Analytics mindset

Peach State University Hotel

Revenue

Background

Revenue is generally a significant account and is often associated with significant risks arising from revenue recognition or the risk of management override, which requires special audit considerations. You have been asked to perform audit analytics procedures on revenue for Peach State University Hotel (PSU Hotel) for the fiscal year ended June 30, 2016 (FY16). You will be using the audit analytics tool, EY Helix General Ledger Analyzer for students, to perform certain procedures as part of the audit.[1]

All of the data you need to perform your assigned audit procedures has been loaded into the tool. Refer to the User Guide tab in the tool or the separate user guide handout from the background case for an explanation of the purpose, navigation and instruction for each analysis in the tool.

During this case, you will be developing your analytics mindset by asking the right questions, applying appropriate analytics techniques, and interpreting and sharing the results of your work with your audit team.

As part of your audit of revenue, you will perform procedures using audit analytics to understand the revenue process, identify and assess risks and obtain substantive audit evidence using various analyses within the EY Helix General Ledger Analyzer for students tool (as indicated in **blue**). This case is broken out into two-parts as outlined below:

- Part I: Understanding the entity and assessing risk
- Part II: Substantive evidence in response to assessed risk

While we are able to use the tool to perform many revenue-related procedures, it is important to note that you will only be performing select procedures in the tool. Additional procedures, performed inside and outside the tool, will be required to support our overall conclusion over revenue.

It is important to note that what may start out as a risk assessment procedure can develop into a substantive analytical procedure if, among other things, you set an up-front expectation.

Throughout the audit, you must determine whether the procedures performed provide sufficient and appropriate evidence of the completeness, occurrence and measurement of the revenues. The higher the assessment of risk, taking into account the types of potential misstatements that could result from the identified risks and the likelihood and magnitude of potential misstatements, the more persuasive audit evidence the auditor needs to obtain. When further evidence is required, additional procedures can be performed.

[1] Note that EY Helix General Ledger Analyzer for students is a simplified version of EY Helix, the global analytics platform that EY uses to perform audit analytics in practice. As a result, its use for this case study is less precise than would be required for an actual audit, but is sufficient for the requirements of this case.

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Part I: Understanding the entity and assessing risks

An important part of the audit is understanding the entity and its environment. By understanding the nature of the entity, you are better able to understand the classes of transactions, account balances and disclosures to be expected in the financial statements.[2] To provide a basis for designing and performing further audit procedures, you will use that understanding to identify and understand the risks of material misstatement at the financial statement level and the relevant assertion level for classes of transactions, account balances and disclosures.[3]

Part of your understanding and risk assessment will come from the case study background you have already read. Additionally, the following data analytics procedures can be performed, using the EY Helix GL Analyzer for students, to better understand the entity and the revenue-related classes of transactions and to identify and assess the related risks.

a. Analyze the income statement

b. Analyze the balance sheet

c. Analyze monthly trends and relationships

d. Understand the sources of journal entries

e. Understand how journal entries are posted

f. Understand who is posting journal entries

g. Understand the debit and credit activity

h. Understand the relationship between revenue and cash using journal entries

[2] AICPA AU-C 315.12

[3] AICPA AU-C 315.26

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Part Ia: Analyze the income statement

The **Income statement analysis** allows us to identify the revenue accounts and their current year activity to understand the revenue-related classes of transactions. The following procedures usually involve comparisons of the recorded revenue with other information or using ratios or other independent relationships to evaluate if the recorded amounts make sense. We normally have general expectations about how the current period amounts may compare with the prior period amounts based on our understanding of the entity, its industry and the current economic environment (i.e., the case background materials). These general expectations assist us in identifying amounts or transactions that appear unusual or have unexpected changes that require further investigation.

Required:

- Review the **Income statement analysis** and prepare a lead sheet of all revenue accounts. As a reminder, a lead sheet functions as a table of contents and summarizes, at a high level, what happened in the account during the period. Make sure you answer the following questions.
  - What was the total amount of revenue for FY16?
  - What was the dollar change amount and the percentage change in the total revenue activity compared with the prior year?
  - Which revenue general ledger account represented the highest dollar value of activity in FY16?
- Would you expect revenue to increase or decrease in FY16 compared with the prior year? What specific factors influence your expectations?
- Do your expectations align with the FY16 results you see?

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Part Ib: Analyze the balance sheet

The **Balance sheet analysis** displays trial balance data for the current and prior period, including fluctuations by amount and percentage for each financial statement caption to provide an overview of the financial position of the entity.

Although revenue is not a balance sheet account, it is important to identify and understand all accounts within the revenue process, including balance sheet accounts such as trade receivables or cash. In many business cycles, the other side of most revenue entries would be trade receivables. However, because PSU Hotel is largely a cash and credit card based business, we expect the other side of most revenue entries to be cash. We should, therefore, identify and understand the relevant cash accounts.

Required:

- Review the **Balance sheet analysis** and prepare a lead sheet for all cash accounts.
  - What was the total amount of cash for FY16?
  - What was the dollar change amount and the percentage change in the total cash account balances since the prior year?
  - Which cash account represented the highest dollar value of activity?
  - Based on your understanding of the company's revenue process, identify the significant accounts you expect to be used when recording revenue. These accounts will be used within the case for the **Dimension analysis** to identify and evaluate postings between revenue and cash.

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Part Ic: Analyze monthly trends and relationships

The **Monthly activity analysis** allows us to understand information about the activity of revenue accounts, by month, for the current and prior period which aids us in obtaining an understanding of the revenue-related classes of transactions. The following procedures may help to identify the existence of unusual transactions or events and amounts, ratios, and trends that might indicate matters that have audit implications[4]. As we are identifying and assessing risk, we normally have general, rather than precise, expectations about how the current period amounts may compare with the prior period amounts based on our understanding of the entity, its industry and the current economic environment (i.e., the case background materials).

Required:

- Understand the annual and monthly activity of the revenue streams by reviewing the **Monthly activity analysis**.
  - What pattern do you see in the overall revenue activity and by account class in FY16?
  - How does this compare with the prior year?
  - Identify the most significant revenue streams, represented by account classes, in FY16.
    - Which month had the highest net sales for these account classes and how much were they?
- Beyond the expectations you already developed about overall revenues in Part I of this case, what general expectations do you have for monthly activity of revenue for FY16 compared with the prior year? What specific factors influence your expectations?
- Do your general expectations align with the FY16 results you see? If not, why?
- What is the benefit of being able to develop more precise expectations using the same analysis?

[4] AICPA AU-C 315.A15

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Part Id: Understand the sources of journal entries

The **Dimension analysis** is used to analyze account activity, disaggregated by dimensions captured by the ERP system, including the source of the entry, who posted the entry and the business unit posting the entry. By doing so, you can understand the nature, volume and frequency, including the changes from the prior period, of each dimension of the journal entries posted to revenue.

Required:

Determine which of the sources of journal entries for FY16 revenue represent one or more classes of transactions that are significant to the financial statements.

- Understand annual or monthly changes by the source of the journal entries for all revenue streams by reviewing the **Dimension analysis**.
  - What are the sources for all revenue accounts on an aggregate basis and what was the total activity of each source?
  - Were these sources and level of activity consistent with the prior year?
  - Why is this important to know?
- Based on the net FY16 activity, identify each of your sources as routine, non-routine or estimation classes of transactions.
- Which classes of transactions do you believe are significant to the financial statements and why?

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Part Ie: Understand how journal entries are posted

Using the **Journal entry line items**, we can confirm our understanding of the flow of transactions by walking through the process of how journal entries are posted between revenue-related accounts and sources (a walkthrough). We use the **Journal entry summary and details** to review the details of the journal entries to further confirm our understanding of the process.

Required:

- Confirm your understanding of the flow of transactions by walking through how journal entries are posted between revenue-related accounts and sources. For purposes of this case, limit your walkthrough only to credit card transactions for hotel sales.
  - Using the **Dimension analysis** for the month of June 2016, left-click on the activity and select View underlying JE line items.
- Using the **Journal entry line items**, identify the journal entry for the most significant activity for that month.
  - What was the journal entry identifier?
  - What was the journal entry description?
  - What was the effective date and the entry date?
  - What was the preparer's ID?
  - Which business unit was it?
- For this identified transaction, left-click on that amount and select Filter for the selected JE. Using the **Journal entry summary and details**, review the details of the journal entry.
  - What was the debit amount of that entry?
  - Does this confirm your understanding of the transaction?

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Part If: Understand who is posting journal entries

Required:

- Using the **Dimension analysis**, determine which individuals and/or systems prepared the journal entries for each of the significant revenue-related classes of transactions (i.e., hotel Sales, dining sales) and the total activity for each preparer.
- Were the revenue journal entries being recorded by appropriate individuals, departments or systems? Were they being recorded at a level of activity that matches your understanding of the entity's process?
- Why is this important to know?

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Part Ig: Understand the debit and credit activity

Required:

- Using the **Dimension analysis**, review the profile of the annual debit and credit activity for each of the significant revenue-related classes of transactions (i.e., hotel sales, dining sales) and determine whether the debit activity is significant or unusual.

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Part Ih: Understand the relationship between revenue and cash using journal entries

Using the **Balance sheet analysis**, we identified significant cash accounts to use for the revenue analysis based on the expected double-entry relationship between revenue to cash. Based on our understanding of the revenue class of transactions, we set a general expectation of the double-entry relationship between revenue to cash and use the **Dimension analysis** to identify and evaluate postings between revenue and cash to determine whether the entries agree with our expectations or whether additional risk is present.

Required:

- Identify and evaluate postings between revenue and cash using the **Dimension analysis**.
- What was the total amount of credit postings to all revenue accounts in FY16 based on your known revenue sources? Note that the degree of disaggregation (which may filter out extraneous activity) directly affects the quality of evidence we can obtain from this analysis.
  - What was the total amount of credit postings to all revenue accounts in FY16 originating from the Credit Card Receipt source?
  - If all of these were valid sales, how much cash would you expect to be posted from this source for the year (assuming there were no un-accrued collection or posting lags)?
  - What was the total amount of debit postings to cash in FY16 originating from the Credit Card Receipt source?
  - If the debits to cash did not equal the credits to revenue, explain why this might be.
  - Answer these same four questions for the Cash Receipts source.
- Confirm your expectation of the timing of the revenue collected as cash based on the entity's collection policies and other information.

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Part II: Substantive evidence in response to assessed risk

Background

In response to the risks identified, you will perform certain substantive procedures. These substantive procedures may be a combination of analytical procedures and tests of detail.[5] The following substantive analytical procedures can be performed using the EY Helix GL Analyzer for students to obtain some of the audit evidence needed to respond to the assessed risks of material misstatement. Additional procedures, not included in this case study, would also be needed to conclude.

a. Substantive analytical procedure – monthly revenue trend

b. Substantive analytical procedure – gross margin analysis

c. Cutoff testing – date analysis

[5] AICPA AU-C 330.A46

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Part IIa: Substantive analytical procedures – monthly revenue trend

When identifying and assessing risk we set general expectations when using the **Monthly activity analysis** to understand information about the activity of revenue accounts, by month, for the current and prior period. When using analytical procedures to obtain substantive evidence, we develop a more precise expectation of recorded amounts or ratios and evaluate whether the expectation is sufficiently precise (taking into account whether substantive analytical procedures are to be performed alone or in combination with tests of details) to identify a misstatement that, individually or when aggregated with other misstatements, may cause the financial statements to be materially misstated.[6]

Required:

- Based on your understanding of the annual and monthly activity of the revenue streams by reviewing the **Monthly activity analysis**.
  - What is your reasonably precise expectation of monthly revenue? For purposes of this case, limit your work to just hotel sales.
  - How did you develop your expectation and how precise do you think it is?
  - Assuming that the acceptable difference between the recorded amount and expected value for any given month is $150,000, which months likely require further investigation?

[6] AICPA AU-C 520.05

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Part IIb: Substantive analytical procedure – gross margin

The **Gross margin analysis** presents the sales compared to the cost of sales in table and graph formats and can be used to perform a substantive analytical procedure to provide evidence over the occurrence and valuation of revenue as well as related costs of goods sold.

Required:

- Analyze the gross margin for the dining sales revenue stream (note that there is no cost of sales for lodging).
  - Set a reasonably precise expectation for the gross margin percentage by month and a threshold for differences that need to be investigated.
  - Using the **Gross margin analysis**, establish the relationship between the revenues and the cost of sales for the different months and compare this with your expectation.
  - Assuming that the acceptable difference between the recorded amount and expected value for any given month is $5,000, are there any differences that don't match your expectations that require inquiry of PSU Hotel management?

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Part IIc: Cutoff testing – date analysis

The **Date analysis** enables us to understand the timing of revenue journal entries and to identify days that represent a higher risk for further testing.

Required:

- Understand the timing of period-end revenue journal entries and consider the related cutoff risk using the **Date analysis**. Note that since you do not have any FY17 data, you only are able to complete partial cutoff procedures. For hotel sales and dining sales (separately):
  - Review the credit activity in the last five days of the year.
  - How does this compare with the prior year?
  - Do you notice anything else that looks odd in the activity near year-end?
- Understand the revenue activity and booking patterns by effective date in the **Date analysis**. For hotel sales and dining sales (separately):
  - Which two dates had the largest posting? What might account for that?
  - When were there no postings? Why might this be?
- Review the **Date analysis** entry date activity for hotel sales and dining sales (separately). What is your expectation for the timing of the revenue occurrence and do you notice any postings on a day you did not expect them?
- Identify any unexpected journal entries at unexpected times. Consider whether this confirms your expectation for the timing of the revenue occurrence and booking dates.
- What might you do next to investigate?

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