revenue is "contingent" upon the performance of the balance of the contract. Because the subscription contract has an escalation clause, the contingent revenue is "held back". Even though the allocation is the same under ASC 605 and ASC 606, the additional revenue is held back under ASC 605 and recorded using a "Contract Asset" account under ASC 606. The effect of this allocation method is that the discount or premium relative to VSOE/SSP shared equally among the various services. The appropriate entries and revenue allocation schedule are below:

ASC 606		ASC 605	
12/31/2021		12/31/2021	
Cash	\$29,000.00	Cash	\$29,000.00
Contract Asset	\$3,692.31	Revenue	\$29,000.00
	Revenue		\$32,692.31
12/31/2022		12/31/2022	
Cash	\$22,000.00	Cash	\$22,000.00
	Contract Asset		Revenue
	Revenue		\$22,000.00
	846.15		21,153.85
12/31/2023		12/31/2023	
Cash	\$24,000.00	Cash	\$24,000.00
	Contract Asset		Revenue
	Revenue		\$24,000.00
	\$2,846.15		\$21,153.85

Service	Contract Revenue	VSOE (ASC 605); SSP (ASC 606)	Allocation	Subscription Revenue per Yr. (ASC 606)
Subscription	66,000.00	66,000.00	63,461.54	21,153.85
Implementation	9,000.00	12,000.00	11,538.46	
Total	75,000.00	78,000.00	75,000.00	

Table 3 analyzes various revenue-generating transactions Olympic engages in. The solutions utilize relevant portions of the five-step revenue recognition process in accordance with the requirements of ASC 606. (AICPA, 2019; Flood, 2017; Deloitte 2019)

Question 7: If the company must allocate the transaction price to separate performance obligations, what is required? While they need to use standalone selling prices, the contract will typically get a “bundled”/“basket purchase” (or “less than standalone”) price. How do companies develop their best estimate of what the good or service might sell for as a standalone offering of goods or services?

Solution 7: Companies use one of three methods to develop an estimate of what of what the good or service might sell for as a standalone offering:

- The adjusted market assessment approach: The price customers are estimated to be willing to pay for those goods/services.
- The cost plus a margin approach: The expected costs of satisfying performance obligation plus an appropriate margin for each good or service.
- The residual approach: The difference between the bundle’s total selling price and the sum of the known standalone selling prices.

If a bundle’s selling price is less than the sum of the individual standalone price(s), the discount is allocated to the product(s) creating the discount (Deloitte, 2020)

Question 8: In your opinion, does the new method of revenue recognition accounting provide a clearer picture of the company’s financial position?

Solution 8: Students may have a variety of answers as this involves drawing an overall opinion based on answering the above questions, their readings for the course, and other sources. The FASB believes more useful information on the nature, amount, timing, and uncertainty of revenue from contracts with customers will be provided, because the guidance removes inconsistencies and weaknesses in existing revenue requirements; provides a more robust framework; improves comparability; provides more useful disclosure information; and simplifies financial statement preparation (FASB, 2021.)

Question 9: What are some of the implementation activities Olympic will need to plan on?

Solution 9: This question gets students to think about all the various planning, decision-making, and control activities related to new reporting requirements (and part of why financial statement preparers are so opposed to new regulations!) Chapter 21, “Implementation Activities,” of *A Roadmap to Applying the New Revenue Recognition Standard* (Deloitte, 2020) details a variety of considerations and provides some handy schematics (e.g. “Roadmap for Implementation” on p. 730).

Questions 10 and 11 are optional and may be completed time-permitting.

Question 10: Discuss and analyze four articles written by the large multinational accounting, tax and professional services firms identified in Question 1. Evaluate the strengths and weakness of the new revenue recognition pronouncement. Make sure to answer the following questions:

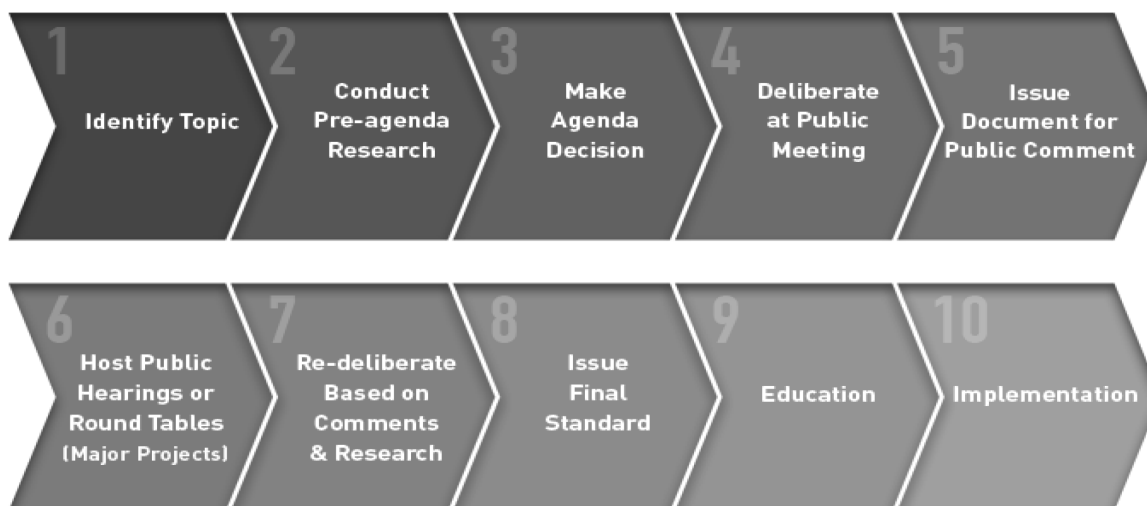
Solution 10: Solutions are included below each numbered item in Question 10. Answers will vary based on the resources accessed but should reflect the content and considerations outlined below. See References for useful sources if additional detail is desired.

1. In what ways are the quantitative and qualitative disclosure requirements more rigorous under ASC 606?

ASC 606 includes more exacting presentation and enhanced disclosure requirements. It includes qualitative and quantitative information about contracts with customers, the significant judgments made in the recognition of revenue, as well as assets recognized from costs incurred to fulfill a contract. The expanded quantitative and qualitative disclosures under ASC 606 are detailed at ASC 606-10-50-1, and *A Roadmap to Applying the New Revenue Recognition Standard* (Deloitte, 2020.)

2. What does “due process” mean? How does the converged “Revenue from Contracts with Customers” reflect due process?

This question gets students to think about the basic structure of accounting standard setting. In the case of developing and implementing accounting standards, it means operating transparently, with public access and feedback, and a Board that is independent and not dominated by the professional accounting firms. This is thought to build confidence that all sides have been heard and that accounting pronouncements have been generated in a relatively “fair” manner (Kieso, 2019.) The Revenue Recognition standard followed the above-described due process mechanisms over an approximately two-decade period (Deloitte, 2020.)



(FASB, 2021.)

3. What types of entities will be more affected by the new revenue recognition accounting guidance? What are some of the areas that will be problematic for a sampling of, say, five of the industries (one issue per industry)?

Answers will vary. While practically all industries are affected, some of the more notable industries (and examples of industry-specific issues) are software (post-contract customer support, determining whether components are separate performance obligations, guaranteed upgrades/support), construction (customer termination rights and penalties on contract termination, variable consideration, measures of progress), aerospace and defense (contract modifications including unpriced change orders, significant financing components, US/foreign government contracts), and telecommunications (identification of separate performance obligations, portfolio accounting.) See the References section above, especially *Revenue Recognition: Understanding and Implementing the New Standard* (Flood, 2017), and the *AICPA Audit and Accounting Guide: Revenue Recognition* (AICPA, 2019.)

4. What are the similarities and differences between the new revenue recognition accounting under US GAAP, ASC 606, as opposed to IFRS 15?

See “Appendix A — Differences Between U.S. GAAP and IFRS Standards,” in *A Roadmap to Applying the New Revenue Recognition Standard*, (Deloitte, 2020, p. 751.)

Question 11: Working in groups or individually, identify and discuss earnings management and revenue recognition issues found in any of the following classic texts or at the SEC’s Accounting and Audit Enforcement Release web site (number 4, below.) Using the guidance from one of the large multinational audit, tax and business advisory firms, identify any aspects of ASC 606 that would enhance or detract from the earnings management and fraudulent or erroneous revenue recognition in the text or web site and related topic or case you select. Write a brief report detailing your findings.

-
1. Knapp, Michael C. (2017). *Contemporary Auditing* (11th ed.). Cengage Learning, Inc.
 2. Schilit, H. M., Perler, J., & Engelhart, Y. (2018). *Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud in Financial Reports* (4th ed.). McGraw-Hill.
 3. Mulford, C. W., & Comiskey, E. E. (2005). *The Financial Numbers Game: Detecting Creative Accounting Practices* (1st ed.). Wiley.
 4. U.S. Securities and Exchange Commission (2022). "Accounting and Auditing Enforcement Releases," *U.S. Securities and Exchange Commission*. Retrieved April 28th, 2022 at: <https://www.sec.gov/divisions/enforce/friactions.htm>
-

Solution 11: Students answers will vary. Some areas that may be of interest to them are described below.

-
1. Knapp, Michael C. (2017). *Contemporary Auditing* (11th ed.). Cengage Learning, Inc.

The most involved cases are the comprehensive ones. These entail various elements of revenue recognition and earnings management. However, other sections include audits of high-risk accounts, internal control issues, ethical responsibilities of accountants, ethical responsibilities of independent auditors, professional roles, professional issues, and international cases. A fascinating resource widely used in undergraduate and graduate auditing, and financial accounting courses.

2. Schilit, H. M., Perler, J., & Engelhart, Y. (2018). *Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud in Financial Reports* (4th ed.). McGraw-Hill.

Schilit et al's text focuses on, among other topics, "Earnings Manipulation Shenanigans" (Part Two). "Chapter 3, Earnings Manipulation Shenanigan No. 1: Recording Revenue Too Soon" and "Chapter 4: Earnings Manipulation Shenanigan No. 2: Recording Bogus Revenue" are particularly relevant, but the entire text is a rich resource.

3. Mulford, C. W., & Comiskey, E. E. (2005). *The Financial Numbers Game: Detecting Creative Accounting Practices* (1st ed.). Wiley.

Mulford and Comiskey text is another source of insight regarding and examples of errors (unintentional) and irregularities (intentional) with regard to earnings management and fraudulent financial statement reporting. Chapters 2 through 4 and 6, "How the Game Is Played," "Earnings Management: A Closer Look," "The SEC Responds," and "Recognizing Premature or Fictitious Revenue" are particularly relevant.

4. U.S. Securities and Exchange Commission (2022). "Accounting and Auditing Enforcement Releases," U.S. Securities and Exchange Commission. Retrieved April 28th, 2022 at: <https://www.sec.gov/divisions/enforce/friactions.htm>.

Per the Center for Audit Quality, in recent years there were 140 AAERs related to financial statement fraud schemes resulting in 204 enforcement actions (Center for Audit Quality, 2021.) The ingenuity and focus demonstrated by the C-suite executives and auditors run amok is fascinating. The AAERs are listed at the SEC link above.

BIOGRAPHY

Brent McCallum, CPA, CMA, CFM, CGMA, MS is an Assistant Professor of Scholarly Practice at SUNY Polytechnic Institute in Utica, New York. His research appears in journals that include *Current Issues in Auditing*, *The Journal of Financial Planning*, *The CPA Journal*, *Emerging Markets Finance and Trade*, *Compensation and Benefits Digest*, the *International Research Journal of Applied Finance*, the *Review of Business & Finance Studies*. He can be reached at SUNY Polytechnic Institute, College of Business, 100 Seymour Rd., Utica, NY 13502.

Chloe M. McCallum is a graduate of the Robert H. Smith School of Business University of Maryland (B.S. Marketing, 2016). She is bilingual (Spanish/English) and has lived and worked overseas (Spain and the United Arab Emirates) for over a decade. Her research interests include current accounting and auditing issues, and professional services marketing strategy. She can be reached at University of Maryland, Robert H. Smith School of Business, 7621 Mowatt Ln. College Park, MD 20742.

The authors thank Raina Rose Tagle, Partner, Baker Tilly Virchow Krause, LLP, for her generous feedback.