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Effective Internal Controls for Recognizing Contracting Revenues

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Walden University

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Walden University

College of Management and Technology

This is to certify that the doctoral study by

Antonio Ghaleb

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2018

Abstract

Effective Internal Controls for Recognizing Contracting Revenues

by

Antonio Ghaleb

MBA, Holy Spirit University of Kaslik, 2009

BA, Holy Spirit University of Kaslik, 2005

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

April 2018

Abstract

Business leaders of contracting companies in Qatar struggle to develop appropriate internal controls over revenue estimates to mitigate the risk of financial statement manipulation. Grounded in the internal control framework of the Committee of Sponsoring Organizations of the Treadway Commission, the purpose of this multiple case study was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. Nine participants from 3 private contracting companies in Qatar who had implemented strategies to develop and implement effective internal controls for recognizing contracting revenues participated in face-to-face semistructured interviews. Through a process of methodological triangulation as described by Yin, observations and documentary evidence supplemented data collected through semistructured interviews. Different themes emerged through the analysis of data that involved coding narrative segments. The research findings included themes of control environment, control activities, systemized project budget, accounting standards compliance, and risk assessment and monitoring. Business leaders of contracting companies may benefit from the findings of this study by gaining awareness of the need to develop and implement effective internal controls for recognizing contracting revenues. Implications for positive social change could come from identifying internal controls that increase financial statement reliability, which could lead to increased access to capital and debt financing and improved employment opportunities in Qatar.

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Dedication

I dedicate this study to my wife, Carla Tarraf Ghaleb, for the unwavering support and sacrifice throughout the doctoral journey. I owe her a debt of gratitude for her continuous support since the day we met. I also dedicate this study to my supportive and loving parents, Fares Ghaleb and Yvonne El-Khawaja, who believed in me and supported all of my life's endeavors. To my amazing sisters, Darine Ghaleb and Nermine Ghaleb, and to my lovely brother, Halim Ghaleb. To my extended relatives and friends for their encouragement. And above all, to my source of inspiration, my adorable kids, Rita-Maria and Fares-Anthony. I love you all!

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Section 1: Foundation of the Study

Internal controls are a critical element of proper revenue recognition. The Committee of Sponsoring Organizations of the Treadway Commission (COSO), a voluntary private sector initiative dedicated to improving and enhancing organizational performance and corporate governance through an effective internal control system, provides guidance for businesses related to developing a framework of internal controls (COSO, 2013). Wang and Yu (2015) found that there was a significant relationship between internal control quality of engineering projects and the sustainability and corporate value. Managers understand that an ineffective internal control system can increase the difficulty of achieving a company's objectives of sustaining profits and reducing unexpected events (Hajiha & Bazaz, 2016). Martin, Sanders, and Scalan (2014) outlined the importance of the COSO framework as an accepted framework for evaluating internal control related to operations, compliance, and financial reporting (Martin et al., 2014).

Background of the Problem

Business leaders who deal with long-term contracting projects face unique financial reporting issues related to the accurate reporting of revenue. International Financial Reporting Standards (IFRS) require reporting revenue based upon the percentage of completion of a project as of the last day of the reporting year (IFRS, 2015a). When companies issue financial statements outside the United States, they must follow IFRS general accounting principles (Kumar, 2015). The IFRS accounting standards require management to assess project budget that is material to the financial

statement results. Without appropriate internal controls, these estimates are susceptible to manipulation by management (Kapić & Bašić, 2013). Flood (2017) stated that if those in management want to manipulate their revenues, they might use aggressive cost estimates when accounting for contracts. Griffith, Hammersley, Kadous, and Young (2015) stated that auditors consider the accounting estimate related to revenue recognition to be a high-risk estimate.

Management's estimate of contract revenue requires a project budget. Thus, the project budget, developed by management, has a direct effect on the revenue recognition of a contract. Srivastava (2014) pointed out that revenue is a substantial element in companies' financial statements. Revenue recognition decisions in a contracting company's financial statements have a substantial effect on understating or overstating revenue (IFRS, 2015a). The purpose of this qualitative multiple case study was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues.

Problem Statement

Business leaders of contracting companies struggle to develop appropriate internal controls over revenue estimates to mitigate the risk of financial statement manipulation (Feng, McVay, & Skaife, 2014). Rahman, Sulaiman, Fadel, and Kazemian (2016) conducted a survey study of 57 firms with financial statement fraud and determined that 36.9% of misreported revenue related to discretionary accruals. The general business problem is that without appropriate accounting policies and procedures regarding revenue recognition, contracting companies may lose revenue affecting profitability. The specific business problem is that some business leaders responsible for

financial reporting lack strategies to develop and implement effective internal controls for recognizing contracting revenues.

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. The population for this study included an accounting manager, finance managers, a chief internal controller, a finance controller, an estimation manager, and cost control managers from three private contracting companies in Qatar who had developed and implemented appropriate internal controls over revenue recognition. Implications for positive social change could come from identifying internal controls that increase financial statement reliability, which could lead to increased access to capital and debt financing and improved employment opportunities in Qatar.

Nature of the Study

Selecting an appropriate research method depends on the research question, objective of the study, and current knowledge of the topic (Dasgupta, 2015). The goal of qualitative researchers is to explore the depth and complexity inherent in phenomena; qualitative researchers employ a subjective approach to describe life experiences and provide them with meaning (Yin, 2014). Quantitative researchers analyze numerical data by employing statistical procedures and make deductive conclusions about the relationships and differences among variables (Venkatesh, Brown, & Bala, 2013). The goal of this study was to explore a phenomenon, not to test a hypothesis using numeric data; thus, I rejected quantitative and mixed methods and adopted a qualitative method.

Onwuegbuzie and Byers (2014) identified numerous qualitative designs, of which I considered ethnographic, phenomenological, and case study approaches. Ethnographic researchers study cultures to obtain a full understanding of members' cultural experiences (Mutchler, McKay, McDavitt, & Gordon, 2013). A phenomenological researcher seeks to gain the meaning of the lived experiences of study participants about a concept or phenomenon. Moustakas (1994) stated that researchers employ phenomenological design when the objective of a study is to explore participants' lived experiences. The purpose of this study was not to explore the culture or lived experiences of participants. Thus, I rejected both ethnography and phenomenology for the research design. A researcher using a case study design explores *what* as well as *how* or *why* questions concerning a process or phenomenon that works within a bounded system (Yin, 2014). The purpose of the case study design was to explore a bounded system or a case over time through detailed, in-depth data collection involving multiple sources of information in rich context. Using a case study design enables a researcher to explore a business-related bounded system involving a group of people (Dasgupta, 2015). My goal was to explore a business-related bounded system; thus, I employed a qualitative case study design to address the purpose of my study.

Research Question

The overarching research question was the following: What strategies do business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues?

Interview Questions

I used the following interview questions in my qualitative exploratory case study. Question 1 is the initial problem question, Questions 2-7 represent concept questions, and Question 8 is my wrap-up question.

1. What internal control framework do you have in place to assure compliance with revenue recognition accounting standards?
2. What strategies have you used to ensure that the internal controls are operating effectively regarding contracting revenue recognition?
3. What are the key strategies managers use to develop and implement appropriate internal controls for recognizing contracting revenues to be able to mitigate the risk of financial statement manipulation?
4. How do you assess the effectiveness of the strategies for using your budget as an internal control mechanism to manage projects?
5. How did you address the barriers to implementing the strategies for using project budget variances as a learning experience to strengthen internal controls?
6. How does the accounting team validate the reliability and accuracy of revenue recognition in the financial statements?
7. How does management adapt the internal control system for recognizing contracting revenues?
8. What else would you like to share about your experiences on the effectiveness of the internal control regarding contracting revenue recognition?

Conceptual Framework

The Treadway Commission established the COSO internal control conceptual framework in 1992 outlining professional practices for the development of efficient and effective internal controls (Moeller, 2014). Since 1992, using the COSO model has helped companies design, operate, and evaluate the effectiveness of internal controls (Rose, Sarjoo, & Bennett, 2015). Altheebeh and Sulaiman (2016) defined the five basic components of COSO: the control environment, risk assessment, control activities, information and communication, and monitoring. Shapiro (2014) expanded on the components of the framework:

1. *Control environment* includes the management's commitment to integrity, board of director independence, management accountability, and employee competency.
2. *Risk assessment* includes the management's commitment to business objectives, risk analysis, fraud risk, and change management.
3. *Control activities* include the management's focus on risk mitigation, technology risk, and effective policies.
4. *Information and communication* encompass internal communication within the organization.
5. *Monitoring activities* include a functioning internal audit department and continuous evaluation by management.

Internal control includes not only preventing accounting errors, but also employing an ethical focus on management in designing, implementing, controlling, and improving business processes (Lakis & Giriunas, 2012). The COSO framework applied

to my study because it provided means for exploring strategies and processes that business leaders employ in monitoring accounting policies and procedures regarding revenue recognition to ensure that internal accounting controls are operating effectively.

Operational Definitions

Contracting revenue recognition: Contracting revenue recognition is the stage of completion of the contracting activity as of the end of an accounting period (IFRS, 2015a).

Discretionary accrual: A discretionary accrual is a change to a company's financial position based upon a management estimate (Elshafie & Nyadroh, 2014).

Internal control: Internal control is a process performed by a company's board of directors, management, and other employees that is designed to provide reasonable assurance regarding the achievement of objectives in (a) effectiveness and efficiency of operations, (b) reliability of financial reporting, and (c) compliance with applicable laws and regulations (COSO, 1992).

International Financial Reporting Standards (IFRS): IFRS is a set of comprehensive accounting principles that emphasizes real economic transactions (Kumar, 2015).

Material misstatement: Misstatements or omissions of amounts are material if they could, individually or collectively, affect the economic decisions that users take by relying on financial statements (IFRS, 2015c)

Neutrality: With neutrality, auditors maintain professional skepticism while performing their audits by neither believing nor disbelieving client management (Quadackers, Groot, & Wright, 2014)

Presumptive doubt: With presumptive doubt, auditors assume a certain level of dishonesty unless evidence indicates the opposite (Quadackers et al., 2014).

Project budget: Project budget includes all costs that are associated and attributable directly to the specific project contract (IFRS, 2015a).

Restatement: Financial statement restatement involves correcting the recognition, measurement, and disclosure of amounts of elements incorporated into financial statements as if prior-period errors had never occurred (IFRS, 2015c).

Unqualified opinion: An unqualified opinion is an independent auditor's opinion that a company's financial statements are fairly stated and presented (Public Company Accounting Oversight Board [PCAOB], 2015).

Assumptions, Limitations, and Delimitations

During the process of conducting my doctoral study, I might encounter inherent flaws. However, being able to identify such problems and describe them is significant to any researcher because this process enables researchers to differentiate themselves from novice researchers and distinguish themselves as doctoral scholar-practitioners.

Assumptions consist of information that a researcher considers accurate but that may be unproven (Kirkwood & Price, 2013). A limitation is a threat to the validity and reliability of a study that causes a researcher to provide findings that do not address the research question or findings that are inconsistent with the objectives of the study (Connelly, 2013). Delimitations define the scope of a study, expressing what the researcher will not do or consider in the research (Marshall & Rossman, 2016).

Assumptions

Assumptions are research elements that are considered accurate and valid without concrete proof (Denzin & Lincoln, 2011). Chief financial officers (CFOs) recognize accounting estimates based upon assumptions of management (Kapić & Bašić, 2013). Accounting estimates in project budgets expose most contracting companies to the risk of uncertainty. Thus, there is uncertainty about the accuracy of the figures set in a project budget, which management uses in making a decision to accept and reject the project. Further assumptions in this study included the belief that the participants answered truthfully and that a qualitative case study was an appropriate strategy to research this topic. Participants had a clear understanding of the accounting estimates and acknowledged the risk of uncertainties regarding the project budget. Additionally, participants acknowledged the importance of having effective internal control over contracting revenue recognition. Wagenhofer (2014) determined that a significant reason for misestimation of project budgets is that development managers receive huge bonuses for planning projects based on projected profits, whereas managers who must operate the projects incur losses because of overoptimistic planning assumptions. I employed well-established techniques and procedures to collect the data to ascertain the validity and reliability of the information provided by the participants. However, there was no absolute guarantee that the data collected from the participants would be free from any intentional or unintentional error.

Limitations

Limitations are likely weaknesses in a study that are mostly outside the researcher's control, such as funding limitations, choice of research design, and other

factors (Marshall & Rossman, 2016). In this study, there were potential limitations that were not within my control as the researcher, including the following:

1. Some participants initially provided inaccurate statements regarding best practices in response to certain questions; I had to restructure these questions for purposes of clarity.
2. I noted the following change in accounting standards: IFRS 15 would replace IAS 11 starting in January 2018. Participants emphasized that the new IFRS 15 had the same application to contracting revenue recognition, with only immaterial differences from its predecessor.
3. The results were based upon a specific time and therefore may not reflect future activities.

Ellis and Levy (2009) pointed out that limitations usually flow from the research method employed in a study. Factors outside the researcher's control may negatively influence the results of a study. To confirm the results of my study, I recommend that researchers conduct further research on different populations.

Delimitations

Delimitations are the definitions that a researcher sets as the boundaries of a study (Marshall & Rossman, 2016). One delimitation of my study was the limited number of companies, in that the study involved three private contracting companies in Qatar. The target companies in this study were neither required to disclose detailed information regarding internal control nor obliged by authorities to disclose such information. The decision to study three private contracting companies only was a boundary.

Significance of the Study

Business leaders could use the results of this study to identify and implement appropriate internal controls over contracting revenue, thus increasing the reliability of financial statements. Investors rely on financial statements when making debt and equity investment decisions. Furthermore, society can benefit from this study's findings because contracting companies represent a significant percentage in the private sector in Qatar. Hence, increases in financial investments would have a direct effect on employment opportunities.

Contribution to Business Practice

Business leaders could benefit from the results of this study. The development and implementation of effective internal controls for recognizing contracting revenues directly relate to the reliability of financial statements. Revenue recognition is a significant element of the income statement that measures the financial performance of the company (Kasztelnik, 2015). Revenue recognition in the contracting sector is vulnerable to high levels of risk, which can lead to misstating the financial statement and misleading both internal and external users. Therefore, exploring strategies for developing and implementing effective internal controls for recognizing contracting revenues could increase the value of financial statements to accounting managers, CFOs, auditors, and regulators.

Implications for Social Change

Society could benefit from the results of this study because private contracting companies represent a significant source of employment opportunities in Qatar (Jarkas & Haupt, 2015). Kasztelnik (2015) noted that there is a significant increase in the value

relevance of revenue recognition after the adoption of IFRS along with an increase in the value relevance of accruals. Thus, the results of this study can contribute positively to social change by enhancing financial statement reliability. Financial statement reliability can lead to increased access to capital and debt financing, which may increase business opportunities and improve employment opportunities in Qatar. Furthermore, enhancing financial statement reliability promotes investors' confidence in financial statements and enables investors to make appropriate business decisions, catalyzing economic growth through capital spending.

A Review of the Professional and Academic Literature

The purpose of the literature review was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. To answer the research question, I conducted a qualitative multiple case study. The COSO internal control-integrated framework was the primary conceptual framework. I also considered the enterprise risk management (ERM) model as an alternative framework as I explored the research topic. A comprehensive review of professional and academic literature provided me an opportunity to gain a comprehensive understanding of my conceptual framework and published literature related to my research topic.

I organized the literature review into several topic headings, including (a) the COSO framework, (b) ERM, (c) project budget revenue recognition, (d) financial statements material weaknesses, (e), internal control, (f) accounting information, (g) IFRS, and (h) contracting field. The literature review included scholarly journal articles and dissertations found in the Walden University library and Google. The search terms

included *internal control*, *revenue recognition*, *corporate governance*, *COSO*, *ERM*, *contracting and construction*, and *financial statements*. The study included 209 sources, and 94% were peer-reviewed journal articles published in 2013 or later. The literature review included 71 references, with 67 published in 2013 or later; of these, 65 (91%) were peer reviewed.

Committee of Sponsoring Organizations of the Treadway Commission

The COSO frameworks originated from a voluntary private sector initiative dedicated to improving and enhancing organizational performance and corporate governance through an effective internal control system (Altheebah & Sulaiman, 2016). As defined by the Treadway Commission, COSO (1992) frames internal control as a process effected by the company's management and other employees that is designed to provide reasonable assurance regarding the achievement of the company's objectives in the following categories: (a) effectiveness and efficiency of the company's operations, (b) reliability of financial statements and other financial reporting in the company, and (c) compliance with applicable laws and regulations. The COSO framework represents the efforts of five major professional associations in the accounting profession: (a) American Institute of Certified Public Accountants, (b) Institute of Management Accountants, (c) Institute of Internal Auditors, (d) American Accounting Association, and (e) Financial Executives International (FEI; COSO, 2013). According to COSO (2013), the control environment sets the tone for an organization because COSO covers integrity, ethical value, employee competence, management's philosophy, operating cycle, and the leadership traits of the management and board of directors.

The COSO framework helps business leaders assess a business and its environment. Altheebeh and Sulaiman (2016) pointed out the five basic COSO components, which are the control environment, risk assessment, control activities, information and communication, and monitoring. Shapiro (2014) outlined the main components of the COSO integrated framework, including (a) control environment, which includes management's commitment to integrity, accountability, and competence; (b) risk assessment, which includes management's commitment to business objectives, risk analysis, and change management; (c) control activities, which include risk mitigation; (d) information and communication, and (e) monitoring activities, which include continuous evaluation.

The risk assessment component is the identification and analysis of risks in the company to achieve the objective of having an effective internal control system (COSO, 2013). Rose et al. (2015) highlighted that companies that have an effective and mature fraud risk assessment could implement it to strengthen their fraud prevention processes and procedures. Further, Rose et al. indicated that Principle 8 of COSO 2013 addressed the need to consider the impact of fraud when developing internal controls. Principle 8 of the COSO framework is similar to the fraud risk requirements embedded in the U.S. Sarbanes-Oxley Act of 2002, which requires companies to identify fraud controls to detect and prevent fraud at the transaction level (Rose et al., 2015).

The control activities are the policies and procedures that help to ensure that management directives are operating effectively and that enable CFOs to ensure the effectiveness of internal control in the accounting cycle of revenue recognition in contracting companies (Lin, Wang, Chiou, & Huang, 2014). Lin et al. (2014) pointed out

that CFOs and CEOs have to state in their companies' financial statements the effectiveness of internal control for the purpose of enhancing the U.S. capital market, and Section 302 of the Sarbanes-Oxley Act (SOX 302).

Management frames communication effectiveness through the COSO framework. Communication effectiveness between leaders and their followers includes a system of formal and informal communication that generates accurate information that flows through the organization (COSO, 2013). Management should communicate relevant information in a specified timeframe to enable individuals to carry out their responsibilities in the company (COSO, 2013). Agyei-Mensah (2016) found that many Ghanaian companies did not disclose sufficient internal control information in their annual financial reports. Independent directors help to improve the quality of internal control disclosure and increase the transparency of information (Agyei-Mensah, 2016). The findings connect to my study by showing the importance of having effective communication, which enables managers to increase the accuracy of budgeting and revenue recognition.

Part of a control environment is regularly monitoring operating activities to ensure that the internal controls are operating effectively (Jackson, 2006). Control environment, risk assessment, control activities, information and communication, and monitoring are significant factors that enable business leaders to develop strategies to ensure the effectiveness of internal control in contracting revenue recognition. For the process and objective of internal control to be perceived as viable and effective, all of the financial statements generated by management must be genuine, and accurate (Chung & McCracken, 2014). McCarthy and McCarthy (2014) found that applying rules-based

accounting standards provides less accurate revenue decisions. Shifting from rules-based accounting standards to principles-based accounting standards requires more professional judgment regarding the decisions of the financial statements' preparers in the areas of the estimate, uncertainty, and inherent subjectivity (McCarthy & McCarthy, 2014).

McCarthy and McCarthy also found that the mean recommended revenue amounts were higher in both the rules-based accounting standard and principles-based accounting standards when the personal incentive was not present.

External auditors play a significant role in developing audit programs that meet the objective of the Sarbanes-Oxley (SOX) Act regarding the effectiveness of internal control. Martin et al. (2014) conducted a survey of members of the Institute of the Internal Auditors (IIA) to report the extent of internal auditors' use of a structured audit program in compliance with SOX, as well as the extent of external auditors' involvement in the development of audit programs. Martin et al. outlined the importance of the COSO framework for companies to evaluate internal control related to operations, compliance, and financial reporting. Further, Martin et al. pointed out that the revised COSO framework in 2013 brought fraud risk assessment explicitly to the 17 stated principles. Martin et al. also described the link that unstructured and structured audit work programs have with SOX compliance and the effectiveness of internal control. Martin et al. found that internal audit departments apply for structured audit programs, and external auditors are regularly involved in developing these programs. However, Martin et al. observed that a structured audit program is inflexible and insufficient to detect fraud. Martin et al. employed a quantitative survey to collect data from IIA members who worked in internal

audit departments. This survey study is relevant to internal and external auditors as they evaluate the advantages and disadvantages of structured and unstructured audit programs.

Martin et al. (2014) determined that an audit requires structure and an overall framework. Further, Martin et al. outlined the extent of reliance on internal auditors to ensure the effectiveness of internal control over financial reporting when performing their audits. Martin et al. described the involvement of external auditors to support management assertions regarding the effectiveness of internal control over financial reporting. Martin et al. further explained the objective of external auditors' involvement, and to what extent they can rely on internal auditors. Rose et al. (2015) discussed how to adopt the updated COSO 2013 internal control integrated framework to prevent or mitigate the risk of fraud through a fraud risk assessment. Rose et al. highlighted that companies that have an effective and mature fraud risk assessment can implement the framework to strengthen their fraud prevention processes and procedures. Rose et al. indicated that the discussion of fraud in COSO 2013 centers on Principle 8 in which management must consider the potential for fraud in assessing risks for the purpose of meeting their objectives. Rose et al. stated that COSO requires a strong and stringent internal control foundation that addresses fraud broadly to encompass the firm's objectives as part of its strategy, operations, reporting, and compliance with applicable laws and regulations.

Principle 8 of the COSO framework includes the following: (a) fraudulent financial reporting, (b) fraudulent nonfinancial reporting, (c) illegal acts, and (d) misappropriation of assets. Rose et al. (2015) articulated that some companies have written policies and procedures to manage individual fraud components, but many of

them do not concisely summarize these documents and activities to be able to communicate and assess the completeness of their fraud management processes. Rose et al. stated that the internal auditor could help management address the areas of fraud and ensure that risk assessment is effective and adequate. Moreover, Rose et al. pointed out that the risk assessment process starts with a brainstorming session with management and employees to unveil potential fraud risks without consideration for mitigating controls. Management should assess each risk area, including information technology risk, fraud schemes, incentive compensation programs, pressures on CFOs to reach a certain revenue, and opportunities for executives with override abilities to identify any inherent risk. Rose et al. highlighted that segregation of duties in small companies is difficult for management because of a limited number of employees. Therefore, management has to overcome this limitation by implementing compensation controls such as budget to actual analysis and regular investigation of unusual activity and identified risk areas. Companies that have adopted COSO 2013 can continue with that foundation to prepare for fraud challenges. Companies that have not adopted COSO 2013 should reconsider their strategy and adopt it to improve the internal control system to identify, detect, and prevent fraudulent activity.

The COSO integrated framework plays a major role in mitigating illegal financial transactions. Altheebah and Sulaiman (2016) conducted a quantitative correlational study to determine the impact of COSO on reducing illegal financial transactions in 13 branches of commercial banks listed on the Amman Stock Exchange. Using questionnaire data collected from 33 managers, Altheebah and Sulaiman found a positive association between the independent variables (control environment, risk assessment,

control activities, information and communication, and monitoring) and the dependent variable (money laundering). Altheebeh and Sulaiman found that the most effective component was information and communication, followed by risk assessment, control activities, control environment, and monitoring. Altheebeh and Sulaiman recommended improving the control environment component in the commercial bank because it creates the mood that enables employees to assume their control responsibilities, including interest in employee's competence, ethical values, and management philosophy to be able to limit many laundering transactions.

Revision to the initial COSO integrated framework in 1992 was an effective move toward a comprehensive framework that enables management to enhance the internal control of companies. Rittenberg (2013) discussed the importance of the revised COSO integrated framework for 2013 in guiding the implementation process, which helps practitioners to establish an effective internal control system at a lower cost if implemented adequately. Numerous major companies have failed during the last 20 years because their risk management and internal control systems were ineffective.

Rittenberg (2013) discussed the factors that influenced the COSO board's decision to revise the integrated framework. To name a few, these factors included (a) changes in technology and connected risks, (b) changes in corporate governance, (c) increased demand for internal control information, (d) increased focus on risk assessment, and (e) increased significance of compliance and operation objectives. Further, Rittenberg highlighted the essential differences between the old and new revisions. Rittenberg highlighted the revised points in the new version (COSO 2013) as follows: (a) reporting objectives encompass both financial and nonfinancial reporting

according to the revised COSO 2013; (b) principles and points of focus assist management in designing and implementing an internal control system, as well as evaluating whether the relevant principles are in fact present and functioning effectively; (c) and assessing the effectiveness of governance structure in the companies.

COSO 2013 consists of 17 principles developed around the 1992 integrated framework's five components. These 17 principles set further control on individuals' competence and hold them accountable for their role in accomplishing internal control objectives. Fraud risk consideration is not limited to financial statements only; it includes compliance and operational risk assessment. IT control is considered explicitly because companies are relying on cloud computing. COSO 2013 places further emphasis on the need for judgment in evaluating whether a company achieves an effective internal control system. Further, COSO 2013 reasserts the importance of compliance and operational objectives and presents opportunities for internal audit to broaden its value proposition. Rittenberg (2013) noticed four significant changes:

1. Changing the financial reporting objective to encompass nonfinancial reporting objectives that mirror reporting techniques since 1992.
2. The principles-points of focus approach emphasizes the control environment and good governance.
3. Greater emphasis on operations and compliance objectives.
4. Increased complexity in companies' structure, governance, and other relationships.

Rittenberg explained how the revised framework's illustrative tools help practitioners. Rittenberg stated that the illustrative tools are designed to stimulate thought

through different examples by enabling practitioners to think about what they can accomplish and how they might design the internal control structure to meet the objectives efficiently.

The internal audit department plays a significant role in a company's fight against fraud. Laxman, Randles, and Nair (2014) discussed the importance of having an internal audit department. Laxman et al. (2014) outlined that companies lose around 5% of their revenues due to annual fraud. Laxman et al. explored an internal audit project team in Hewlett-Packard (HP) that developed a successful fraud mitigation program (FMP). Accordingly, Laxman et al. found that FMPs are an evolving topic that helps internal audit project teams monitor the firm's risk mitigation environment. Laxman et al. highlighted that fraud is a threat to any company, particularly affecting complex companies that are operating with multiple business units and globally. The internal audit project team that conducted a case study in HP drove program development with guidance and surveillance from a steering committee that consisted of a corporate controller, chief audit executive, chief ethics officer, and compliance officer. Accordingly, Laxman et al. outlined that based on the five components of the COSO integrated framework, the internal audit project team developed the FMP. The internal audit project team applied a pilot assessment, and according to its results, Laxman et al. formed a methodology to efficiently address fraud risks by evaluating the functions that supported high-risk processes across of the company's businesses. The functions ranked according to the level of risk and the project team considered factors of the risk mitigation environment such as past fraud events, exposure to management override, past

audit issues, dollars spent, level of third-party interaction, and previous fraud risk and control assessments.

The COSO integrated framework reflects its importance regarding strengthening the internal control system of the companies. Moeller (2014a) discussed the importance of COSO internal control framework. In this executive summary, Moeller outlined that internal controls are an integral part of a firm's governance system. Further, Moeller highlighted that an effective internal control system helps to create, enhances, and protects shareholders' value as well as to counter the threats to take on additional risks and achieving the company's objectives. An adequate internal control assists the management to ensure that the accounting transactions are properly authorized, supporting Information technology systems are properly managed, and the information recognized in the financial reports are reliable. Further, an effective internal control is a process that helps the management and its related departments to mitigate any potential accounting errors, illegal acts, and irregularities. Internal control systems cannot eliminate all the accounting errors or irregularities in the company, but they can alert the management regarding any potential problem (Moeller, 2014).

Moreover, internal control systems are not merely associated with functions related to the accounting and finance departments. However, there are policies and procedures set by the management within the company to increase the business value and mitigate risk. Moeller (2014b) discussed in the relevant article the basic concepts of the risk assessments component of the COSO internal control integrated framework. The purpose of this paper is to explore the significance of risk assessments component because risks affect the company's ability to succeed, compete within its industry, sustain

its financial strength and positive reputation, and sustain the overall quality of its products, services, and people. Moeller (2014b) outlined that there is no practical way to reduce risk to zero because all business activities involve some amount of risk. Chappell (2014) explained that the goal of management is to manage risk, not to eliminate risk. Moeller (2014b) stated that while the risk assessments component of COSO has not changed significantly since the original framework, guidance on internal controls has undergone significant revisions.

Moeller (2014b) pointed out that management should establish and tailor its risk management processes following the four principles detailed as follows: (a) the firm specifies objectives with enough clarity to enable the identification and assessment of risks correlating to its objectives, (b) the firm identifies risks to the accomplishment of its objectives across the company and analyzes those risks as a basis for ascertaining how the risks should be managed and controlled, (c) the company considers the possibilities for fraud in evaluating risks to the accomplishment of objectives, and (d) the entity identifies and evaluates changes that could significantly affect the performance of its internal controls. Further, Moeller (2014b) highlighted that company's risk assessments should cover (a) operations, (b) compliance activities, and (c) reporting needs.

Concerning COSO risk assessment operations objectives, the main area of concern for many companies is the need to consider tolerances for risk as discussed by Moeller. Further, Moeller (2014b) outlined that another risk management term sounds important but is often difficult to define, risk tolerance can be defined through two basic questions; (a) how much can the enterprise afford to invest to accomplish its goals, and (b) how much is the company prepared to lose. Nevertheless, the board of directors' best

addresses those two significant questions, only after the top management has an understanding and an agreement about the company's risk attitude or risk philosophy.

Risk assessment operations objectives should reflect management's choices about structure, industry consideration, and company's performance. Management should use these operations objectives as a basis for allocating resources required to achieve desired operations and financial performance. While Moeller (2014b) focuses more on operational risks, management has to give similar levels of attention to compliance and a combination of internal, external financial, and external nonfinancial reporting risks. When building an effective internal control processes, following the COSO framework, a firm needs to build effective risk management and assessment processes.

Financial risks are becoming more diverse because of the increased number of international transactions. Fang (2016) pointed out that the financial risks are becoming more diverse due to the increased number of global economic integrations between international companies. The purpose of Fang's paper was to understand the network marketing performance evaluation index system, using an experimental design of interval-valued intuitionistic fuzzy sets. The interval-valued intuitionistic fuzzy sets generalized mixed weighted aggregation operator to calculate the risk evaluation value of various companies. Fang outlined that using interval-valued intuitionistic fuzzy sets can describe some parameter values in greater detail than other index values. Fang found that companies should establish an effective internal control system, strengthen the evaluation and control of risk. Further, Fang highlighted that assessing the risk of the companies in real time is necessary. To be able to evaluate the companies' risk, Fang built the evaluation index system, which affects the impact of firms' risk assessment. Fang

evaluated the risk of four marketing companies of China. The index data are known and arranged in the form of interval-valued intuitionistic fuzzy sets. Fang calculated the weight by using subjective and objective comprehensive weighting method, and then assessed the risk of each company by using interval-valued intuitionistic fuzzy sets generalized mixed weighted aggregation operator, which make the companies understand their and competitor's risk situation, and make corresponding analysis, so that raise the corresponding strategy. The results revealed by Fang made sufficient consideration of the financial risk, credit risk, human resources risk, and market risk. Evaluation index system is detailed as follows: (a) financial risk, which includes the critical income from operation, degree of financial leverage, and interest bearing debt ratio; (b) human resource risk, which comprises two aspects of employees' turnover rate and staff compensation satisfaction; (c) market risk, which includes the market share, market competition degree, and product life cycle; and (d) credit risk, which includes the service enterprise overdue loan repayment rate, and complaint rate. This assessment includes financial and non-financial evaluation system.

A balanced scorecard (BSC) is not merely a management system but is a strategic management system that stresses on strategic implementation. Wisuttee Wong and Rompho (2015) stated that BSC focuses on four perspectives: financial, customer, internal business processes, and learning and growth. Therefore, Wisuttee Wong and Rompho employed a structural equation modeling (SEM) to examine the relationship between successful BSC and an effective COSO, ERM framework in Thai listed companies. Wisuttee Wong and Rompho posited that the objectives of this study were: (a) to investigate the relationship between a successful BSC implementation and an effective

COSO ERM system, (b) to investigate an effective ERM by employing eight components of COSO ERM, which are internal environment, objective setting, event identification, risk assessment, risk response, control activities, communication, and monitoring, and (c) to investigate the success of BSC implementation as measured by best-practice standards of the Strategy-Focused Organization. Wisuttee Wong and Rompho found a positive relation between a successful BSC implementation and an effective COSO ERM.

Wisuttee Wong and Rompho stated that management should take into consideration the combined approach of these management tools, which are BSC and COSO ERM to be able to realize full benefits. In addition, the results revealed that to protect the shareholders' value, management should adopt a proper integration between BSC and appropriate risk management.

The adoption of Control Objectives for Information and Related Technology (COBIT) framework together with the COSO framework enables managers to implement an effective internal control in IT and other categories of material weaknesses over the financial reporting. Rubino and Vitolla (2014) in their conceptual paper highlighted the relationship between COBIT and COSO framework, by illustrating how the COBIT processes mitigate the material weaknesses in internal control system. The purpose of this paper was to show the improvements of internal control over financial reporting to mitigate the material weaknesses when COBIT framework is integrated with COSO framework. Rubino and Vitolla found that these material weaknesses can be mitigated and overcome by using the COBIT framework. Rubino and Vitolla found that the analysis indicated that the implementation of the COBIT framework, or the adoption of effective and adequate IT controls with COSO framework, provides significant benefits

to the entire company. Moreover, the application of COBIT provides further improvements regarding the reliability of financial reporting. The paper prepared by Rubino and Vitolla addressed a significant subject, which is considerably helpful to both practitioners and academics and also expands existing accounting literature. It shows how the IT processes are significant in the company and how their integration with the internal control of other categories reduce the material weakness and, therefore, affect the reliability of financial reporting.

Corporate governance. The main objective of the corporate governance is to increase the value of the company and enhance the shareholders/partners equity, hence strengthen the internal control of the companies. Companies that insist on the highest standards of governance mitigate many risks that arise from daily operations; then these companies are able by better performance to attract further investors whose investments in the company may help to further growth and development (Odorovic, 2013). Guo, Huang, Zhang, and Zhou (2015) found that material weaknesses in internal control were mitigated when the management establishes more employee-friendly policies than their counterparts with fewer employee-friendly policies. Further, Guo et al. (2015) outlined that the appropriate worker-friendly policies considerably mitigate the propensity for financial restatements, especially for those driven by unintentional errors. This process implies that treating the employees with good corporate governance, improving their knowledge and experience through regular training and coaching, keeping their morale up and motivated, will have a positive effect on the internal control processes, which in turn mitigate the financial statements restatements caused by intentional or unintentional accounting errors. Further, Odorovic (2013) found that the level of implementation of

corporate governance was positively correlated with the performance of companies. Odorovic outlined that the companies should follow the best practice of corporate governance to attract investors and raise finance at a lower price. Odorovic highlighted that to determine the results of corporate governance, entities from the Republic of Srpska use net profit margin and earnings per share to analyze and compare to findings for entities from Austria. The results showed that entities with a higher implementation of corporate governance principles have a higher net profit margin and earning per share. Companies with a lower level of implementation of corporate governances have a lower net profit margin and earnings per share (Odorovic, 2013). These results indicate that companies should adopt good corporate governance to be able to sustain the companies' profitability and sustainability (Odorovic, 2013).

Good corporate governance will have a positive effect on the employees' performance, which in turn performs effectively and efficiently in the company (Odorovic, 2013). Good corporate governance ensures the sustainability of the company through continuous increasing of the profit, which affects the equity of the company and increases its value to the stakeholders (Odorovic, 2013). The financial ratios enable the management to assess the financial situation of the company, competency of the employees, and accordingly monitor its objective and strategy regularly to be able to sustain its business (Odorovic, 2013). A company sustains and increases profitability, improves its credibility, reputation, and competitiveness and improves relations with key stakeholders such as investors, suppliers, partners, employees, regulators, and customers, through appropriate use of the principles of corporate governance (Odorovic, 2013). In addition, Odorovic (2013) highlighted that companies that insist on the highest standards

of governance mitigate many risks that arise from daily operations; then these companies are able by better performance to attract further investors whose investments in the company may help to further growth and development.

The main objective of corporate governance is to increase the value of the company and enhance the shareholders/partners equity. Hence, to be able to meet this objective, every company's management has to know how to implement good corporate governance, through recruiting managers who possess the transformational leadership trait (Mandzila & Zeghal, 2016). Corporate governance is an essential element of the control environment, which is one of the main components of COSO (Odorovic, 2013). Moreover, good corporate governance can help the companies to prevent entities scandals, and possible civil and criminal liability of companies, and fraud (Odorovic, 2013). Further, good application of corporate governance enhances the companies' image and reputation in the market and then attracts further investors, suppliers, customers, and other stakeholders. Accordingly, Odorovic (2013) stated that the most important aspects for investors, when they decide to make an investment, is to check the level of implementation of corporate governance principles, which are public disclosure of information, shareholders right and equal treatments along with profitability that ensures return on investment (Odorovic, 2013).

Mandzila and Zeghal (2016) conducted an empirical study on 109 French public companies to examine the level of compliance of the French Société des Bourses Françaises (SBF) 120, which include disclosure requirements on corporate governance, internal control, and risk management. Mandzila and Zeghal revealed that managers use an integrated approach to reporting about their corporate governance and risk

management practices. Further, Mandzila and Zeghal found that the mandatory nature of the legislation did not transpose in extended disclosures regarding internal controls and risk management practices, except banks because they are subject to a more stringent regulatory standard.

An effective corporate governance mechanism can mitigate agency problem, handle effectively shareholders' issues, improve internal control, and maintain a balance between the principals and agents in the companies. According to Hassan and Marimuthu (2015), agency problems in organizations result in decreased performance. One of the primary reasons why conflict arises is that work agreements between principal and agent are imperfect because not every single contingency can be accounted for; monitoring is difficult and costly, and then, the principal may have difficulty enforcing their property rights (Hassan & Marimuthu, 2015). The topic of corporate governance, which is a significant part of COSO framework embeds the substance of agency theory. Agency theory plays a significant role in interpreting the relationship between the principal and agent, who might not act in stakeholders' best interests. My objective in the next subsection is to explain the importance of agency theory as it relates to the COSO framework.

Agency theory. Researchers in agency theory discuss highlight the importance of corporate governance. Mustapha (2014) related the monitoring component of the COSO framework to the governance aspect of agency theory. Bendickson, Muldoon, Liguori, and Davis (2016) conducted an exploration study to explore how agency theory emerged from some economic and social developments. According to the Bendickson et al. two forms of agency theory have developed: positivist and principal-agent. In large

organizations, positivist researchers have emphasized governance mechanisms primarily (Bendickson et al., 2016). For example, Hassan and Marimuthu (2015) pointed out that to minimize agency costs, protect shareholders' interests, and ensure agent-principal interest alignment, agency theorists direct various governance mechanisms. Hassan and Marimuthu (2015) concluded that these mechanisms are usually focused on executive compensation and governance structures.

Researchers use the principal-agent theory to detail the specifics of the relationship between principals and agents. The focus of principal-agent theory is to determine the optimal agreement between principals and agents. Principals delegate work to agents, expecting that agents will complete these demands in the principals' best interest (Hassan & Marimuthu, 2015). Bendickson et al. (2016) highlighted that agency theory is based on the relationship between one party, the principal, who assigns certain tasks, responsibilities, and decisions to another party, the agent. In addition, according to Abdullah, Murad, and Hasan (2015), the focus of agency theory derives from assumptions that the agent will behave opportunistically, especially if their interests conflict with the principal and causing an agency problem. Hence, further attention and monitoring must be directed to resolve this conflict when different interests arise. However, these differences are difficult to measure and require governing mechanisms to facilitate congruence and shared risk. One of the primary reasons why conflict arises is that work agreements are imperfect because not every single contingency can be accounted for; monitoring is difficult and costly, and then, the principal may have difficulty enforcing their property rights according to the authors (Abdullah et al., 2015).

Enterprise Risk Management

Managers apply the ERM framework to contribute to an effective internal control system. Edmonds, Edmonds, Leece, and Vermeer (2015) posited that COSO 2004 develops an integrated framework for ERM, which is built on the board's role in risk oversight and provides guidance regarding the responsibilities of board's risk oversight. Brustbauer (2016) conducted an empirical study to analyze ERM in small and medium enterprises (SME). Brustbauer revealed that larger companies are more likely to have a more developed ERM and that family-owned company have fewer incentives to implement ERM. Further, Brustbauer revealed that the applied ERM approach affects the company's strategic orientation; while an active ERM approach results to lead to a more offensive strategic orientation, a passive ERM approach may appear in a more defensive strategic orientation. Thus, the analysis revealed that the success key for SMEs is an awareness of company-related risks; being cognizant of risks is the prerequisite for ERM activity. Though entrepreneurs are familiar with their businesses; however, they are unlikely to be able to identify all related risks. Hence, a strong ERM approach may help them identify, assess and monitor risks, raise their risk knowledge and facilitate them in better understanding and adjust to the prevailing environment.

Brustbauer (2016) indicated that following an active ERM approach may support small business entrepreneurs in exploring strategic advantages thus, enhancing the competitiveness and business success of their companies. Brustbauer analyzed ERM activity in SMEs along three dimensions: risk identification, risk assessment, and risk monitoring. Further, each of these dimensions included four items, termed ERM classifying items. Edmonds et al. (2015) conducted an empirical analysis in their study to

examine whether changes in the quality of risk management are connected with changes in earnings volatility. Edmonds et al. posited that corporate risk management attempts to identify risk exposures and determine a response strategy to either bear or manage the risk. Zhao, Hwang, and Low (2015) identified critical drivers and hindrances to ERM implementation to be able to compare the influence of these factors on ERM implementation between large and small-medium enterprises in Chinese construction firms (CCFs) in Singapore. Zhao et al. (2015) found a total of 13 drivers and 22 hindrances, which are critical to ERM implementation of the CCFs in Singapore. The top influential driver was the improved decision making, whereas insufficient resources such as time, money, and people-were the most important hindrances (Zhao et al., 2015).

Further, Edmonds et al. (2015) found that if companies implement effective quality risk management systems, then they could achieve lower earnings volatility. In addition, Edmonds et al. pointed out that findings provide evidence as to how companies achieve market performance through a framework of quality risk management and offer a reason why firms should allocate resources toward risk oversight. In addition, Edmonds et al. outlined that their results suggest that recent public policy initiatives to enhance risk management practices have substantive rather than superficial benefits to external stakeholders. Also, companies that incur losses might benefit more from improving risk management practices through an earnings variance reduction (Edmonds et al., 2015).

Stakeholders that lose confidence in a firm's ability to continue as a going concern can lead to lower customer revenues together with tightening the suppliers' credit requirements and employee turnover. Aziz, Manab, and Othman (2016) conducted a case study, which aims to provide an insight of the Malaysian experience regarding risk

management practices in the companies along with the integration of the sustainability as part of the ERM. Aziz et al. emphasized on the sustainability risk management (SRM) as part of corporate strategy and found that SRM is not merely affecting the firm's financial performance but also maintaining the longer term of survival in the industry. The Malaysian listed companies, particularly in plantation industry, realized the significance of SRM as for good business practices (Aziz et al., 2016). Moreover, large and small-medium enterprises of the CCFs agreed on the rankings of drivers and hindrances, though notable differences in the mean scores of seven drivers and four hindrances respectively (Zhao et al., 2015). Lack of perceived value or benefits was the second most notable hindrance, after the insufficient resources such as time, money, and people (Zhao et al., 2015). The results revealed that CCFs, which are operating in Singapore, did not perceive enough value or benefits of ERM that motivated them to implement ERM (Zhao et al., 2015). Further, improved internal control of the company over its projects was ranked fifth, indicating that CCFs based in Singapore executed ERM for better adequate control of their construction projects (Zhao et al., 2015). Few studies have attempted to disclose the factors driving and hindering ERM implementation in construction firms, although the numerous studies prepared according to ERM in various sectors (Zhao et al., 2015). Hence, this study filled a gap in the existing literature relating to ERM. Further, a thorough understanding of the drivers for ERM implementation allows the management to gain sufficient support for the ERM program as well as strengthening the positive influence from the drivers (Zhao et al., 2015). The identification of the hindrances enables the management to be definite about the challenges encountered by the ERM program and take further measures to mitigate their negative influence and overcome

them (Zhao et al., 2015). In addition, Aziz et al. found that the adoption of SRM is not only driven by corporate governance compliance, however, because of good business practices, and improved decision making (Aziz et al., 2016). Thus, improving risk-based decision making is the reason for construction's companies to adopt SRM (Aziz et al., 2016).

The integration of SRM into the business plan would help Malaysian companies to manage environmental, social and financial risk efficiently. In essence, the sustainability encourages the better lives for people, preserve the world's environment as well as ensure the longer term of company's survival. Moreover, sustainability has been a paradigm shift in the business operations because the environmental perils lead to the sustainability development. Mustapha and Adnan (2015) conducted a case study to explore the implementation of ERM in the Malaysian construction companies. The results suggest that the awareness and understanding of the ERM concept by the companies' employees are the significant factors in assuring a successful ERM implementation because the employees will be the first people in the company to experience such risks due to their day-to-day operations. Moreover, Mustapha and Adnan found that participation from all level of employees together with the commitment from the top management is critical to ensure its successful implementation. Also, Mustapha and Adnan found that continuous monitoring and maintenance of a risk management exercises are significant in managing risks effectively.

Contracting companies can use an ERM model to frame decisions regarding the planning and construction of projects. Mafrolla, Matozza, and D'Amico (2016) examined the influence of private companies' ownership structure on the adoption of ERM

practices in Italy. Mafrolla et al. found greater ERM development where ownership is more dispersed, revealing that ERM plays a significant role in protecting minority shareholders. Further, ERM is better developed in public-owned firms but is less well developed in family-owned companies. Thus, Mafrolla et al. pointed out that the ownership's type has a significant role in the development of ERM in private companies, considering that ownership concentration in the hands of a stronger main block-shareholder is a disincentive to the adoption of better ERM practices. Choi, Ye, Zhao, and Luo (2016) conducted in their paper a literature review and critical analysis of the work of Wu and Olson, from the viewpoint of the ERM, to gather implications and suggestions for the customization and optimization of the ERM. Businesses exist to cope with risk as companies are encountering a great deal of daily environmental changes. Further, risk creates opportunities as well as threats. The results revealed that by identifying and managing risks, then management can mitigate the risk impact on an enterprise because the risk itself is an undesirable outcome and potential loss (Choi et al., 2016). A risk is strongly related to uncertainty, and hence ERM can be defined as an activity employed to identify, assess, and evaluate potential outcome, and as a result suggest the optimal path for risk management (Choi et al., 2016).

Project Budget Revenue Recognition

Revenue is a significant element of the financial statement, which its users rely on in order to make an economic decision. Kasztelnik (2015) highlighted that revenue is one of the most commonly used as a benchmark for determining the performance of revenue recognition in the companies. The objective of financial statements is to provide accurate information about the financial position, statement of income and cash flows of an entity

that is useful to a wide range of users in making economic decisions (IFRSb, 2015). In Qatar, the application of IFRS is mandatory according to the Qatari income tax law (Ministry of Finance, 2015). Thus, the recognition of revenue in both the financial statements and tax declaration should meet the requirements of the International Accounting Standards (IAS) 11. Recognizing revenues according to IAS 11, implies the transactions are subject to an estimation value calculated by the management and may lead to manipulation caused by overstating or understating the revenue. Estimation managers calculate the project budget on the basis of entire costs of this specific project according to the International Accounting Standard 11 (Malaj & Shuli, 2015).

Accordingly, due to the uncertainty of estimating reliable financial information while recognizing the revenue in the contracting sector, the risk of manipulating the accounting transactions by overstating or understating the revenues to meet the management needs is considered high; thus, management must ensure proper internal control strategies over financial reporting. Rose et al. (2015) pointed out that by using the percentage of completion method, the result will be more accurate regarding the revenue recognition. Using the percentage of completion method, financial statements will reflect the yearly profitability or loss of the company (Tunçez, 2015). Kacmar and Tucker (2014) outlined in their study that management integrity is measured by the outcome of related-party transactions, financial position ratios, statement of income ratios, and revenue recognition. The measurement of revenue in the contracting contract affected by various uncertainties depending on the consequences of the future events (Tunçez, 2015).

Further, the budget of the contracting projects has a direct effect on the revenue recognition. Moreover, the substantial issue in the accounting practice of the contracting

and construction field is to know how to recognize the revenues and allocate expenses within the scope of a contract (Tunçez, 2015). When the ends, and uncertainties are solved, then management reviews estimated compared to actuals revenues and adjusted the records accordingly (Tunçez, 2015). Thus, revenue recognition in the contracting sector is vulnerable to an intentional and unintentional error at the highest level in the financial statements since the finance department recognizes revenue according to IAS 11 (IFRSa, 2015).

The effectiveness of internal control together with good corporate governance is significant to be able to detect any material weakness that might affect the financial statements adversely. Kasztelnik (2015) pointed out that there is a significant increase in the value relevance of revenue recognition after the adoption of IFRS along with an increase in the value relevance of accounting accruals. Jarkas and Haupt (2015) outlined that errors and omissions in design drawings might lead to further cost in the budget for the project. Further, contractors underestimate of contracting cost, and poor performance of subcontractors might cause considerable penalties, which affect the project budget (Jarkas & Haupt, 2015).

As managers comply with SOX, a significant part of their activity relates to enhancing the internal control over financial reporting. Knott (2012) discussed in the relevant paper the implementation of SOX regarding enhancing internal controls over the financial reports. Further, Knott outlined the effect of revenue recognition on the profitability of the public held companies. In his research design, Knott raised the issue of the accuracy of financial statements before and after the implementation of the SOX Act and the changes this act has made to the recognition of revenue and its effect on the

financial position and statement of income. In his quantitative experimental study, Knott examined the financial ratios analysis and other cash-flow measures to determine the reliability of revenue recognition and investment expectations before and after the implementation of SOX Act. Results showed that cash/total assets and net credit sales/average accounts receivable improved after the implementation of the SOX Act (Knott, 2012). McCarthy and McCarthy (2014) conducted in their study an experiment instrument to examine the finance managers' revenue decisions under principles-based accounting standards, which are perceived to be IFRS compared to the rules-based accounting standards, which are perceived to be US accounting standards with and without a personal incentive to maximize revenue for each standard. McCarthy and McCarthy found that applying rules-based accounting standard provides less accurate revenue decisions. Shifting from rules-based accounting standards to principles-based accounting standards requires more professional judgment regarding the decision of the financial statements' preparers in the areas of the estimate, uncertainty, and inherent subjectivity. Further, McCarthy and McCarthy found that where the personal incentive was not present, the mean recommended revenue amounts were higher in both the rules-based accounting standard and principles-based accounting standards.

The new IFRS 15, which replaces IAS 11 and IAS 18 simplifies the mechanism accountants have to apply while preparing the financial statements. Berchowicz and Whitehead (2014) discussed in their articles the implication of the introduction of IFRS 15, the new awaited global standard on the revenue recognition. Whitehead outlined that the new IFRS will affect the majority of the companies that generate revenues and especially, the sectors such as contracting, media, and telecommunications. Huefner

(2015) pointed out that the unbundled goods and services with transfer standard pricing are less affected by the new reporting revenue standard as compared to bundled goods and services such as software, contracting, telecommunication, financial services. In addition, businesses with long production cycle are most affected by the new standard (Huefner, 2015).

IFRS 15 was scheduled to be effective by the 1st of January 2018 and it will replace the following standards and interpretations; *IAS 18 Revenue*, *IAS 11 Construction Contracts*, *Standard Interpretations Committee (SIC) 31 Revenue – Barter Transaction Involving Advertising Services*, *International Financial Reporting Interpretations Committee (IFRIC) 13 Customer Loyalty Programs*, *IFRIC 15 Agreements for the Construction of Real Estate* and *IFRIC 18 Transfer of Assets from Customers*. By adopting IFRS 15, for all contracts with clients, management should recognize revenue when control of the promised goods or services is transferred to the contractor, not when risks and rewards are transferred to the contractor. Berchowicz and Whitehead outlined that upon adoption of IFRS 15 the measurement of the total contract consideration and how it is broken into multiple elements deliverable under a single contract will also change for many companies. Further, by adopting IFRS 15, management should increase the volume of disclosure comparing with previous relevant standards. Also, the company has to determine that a contract is within the scope of IFRS 15, and then the relevant standard sets out five processes to be able to recognize the revenue: (a) identify the contract with the client, (b) identify the performance obligations or deliverables promised in the agreement, (c) determine the contract consideration or agreement's value, (d) allocate consideration to the performance obligations, and (e) recognize revenue when the

control occurs (Huefner, 2015). For services, control is transferred over time hence revenue is recognized over time as well. Thus, companies have to implement the input method or percentage of completion method, which is the most appropriate measure of progress to recognize the revenue. Huefner (2015) pointed out that many of the fraud and enforcement cases are associated with timing issue of revenue recognition typically reporting revenue earlier than the appropriate time.

According to Mardini and Power (2015), IAS 18 is still existing and in their recent study discussed the application of IAS 18 by the Jordanian industrial companies. Mardini and Power posited that the objectives of their study are: (a) to examine the extent of application of IAS 18, which is related to the revenue recognition in selected Jordanian industrial firms listed on the Amman Stock Exchange (ASE), and (b) to examine the impact of certain organization characteristics such as the size of the company, profitability, leverage, liquidity, listed status and ownership of the application of IAS 18 among Jordanian industrial companies. Mardini and Power found that, on average, the firms published information on almost 56% of the 15 items included in the index; only 13 firms achieved high disclosure scores. Mardini and Power stated that to be able to achieve the objectives of this study an index comprising of 15 items were used to study disclosures by 40 industrial companies listed on the ASE. The 15 items according to Mardini and Power, are detailed as follows: (a) sales of goods, which is defined here as the amount of revenue can be measured reliably, (b) the cost of goods sold, (c) matching revenues and expenses, (d) sales of goods, which is defined here as goods produced by the company for the purpose of sale and goods purchased for resales, (e) sale of goods, which is defined here as it is recognized only when it is probable that the economic

benefits connected with the transaction will flow to the company, (f) interests, (g) dividends, (h) accounting policies, (i) disclosure of sales of goods, (j) Disclosure of interests, (k) disclosure of dividends, (l) disclosures of royalties, (m) disclosures of contingent assets and liabilities according to IAS 37, (n) disclosure of the amount of Revenue resulting from exchanges of goods or services included in each significant category of revenue, and (o) measurement of revenues. The results revealed by Mardini and Power indicated that there is significant scope for adding further disclosures under IAS 18 by Jordanian industrial companies listed on the ASE. Further, the results also suggest that firm size is significantly and positively associated with the application of IAS 18. The analysis also substantiates that liquidity as well as leverage are significantly and negatively connected with the application of IAS 18, whereas profitability is not significantly associated with the level of disclosures under IAS 18.

Financial Statement Material Weaknesses

Financial statements are significant to any user who wants to make an economic decision. Therefore, management should ensure that the presentation of the company's financial statements does not include any material weakness that misleads their internal or external users and to avoid any financial statements' restatement. Chung and McCracken (2014) discussed in their paper the restatement process, its interaction among the auditors, CFOs, CEOs, audit committee and regulators and its impact on the relationship between these parties.

Jahmani, Ansari, and Dowling (2014) identified new accounting standards, accounting errors, and lack of management integrity as the primary reasons for the restatement of financial statements. The management usually do restatement of the

company's financial statements for several reasons, to name a few, misapplication of the implementation of the conversion from the General Accepted Accounting Standards (GAAP) to the International Financial Reporting Standards (IFRS) and vice versa and incompetence of the employees leading to accounting errors, and lack of management's integrity (Chung & McCracken, 2014). Moreover, Chung and McCracken found no research conducted so far to describe the role of the various parties concerned in the restatement process. Jahmani et al. found that a high percentage of companies that have weakness in internal control have restated their financial statements. Chung and McCracken (2014) found in their research that restatements indicate ineffective audit effort or underestimated audit risk during the planning process in the years leading up to the restatement. Materiality implies any misstatement that has an adverse effect on the financial statements and its result may mislead the users of the financial statements to take an economic decision (Chung & McCracken, 2014).

Additionally, prior studies rely inevitably on the number of meetings and duration of the audit committees and how active those committees were involved in the internal control problems that lead to a restatement. Chung and McCracken (2014) suggested an approach that strives to look further to the role of involvement of each party in the restatement process, the effect of the restatement process on the final resolution along with the future relationship between these parties. However, Chung and McCracken developed their questions based on the findings of prior studies in the restatement; these studies indicate the restatement outcome, but Chung and McCracken did not discuss the restatement process and the negotiations that resulted in final resolution.

External auditors should not provide an unqualified opinion if material weaknesses are detected by them and not rectified by the management. Brant, Steven, and Christopher (2014) outlined that both US and international standards have proposed changes to the auditors' report and discussed the reports' impact on any potential investor. Brant et al. (2014) discussed in their paper the new adjustment proposed to the standard audit report, which includes a requirement to insert a critical audit matter (CAM) paragraph. Moreover, Brant et al. discussed the reaction of the users and especially the non-professional investors when they read the auditor's report with CAM paragraph and its influence on the decision the investors will take to invest in the intended investee. Brant et al. found that the investors are more sensitive to change their decision when they receive a report that includes a critical audit matter other than the investors who receive a standard audit report with no qualification. Donelson, Ege, and McInnis (2015) found that the issuance of an adverse opinion by the auditor on the internal control material weakness indicates a high possibility that managers are committing unrevealed fraud. Hence, Donelson et al. revealed that the type of internal control weakness is significant from prediction fraud standpoint. Brant et al. (2014) made no mention of the positive issues in regards to the CAM and focused mainly on the negative points of incorporating CAM in the audit report. Most of the investors are non-professional; thus they may find difficulties to readily understand the auditor's opinion in the audit report. Brant et al. should focus on the objective of the audit report, and afterward, they could mitigate the subjectivity raised for integrating the CAM. The main objective of the audit report is to provide an objective assessment of the fair presentation of financial statements. Also, Hajiha and Bazaz (2016) used the external auditors' reports

to extract the internal control material weaknesses and afterward categorized them into two groups of account and firm level.

Celenk (2013) conducted a survey study to evaluate the negative effect the customers have on the members of auditors or professional while displaying their ethical behaviors during the performance of the audit and preparing the tax return. Celenk highlighted that recognizing the transactions in the books and issuing reliable and accurate financial statements are significant not only to the taxpayers but also to other users of the financial statements. This survey study is important since it reflects the perspective of the professionals regarding ethical practices while they perform their audit and preparing the tax return of the customers. Celenk found a contradiction in the responses of the professionals between adhering to the code of ethics and objectivity while performing their audit, and the wish of the customers to receive a financial statement and tax return that meet their requirements. While Celenk pointed out the link between the code of ethics and objectivity and work of the professionals, he did not discuss the importance of the code of conduct and objectivity. While professionals may encounter an ethical event with their customers, they should know how to overcome the dilemma and perform their job ethically. Celenk outlined the importance of International Standards on Auditing (IAS) or national auditing standards and International Financial Reporting Standards (IFRS) or national standards and connect them to the practice of the professionals.

Recognizing contracting revenues is based on accrual accounting because revenue recognition is based on relevant management estimation and project budget. Maghariee, Neghabi, and Abdi (2015) in their survey conducted an empirical investigation to study

the impact of accrual accounting in the municipality of Amol, Iran. Maghariee et al. examined whether or not the financial reporting prepared based on accrual accounting compared with the cash accounting provide a better accounting method of for promoting accountability. Maghariee et al. employed regression analysis to compare the performance of accrual accounting versus cash basis concept. Maghariee et al. found that applying accrual accounting could improve the accounting system in the municipality. Maghariee et al. did not mention the effectiveness of applying the accrual basis in the municipality accounting. The accrual accounting reflects the real financial position of the public entities, and for most countries, the cash basis concept is no longer an option. Maghariee et al. could mention the agility of the accounting researchers to improve the current accounting system and replace it by the accrual accounting because it will positively impact the accounting treatment of the public entities and also increase the efficiency of work in the public entities' accounting departments.

Internal Control

Effective internal control systems enable companies to ensure that their operations are operating effectively and be able to get accurate and reliable financial outputs. Li (2015) conducted a research study to investigate the relationship between the managerial ability and internal control quality. Disclosing the internal control in the listed companies in the United States is mandatory after the year 2012 (Li, 2015). Further, Li (2015) found that a significant relationship exists between the managerial ability and internal control quality. Li found that the efficiency of top executives' positively relates with the internal control quality. In other samples of the regression analysis, Li found that a significant relationship does not exist between a managerial ability and internal control quality.

Gooden-Sanderson (2014) found that managerial ability is positively associated with the internal control quality, which confirms with Li findings. Gooden-Sanderson found that a significant relationship does not exist between a managerial ability and internal control quality, which supports Li's findings.

The characteristics and behaviors of business leaders are a part of the control environment. Lin et al. (2014) conducted an empirical study to investigate the influence of CEOs characteristics on the internal control quality in the US. Lin et al. described the characteristics of the CEOs regarding their age and tenure to be able to investigate their effect on the disclosure of internal control's material weakness. Lin et al. revealed that the age and entrenchment of the CEOs are significantly associated with the disclosure of internal control's material weakness under Sarbanes-Oxley Section 404 (SOX 404). Lin et al. also found that the younger the CEOs and the higher they own shares in the companies will enable them to have entrenchments. Entrenchments lead to creating a power to design an ineffective internal control mechanism, selecting auditing firms that are not from the big 4 companies, and then will affect the strength of internal control mechanism and reduce the disclosure of internal control material weakness (Lin et al., 2014). Kehinde (2015) stressed that management should ensure that code of ethic and objectivity is well established in the company to enhance the effectiveness of corporate governance to mitigate the incidence of exogenous errors, fraud, and irregularities. Lin et al. (2014) did not discuss the role of internal auditors in monitoring the effectiveness of internal control and whether the entrenched managers or leaders in these companies had a significant influence on the internal auditors' objectivity. While entrenchment and age

drive the CEOs' behavior regarding the quality of internal control, the internal auditors play a significant role to fill this weakness in the internal control process.

An internal auditor plays a vital role in the companies to ensure that the internal control system is effective and report weaknesses to the top management. Roussy (2013) discussed in the relevant paper the governance roles of internal auditors and their roles in protecting the management and the company. Internal auditing plays a significant role in protecting the company, and the management helps and guides the employees to apply the internal policies and procedures effectively. Roussy revealed that internal auditing is not a governance watchdog as defined by the regulatory bodies because there are several studies that prove the act of internal auditor. The internal auditors operate as a member of the management team and not as a member of the oversight board to monitor and oversight employees. Further, Jahmani, Ansari, and Dowling (2014) highlighted that an effective internal control assists companies in safeguarding their assets, generating reliable financial reports, promoting efficient operation that affects the revenue, and complying with the rules and regulations. In addition, Jahmani et al. outlined that the findings are significant to the financial statements' users such as regulators, and auditors because an effective internal control gives confidence to the financial statement's users and close any loophole that affects its reliability. Jahmani et al. found that when the company restructures its operation, establishes multi-segments, and a result of low or negative return on assets, the probability of having an ineffective internal control is significant. Jahmani et al. found that debt to equity ratio and fast revenue growth are not significant variables to consider while evaluating the effectiveness of internal control. Kehinde (2015) revealed that the scope of work of the internal auditors includes the

detection and prevention of errors and irregularities, and report the same to the top management. Further, Kehinde found that there is a positive relationship between the daily job of the internal auditor and the effective working of the company.

The management is responsible for ensuring the effectiveness of the internal control system in the company in which this set up will assist the internal auditor to protect the company's assets against any error or irregularities. Kehinde tested the hypotheses with the 0.05% confidence, and accordingly Kehinde found that the entire null hypotheses have been rejected, whereas the alternate hypotheses regarding: (a) the responsibility of the internal auditor to detect and prevent error and irregularities, (b) the effectiveness of internal control system in the company regarding the protection of assets and management organization, (c) the relationship between the internal auditor functions and the assets performance of the company, (d) and the establishment of effective and adequate internal control system, which will assist the internal auditors to detect fraud and irregularities were all accepted. The result obtained in this study revealed that there is a strong linkage between the ineffective internal audit and financial statements fraud. Therefore, Kehinde concluded a well-established internal control, which is the responsibility of the management helps to mitigate any conducive to fraud. Further, the management should set up an effective communication of both upward and downward flow of information for effective working in the company's system. Additionally, Jahmani et al. stressed that the management should ensure that code of ethic and objectivity is well established in the company to enhance the effectiveness of corporate governance to mitigate the incidence of exogenous errors, fraud, and irregularities.

Internal control is mandatory in the listed companies in the United States due to the positive impact adequate internal control over the companies' operations. Jahmani and Dowling (2013) employed ANOVA and logistic regression techniques in the study to examine a sample of large accelerated filers with internal control weaknesses to identify the characteristics of these companies. Jahmani and Dowling selected the control group with an effective internal control to match the same sample number from each industry in the experimental group. Jahmani and Dowling examined the large accelerated filers merely because the other categories were exempted from reporting on the effectiveness of their internal control in their annual financial statements. The other categories are small companies, accelerated filers, and non-accelerated filers. Although the non-accelerated filers are obliged to report on the effectiveness of their internal control in their financial statements, however, the authors regarded non-accelerated filers have a few resources than large accelerated filers, and there is doubt regarding if they will be able to maintain an effective internal control (Jahmani & Dowling, 2013). Jahmani and Dowling found that large accelerated filers had a well-developed and established internal control over the small companies. Kehinde (2015) revealed that the scope of work of the internal auditors includes the detection and prevention of errors and irregularities, and report the same to the top management. Further, Kehinde found that there is a good relationship between the daily job of the internal auditor and the effective working of the company. Hajiha and Bazaz (2016) argued that association of not reporting internal control weaknesses in the company is higher than reporting earnings and management compensation with internal control material weaknesses for the following reason: (a) managers can apply their full discretion to manipulate the result when the internal control is weak, and (b) in the

absence of ineffective internal control, the possibility of not detecting the occurrence of accounting errors is considered high.

Employee treatment in the companies is crucial regarding the implementation of internal control set by the management. Guo et al. (2015) conducted a quantitative study to examine the effect of employee treatment policies on the accounting practices of the companies along with the dimensions of the internal control processes and financial statements activities. Further, the aim of Guo et al. study was to investigate the role of employee treatment policies on the effectiveness of internal control about how to mitigate it along with the financial statements restatements. Accordingly, Guo et al. found that material weaknesses in internal control were mitigated when the management establish a more employee-friendly policies vis a vis their counterparts with fewer employee-friendly policies. Further, Guo et al. found that the appropriate worker-friendly policies considerably mitigate the propensity for financial restatements, especially for those driven by unintentional errors. Guo et al. results were consistent with the COSO internal control integrated framework along with the human capital theory of corporate governance. Guo et al. suggested that employee-friendly policies are capable of reducing the failure of the employees in the internal control processes and crucial to the success of the companies in the accounting practices. This implies that treating the employees with good corporate governance, improving their knowledge and experience through regular training and coaching, keep their moral up and motivated, will have a positive effect on the internal control processes, which in turn mitigate the financial statements restatements caused by intentional or unintentional accounting errors. Wang and Yu (2015) examined the influence of internal control's quality change on the listed corporations of the

construction sector and its impact on the corporate value. Wang and Yu found that the internal control of listed companies of the construction industry had been improved continuously from 2008 and 2012. Further, considerable improvements in internal control's quality change have taken place after the year 2010. In addition, Wang and Yu found that there was a significant correlation between internal control quality of engineering projects with the companies' sustainability and corporate value.

Relation of the internal control and five COSO components of internal control integrated framework is significant to ensure the effectiveness of the components. Lämsiluoto, Jokipii, and Eklund (2016) examined the effectiveness of the internal control and its relation to the five COSO components of internal control integrated framework. The internal control effectiveness was measured according to the management assessment and not to the internal control material weaknesses reports since not all the companies apply the Sarbanes-Oxley Act, and then the study could be considered more powerful for them (Lämsiluoto et al., 2016). Lämsiluoto et al. 2016 found that there are interrelated, but not straightforward, relationships between internal control variables, which are the five COSO components and three-dimensional types of internal control effectiveness. Also, Lämsiluoto et al. 2016 found that there was a link between some of them and higher internal control effectiveness in practice. These findings have significant implications for those accountable for improving or assessing internal control, such as management, personnel, and internal and external auditors. Further, Lämsiluoto et al. 2016 found that one component of effectiveness might be at a high level of effectiveness such as efficiency and effectiveness of activities whereas another component might exhibit a low level of effectiveness such as reliability and financial reporting. These

results confirm previous studies done by other authors that internal control effectiveness is a multi-dimensional concept than a one-dimensional concept.

Reporting internal control weaknesses by the companies is important because disclosures do not mislead the users of the financial statements. Wilford (2016) examined during an empirical analysis whether there is a difference between internal control reporting regarding the material weaknesses among foreign and U.S. companies. Both the material weakness samples and control samples included the US and non-US companies. Wilford defined the non-US companies as headquarters located outside the US. Afterward, Wilford examined the relation between internal control reporting regarding the material weaknesses and the accounting standards employed by companies in the US and foreign firms in their submitted SEC financial statements. Overall, the results indicated that foreign firms are more likely to report internal control material weaknesses than U.S. companies. Further, Wilford found that foreign companies, which submit financial statements according to U.S. GAAP or according to their domestic standards and then reconciled to U.S. GAAP were more likely to report internal control material weaknesses. Moreover, Wilford examined whether the rule of law affected the reporting of internal control material weaknesses due to specific political factors that could influence some country. Wilford revealed that foreign companies, which are classified as the strong rule of law countries are less likely to report internal control material weaknesses, and foreign companies that are classified as the weak rule of law countries are more likely to report internal control material weaknesses. Additionally, foreign enterprises that use IFRS to submit their SEC financial statements are less likely to report internal control material weaknesses in a strong rule of law countries, and there is no

significant relation between IFRS companies and material weakness reporting in the weak rule of law countries (Wilford, 2016). Lenard, Petruska, Alam, and Yu (2016) conducted in their study empirical analyses techniques such as univariate and regression analyses for the purpose of examining whether US companies that file internal control weakness (ICW) disclosure together with their financial reports with the Securities and Exchange Commission (SEC), as part of the financial annual reporting requirements of Section 404 SOX, exhibit higher levels of real activities manipulation (RM). Lenard et al. revealed according to the results of the study that companies with Internal Control Weaknesses (ICWs) involved in real, beyond accrual-based, earnings manipulation. Further, Lenard et al. found that companies with ICWs have lower unusual cash flows from operations, lower abnormal discretionary expenses, and higher abnormal production costs, compared to firms that have not ICWs. Lenard et al. found that the level of discretionary accruals for companies with ICWs is not significantly different from companies with no-ICWs. As a result, these findings provide support for the controversy that the reporting of ICWs does not prevent real earnings manipulation activities from occurring.

Accounting Information

Accounting information within the companies is important for the decisional process, including contracting companies where costing departments have to collect and elaborate information from various managers to be able to prepare an accurate project budget. Silviu (2014) discussed the importance of accounting for the decisional process in the company. Further, Silviu discussed the importance of accounting information with regards to its reliability, relevance, comparability, and coherence regarding the financial

statements' users and their investment decision. Silviu pointed out that according to the accounting information, management can realize a measurement system of economic performance. Accordingly, Silviu found that accounting represents the core of the informational system, and the accountants play a significant role in providing information that is considered the foundation for processing and analysis of information. Also, Silviu found the necessity of normalization, harmonization, convergence, and standardization at a global level to reducing the differences between the accounting standards applied in Romania and IFRS to encourage foreign investments.

Silviu (2014) conducted a qualitative method, by reviewing articles and books from different authors to collect data. However, Silviu had not approached participants, other than perceiving the theoretical perspective to be able to confirm and support the findings and conclusions of these authors. Having said that, the participants who have experience in accounting can provide significant information about the importance of accounting information and its role in the decision-making process. Further, the participants other than the authors could provide information about the effectiveness and efficiency of accounting information in the accounting information system through processing, to an analysis of the output reports. Any company cannot run its operation without accounting information system because it enables management to generate operational results, financial position, statement of income, detailed financial reports, and the cash flow of the company. Therefore, interviewing participants who have experience in the accounting field and handling managerial position would have provided effective information that supports the authors' findings.

Yin (2014) discussed the importance of having a proper accounting system for the useful economic decision of micro and small-scale entrepreneurs (MSSEs). Yin (2014) conducted a mixed method research by interviewing and interrogating participants in the market centers of Navrongo and Bolgatanga and the surroundings by preparing some questions and their administration. One hundred and eighty respondents are used for this study. Yin collected qualitative and quantitative data, which cover: (a) profile of the respondents, (b) the manner of recording the accounting transactions, (c) mechanism applied in the inventory cycle, the MSSE's basis of determining the bottom line of his or her operations, and (d) information used in making economic decision. Yin outlined that there is no study of this kind conducted in the usefulness of accounting field to MSSEs in Ghana. Therefore, during the research study, Yin found that 95% of the 180 respondents have a good knowledge and understanding of accounting. Precisely, the accounting information regarding the double entry system, which means for every debit entry, there should be an equivalent amount of credit and vice versa. Although Yin found that all the 180 participants used some written records or, in other words, single entry system, however, out of the 28% of the total population that maintained a complete set of accounting records, 9% only maintained a computerized double-entry system of recording accounting transactions. This process implies that although the interviewees have a good knowledge of accounting, however, they maintained ineffective and inefficient accounting system in their companies to improve the effectiveness and reliability of their financial reports. Further, 71% of the total population responded that they relied on the management accounting report for the usefulness of accounting information (Yin, 2014). Yin (2014) revealed that 29% prepared and generated a

complete set of financial statements to rely on the usefulness of accounting information. Additionally, although the results revealed that the educational background and literacy was necessary, however, it was not a sufficient factor for the use of accounting information for the MSSEs (Yin, 2014). Yin outlined that there were evident in the samples responded by the participants in which six of the 16 enterprises that represent 9% of the total population and used the computer-based accounting systems are owned by non-educated entrepreneurs.

Ball (2013) addressed the exaggerated amount of attention supplied in the literature to accounting's role in providing new accounting information for equity investors, and to purportedly widespread earnings management. Ball outlined that the financial statement might not provide a substantial amount of new information to the equity investors due the time it takes to issue a financial statement. Further, Ball found that accounting accruals consist of opportunities to manipulate. The relevant standards oblige the management to prepare the financial statements on the fair value basis, which is adjusted annually according to the current market value. Nevertheless, Ball discussed the discretionary and non-discretionary accruals, which play a significant role in the financial statements. Also, Ball outlined how the managers can manipulate the results by recognizing discretionary earnings for their self-interest.

In addition to accounting information system, the effectiveness of corporate governance plays a vital role regarding the disclosure of internal control information. Agyei-Mensah (2016) collected data from 110 companies in Ghana for the year ending 2013. Afterward, Agyei-Mensah examined the financial statements of the selected companies to be able to obtain the disclosure of internal control information index.

Agyei-Mensah found that most of the companies selected for this examination had not disclosed sufficient internal control information in their annual financial reports. Therefore, Agyei-Mensah indicated that insufficient internal control information does not help the stakeholders to assess the corporate governance. Further, the results revealed that that board independence is a significant variable, which explains the disclosure of internal control (Agyei-Mensah, 2016).

The independent directors help to improve the quality of internal control disclosure and increase the transparency of information. The findings of this study confirmed with the World Bank's study regarding the weakness of disclosure of internal control information in the annual reports of Ghanaian companies. The primary objective of financial statements is to provide information that will be used to take an economic decision (Chung & McCracken, 2014). Therefore, good corporate governance ensures that comprehensive risk management occurs as a normal course of events, and there should be a transparent disclosure for the stakeholders of the company regarding nature, extent, and management of these risks. Neogy and Kumar (2014) conducted a survey study to evaluate the efficiency of Accounting Information System (AIS) on the mobile telecommunication sector. The use of computerized AIS bears significant time and cost saving. The AIS helps the management to record and process various accounting transactions, and then get the financial reports, which will be useful for their users to make an economic decision. Neogy and Kumar found that existing of an effective internal control system increase the efficiency of AIS through ensuring the safeguarding of assets and getting accurate and reliable accounting information.

In addition, Neogy and Kumar (2014) found that the existence of adequate internal control system improved the efficiency of AIS through the prevention of fraud. Neogy and Kumar highlighted that the separation of operation transactions from accounting transactions reduces the risk of fraud. An effective internal control system ensures the adherence to the policies and procedures set by the board of directors. In addition, proper documentation increases the efficiency of AIS since it is essential for providing reliable and relevant information, which helps the management to perform business activities properly and make an appropriate economic decision according to the financial statements. Elbardan, Ali, and Ghoneim (2015) proposed in their qualitative method case study design a conceptual framework for analyzing the internal audit function (IAF) adaptation for the introduction of enterprise resource planning (ERP) systems in the corporate governance context. Elbardan et al. posited that the conceptual framework is a tool to be used when exploring the changes in the IAF connected with ERP systems implementation. Elbardan et al. highlighted that the purpose of this paper was to provide a conceptual framework that helps to explore how the IAF responds to both the introduction of the control logic of ERP systems, and corporate governance's institutional pressures. Moreover, the objective of the paper was to articulate the concurrence between the external pressures of Corporate Governance and internal control logic of ERP systems. Elbardan et al. articulated in their institutional study theory to form a conceptual framework, which explains the mutual interplay between the macro external corporate governance pressures, micro internal institutional logics inscribed in the ERP systems and their impact on IAF practices and structure within companies. The authors presented a review of the normative literature concerning the increase in the significance

of corporate governance in the light of the worldwide economic crisis. They highlighted a research gap related to the lack of studies focusing on the effect of ERP systems implementation on the IAF practices. The paper is conceptual in nature, and accordingly, the proposed framework was to be validated by employing a qualitative research approach in future research. The conceptual framework proposed in this study would offer the internal auditors some strategies for allowing adaptation to the various internal and external pressures. Further, the paper provides a platform for the research community to examine the influence of corporate governance and ERP systems implementation on IAF adaptation.

Further, Ying (2016) conducted an empirical study by employing correlation and regression analysis to verify the relationship between internal control information disclosure, earnings management, and agency costs in the Chinese companies. Earnings management is management authorities to maximize their self-interest in the company by controlling and amending the accounting information and is measured by the amended Jones model (Ying, 2016). Further, Ying measured internal control information disclosure based on internal control information disclosure index separated between first class indicators; reliability, correlation, integrity, and understandability; and second class indicators, which refer to the relevant first class but in further details depending on the indicator. Further, the rate of overhead expenses measured the agency cost. Ying found that internal control information disclosure can affect earnings management through agency cost. Moreover, Ying found that the improvement of internal control information disclosure will effectively reduce agency cost, thus reducing earnings management. According to Ying, implementing the basic norms of internal control effectively has an

adequate impact in China. Hence, listed companies should improve internal control information disclosure quality to strengthen the reliability of public information and preserve the interests of investors.

Management accounting practices were initially based on simple cybernetic controls where objectives and standards are set, inputs and outputs are compared with the actual data and, as a consequence, the management takes appropriate corrective actions to revise the set goals. Therefore, as the effect of the influence of environmental uncertainty was recognized, companies were obliged to develop strategies that focused on product and service innovations to provide a competitive advantage. Chenhall and Moers (2015) aimed to show how the design of management control systems (MCS) has developed in response to the demand for companies to address the challenges of operating in uncertain settings by embracing innovation. Chenhall and Moers demonstrated how MCS have evolved to more complex calculative practices, whereas MCS was conventionally designed as control parameters based on simple closed systems, employing mainly a financial-based logic. Chenhall and Moers outlined that this evolution has been a response to the challenges of managing in uncertain conditions, where innovation has become an imperative. Chenhall and Moers investigated how management accounting has evolved from a conventional, cybernetic approach to control operating within a restricted system with little attention to adaptive processes into MCS that embraces a more complex, dynamic, open approach to management control system that has provided a basis to facilitate innovation. Hence, technologies and organizational structures were designed and developed in a way to help achieve the requirements for innovations in effective ways. Therefore, it is in this setting that MCS developed to address the need for

control systems that were sufficiently open to external factors to help identify possible innovative products and services. Consequently, MCS could then evaluate the efficiency and the effectiveness of which managerial processes and individual behavior could deliver the innovations to market in cost effective ways.

International Financial Reporting Standards and Accounting Estimates

Globalization and international companies are moving forward to adopt IFRS while preparing their financial statements to increase efficiency and avoid restatement. Cameran, Campa, and Pettinicchio (2014) conducted a quantitative study using the propensity score matching approach to be able to match between a control sample of non-IFRS adopters and IFRS adopters' sample. The purpose of this study was to evaluate the impact of adopting IFRS on the non-listed companies regarding the abnormal accruals and timely loss recognition comparing with a sample of companies reporting under national general accepted accounting standards (GAAP).

Cameran et al. (2014) conducted their study in Italy since the national GAAP applicable is not similar to IFRS other than the other Anglo-Saxon countries that have fewer differences regarding the IFRS standards. Further, the Anglo-Saxon countries do not give a choice to their non-listed companies to prepare their financial statements by either IFRS or national GAAP, whereas, Italy gives this opportunity to its companies in which the authors found in doing research in Italy gives more validity to the study. Hence, Cameran et al. found in their empirical results that IFRS did not contribute to the improvement of financial reporting quality among the sample non-listed companies selected in Italy. The adoption of IFRS exhibited a higher level of abnormal accruals and a decrease in a timely loss recognition of the revenue recognition. Moreover, Cameran et

al. run different analyses for subsidiaries that are controlled by listed companies to perceive the reason for switching to IFRS. Also, Cameran et al. found that these subsidiaries switched to follow the headquarters' requirements or to simplify their financial reporting. Thus, both empirical results of the non-listed companies comparing with the national GAAP, and the subsidiaries of listed companies indicated signs of deteriorating earnings reporting quality. Cameran et al. did not identify the activities of sampled companies.

Adopting IFRS implies the companies should comply with the standards introduced by IFRS and the impact of these standards on the accounting treatments. Streaser, Sun, Zaldivar, and Zhang (2014) discussed the implication of the introduction of IFRS 15, the new awaited global standard on the revenue recognition. Streaser et al. applied the provisions of the new revenue standard to a hypothetical contract between a client and a telecommunications company. Streaser et al. found that the new standard accelerates revenue recognition of the bundled contract comparing with the current standard revenue guidance. Streaser et al. outlined that the majority of the companies that generate revenues will be affected by the application of the new standard and especially, the sectors such as construction, media, and telecommunications. By adopting IFRS 15, for all contracts with clients, revenue will be recognized when control of the promised goods or services is transferred to the contractor, not when risks and rewards are transferred to the contractor. Streaser et al. outlined that in the new standard, recognition of revenue occurs when a performance obligation is satisfied by transferring the control of promised goods or services to the client. The standard applies to all companies and replaces most current industry-specific guidance. Further, Streaser et al. articulated that

collection of necessary data to implement the new standard requires adequate internal control systems.

Kumar (2015) conducted a case study analysis to explore the impact of voluntary adoption of international financial reporting standards (IFRS) on the financial decision in Wipro Ltd, which is one of the largest IT services companies in India. Kumar compared the major financial parameters under IFRS and Indian General Accepted Accounting Standards (GAAP) as reported by Wipro Ltd. The company reported its financial statements under both IFRS and GAAP with a transition date of 01.04.2008. Kumar compared the financial parameters, which are liquidity ratios, debt ratios, equity ratios, and profitability ratios for four periods from 2010 to 2013 and found that a substantial increase in liquidity ratios, equity ratios, and debt-equity ratios. The results identified no significant increase in the profitability ratio except for the year 2013 due to the demerger and discontinuation of operations accounting treatment between IFRS and GAAP for some of the company's subsidiaries (Kumar, 2015). However, Kumar cannot generalize the findings of this case study to other companies because this case study covers one company only. Therefore, the financial parameters of this company might generate different results in other companies that work in the same industry but have different size, and in companies that work in different industries. Further, the significant reasons that caused the difference in the relevant ratios might be attributed to principle based IFRS standard, which requires fair value accounting, the difference in accounting for leases, financial position approach to deferred taxes, and timing of providing provision for the proposed dividend.

Management in contracting companies uses estimation project budget and uncertainty to recognize revenue. Kapić and Bašić (2013) illustrated in their study the importance of accounting policies and estimates to adapt and adopt to the accounting policies in a form that reflect the environment in which they operate and the risks that are related to their activities, as part of the overall system of internal controls. Further, Kapić and Bašić found that an establishment of an effective internal control system will provide possible detection of risks, and according to these risks, the management can design adequate accounting policies, which are the basis of making accounting estimates. In addition, Kapić and Bašić found that the consistency of application of accounting procedures would ensure the reliability of financial information. Moreover, Kapić and Bašić found that the implementation of five components introduced by COSO integrated framework are not sufficient to provide reasonable assurance about the achievements of its objectives, which are the effectiveness and efficiency of operation, the reliability of financial reporting, and the compliance with applicable laws and regulations. Kapić and Bašić stated that the absence of adequate monitoring, which one of the five components negatively affect the effectiveness of accounting policies and estimates. Kapić and Bašić gave attention to the accounting estimates and the risk that might affect the reliability of financial statements in case the accounting policies were not designed properly according to the business environment of the relevant company.

Accounting estimates are based on the management judgment according to the latest available, reliable information due to the uncertainties inherent in the business world. Kapić and Bašić (2013) concluded the revenue recognition of the contracting companies is based on accounting estimates along with any foreseeable losses, which

implies the use of judgment by the management in estimating the budget cost of the project. Moreover, tests of critical accounting policies provide insight into the most complex, subjective judgments of management regarding how it interprets instructions of IAS 8, using subjective evaluations.

Maghariee, Neghabi, and Abdi (2015) studied the impact of accrual accounting in the municipality of Amol, Iran. Maghariee et al. examined whether or not the financial reporting prepared based on accrual accounting compared with the cash accounting provide a better accounting method of for promoting accountability. Maghariee et al. found that applying accrual accounting could improve the accounting system in the municipality. Maghariee et al. did not mention the effectiveness of applying the accrual basis in the municipality accounting. The accrual accounting reflects the real financial position of the public entities, and for most countries, the cash basis concept is no longer an option. Maghariee et al. should have mentioned the agility of the accounting researchers to improve the current accounting system and replace it by the accrual accounting since this will positively affect the accounting treatment of the public entities and also increase the efficiency of work in the public entities' accounting departments. Tunçez (2015) discussed in the relevant article the difference between the completed method and percentage and completion method to record the revenue regarding the construction contracts. The purpose of this article was to examine the accounting practice about the construction contracts within the frame of both methods along with the difference between them. Tunçez found that using the percentage of completion method; the result will be more accurate regarding the revenue recognition. Further, Tunçez found that using the percentage of completion method; the financial statements will be more

reliable and reflect the yearly profitability or loss of the company. The significant issue in the accounting practice of the contracting and construction field is to know how to recognize the revenues and allocate the expenses within the scope of contract in which construction work is carried out. The measurement of revenue in the construction contract affected various uncertainties depending on the consequences of the future events. Hence, when the event is completed, and uncertainties are solved, then the estimated revenues can be reviewed and adjusted accordingly.

Using the complete contract method of accounting, a project should be almost completed to be able to recognize the relevant revenues and costs. Thus, this measurement is not reliable to the financial statements' users since they cannot control the profitability of the company on a yearly basis and also the result does not reflect the yearly profitability or loss accurately. The calculation used in the percent of completion method is: divide the total cost incurred as of the end of each year by the relevant total estimated budget (Tunçez, 2015). This percentage multiplied by the total contract value along and total estimated cost is the yearly result. As indicated by Maghariee et al., this method is reliable and applicable in the construction, contracting, and engineering work because it is reliable and reflects the best way to get output and performance of the project on a yearly basis instead of waiting until the end of completion of the project.

Contracting Field

Establishing an effective internal control system in the contracting field is significant because it reflects the accuracy of financial reports. Jarkas and Haupt (2015) conducted in their paper a structured questionnaire survey, which comprises 37 potential risk factors distributed to a representative number of contractors. Also, Jarkas and Haupt

highlighted the major contracting risk factors considered by general contractors running their activities in Qatar through identifying, exploring, ranking the relative importance factors and determining the prevalent allocation response trends. Further, Jarkas and Haupt selected a total number of 126 contracting companies classified under the first, second, and third categories were selected for the interviews. Jarkas and Haupt discussed in details the risk factors caused by the clients, consultants, contractors, and exogenous and affect the contracting revenue recognition. To name a few; errors and omissions in design drawings, which might lead to further cost estimation managers did not consider in the calculation of the project budget, contractors underestimate of construction cost, and poor performance of subcontractors that might cause considerable penalties, which affect the project budget (Jarkas & Haupt, 2015). Malaj and Shuli (2015) found that the construction companies should give further attention to the improvement of management regarding preparing the budget costs, planning, and designing of the projects because those processes are fundamental and challenging activities in the management and implementation of construction projects. Jarkas and Haupt discussed the risk factors caused by the related group only, but they had not discussed their effect on the revenue and the financial statements, which is a crucial part of the contracting project.

The contracting sector is considered major sources of economic growth. Malaj and Shuli (2015) outlined that an effective contracting plan is a basis for developing the budget and work planning. Further, Malaj and Shuli (2015) pointed out that the use of international accounting standards in construction leads to improving the quality of financial situation. The budget of the contracting project is very significant since the revenue recognition is calculated on the state budget according to the International

Accounting Standard 11, which discusses the construction contracts. Hence, estimation managers should calculate the budget accurately to avoid any loss in the projects.

Numerous contracting companies declared their bankruptcy or wound up their activities due to the accumulated and enforceable losses of the projects caused by inaccurate cost estimation in the planning stage. Hence, the management should consider the costing system of every project and consider the entire expenses the project might incur before submitting tender or quotation to the customer. Sepasgozar, Razkenari, and Barati (2015) conducted their study to investigate the essential causes of delay in the construction projects. Sepasgozar et al. focused on technology attributes to understand the priority of causes that affect the project duration and time. Accordingly, Sepasgozar et al. identified top nine factors out of seventy-three as main causes of delay: (a) external factors, (b) contractor attributes, (c) owner attributes (d) labor shortness, (e) material deficiency, (f) design issues, (g) consultant attributes, (h) technology restriction, and (i) project attributes. Further, the results revealed that technology restriction is one of the top nine most significant factors out of seventy-three affecting construction projects' delay (Sepasgozar et al., 2015). Most of the previous publications examined overall factors affecting time, but a few publications concentrated on technology to measure the specific effect of technology on a delay of the construction projects. Zhao et al. (2016) conducted a survey study to develop a knowledge-based decision support system for enterprise risk management (KBDSS-ERM) for Chinese construction firms (CCFs) for the purpose of facilitating their ERM implementation. Zhao et al. outlined that the objectives of the KBDSS-ERM are; to assess the ERM maturity in a CCF; to visualize the ERM maturity assessment results; to provide action plans for improving the ERM implementation

together with the maturity continuum, and to generate a printable ERM maturity assessment report. Accordingly, Zhao et al. revealed that the results of the KBDSS-ERM were consistent with the expert judgments. Further, Zhao et al. found that the KBDSS-ERM had the accuracy ranging from 83.7 to 92.9 percent in evaluating the maturity criteria and the overall ERM maturity of CCFs. Also, Zhao et al. found that the experts recognized the significance of KBDSS-ERM as being a robust, adaptable and useful tool for ERM implementation in CCFs. Using the KBDSS-ERM, the management of the construction forms can understand its ERM implementation along with the relevant strengths and weaknesses, and get the action plans recommended by the KBDSS-ERM. Thus, with the information that the management would obtain from the KBDSS-ERM, it can make better decisions associating to ERM. Also, while using the KBDSS-ERM, the employees need to read the ERM best practices, which enables them to learn the ERM fundamentals and build practical or innovative ideas connecting to ERM.

Contracting technology has a great potential to decrease project duration and improve productivity (Sepasgozar et al., 2015). The priority of delay causes of the contracting project is different in many countries due to environmental effects. Hence, delays can lead to substantial negative effects such as lawsuits between clients and contractors, loss of productivity and revenue, and contract termination (Sepasgozar et al., 2015).

Transition

In Section 1 I included an overview of the impact of internal control in the companies over the contracting revenue recognition. The section also included the foundation to the study, background of the problem, problem statement, and the purpose

statement. Also, another significant element in Section 1 was the nature of the study, indicating my preference of the qualitative research method and the case study design for the study. The research question element of the study was to enable the exploration of what strategies do business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. COSO conceptual framework was the conceptual framework for the study, and the lens to view the study. Further, I explained the assumptions, limitations, and delimitations, which were the facts I assumed accurate without concrete evidence, weaknesses, and the bounds of the study respectively. Another element in Section 1 for overview was the significance of the study, which helped to explain the value of study to business, contribution to business practice, and implications for social change. The literature review elements contained topics relating to COSO framework, ERM, projects budget revenue recognition, financial statements and material weaknesses, internal control, accounting information, IFRS, and contracting field in which all will help the reader to understand the subject and the importance of having these topics aligned together to be able to develop and implement an effective internal control.

Section 2 contained research methodology and design of my study. The section was a restatement of the purpose statement, the role of the researcher, the participants, research method, research design, population sampling, and ethical research. Also, Section 2 had data collection instruments, data collection technique, data organization techniques, data analysis, and their reliability and validity. Section 3 concluded with a presentation of the findings and recommendations.

Section 2: The Project

In this study, I used open-ended questions, along with directed follow-up questions, to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. In this section, I articulate the structure of the study as well as how this structure helped me achieve the goal of the study. This section includes (a) the purpose statement; (b) role of the researcher; (c) participants; (d) research method; (e) research design; (f) population and sampling; (g) ethical research; (h) data collection instruments, technique, organization, and analysis; and (i) reliability and validity.

counterpartsPurpose Statement

The purpose of this qualitative multiple case study was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. The population for this study included an accounting manager, finance managers, a chief internal controller, a finance controller, an estimation manager, and cost control managers from three private contracting companies in Qatar who developed and implemented appropriate internal controls over revenue recognition. Implications for positive social change could come from identifying internal controls that increase financial statement reliability, which could lead to increased access to capital and debt financing and improved employment opportunities in Qatar.

Role of the Researcher

Researchers play a significant role in developing research studies to determine the meaning of phenomena. Kornhaber, de Jong, and McLean (2015) stated that the role of a

qualitative researcher is to collect, analyze, organize, interpret, and understand data to be able to determine the meaning of a phenomenon. Dasgupta (2015) described the use of a qualitative case study design to explore information about a group of people in a company rather than theoretical business issues. Leedy and Ormrod (2013) pointed out that a case study design involves the participation of the researcher as the data collection instrument. Further, Ho (2012) highlighted that qualitative researchers interpret data through their personal lens by being the primary instruments for data collection. I studied the phenomenon from the perspective of participants and not from the viewpoint of my experience in the auditing and accounting field. As the primary researcher, I formulated ideas proposed by the participants without prejudice. My role as the researcher was the same as my role as a scholarly practitioner who collected, organized, and interpreted data to be able to report on the results and come up with a conclusion. My role in the research study included conducting semistructured interviews with open-ended questions for the participants for the purpose of exploring strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues.

At the time of the study, I was a CFO for a large organization; a year before, I had established my own audit firm. Since 2005, I had obtained experience as an external auditor and tax consultant. My professional expertise and work related to the auditing and accounting field as well as tax consulting in Lebanon and Qatar. The participants for the study were business leaders responsible for financial reporting from three private contracting companies in Qatar. I ensured that throughout the data collection process, my professional ideas did not have any influence on the answers the participants provided.

White and Drew (2011) emphasized that research participants should have the freedom to respond to questions without any restraint. I did not use any company associated with my current or previous employment, and I carried out transcript review (i.e., enabled participants to review the transcripts) to mitigate bias. I relied only on information gathered through the data collection process. Conducting interviews helps a researcher to get the story behind participants' experiences (Yin, 2014). Through interviews, a researcher can gather in-depth information on an evolving topic (Yin, 2014). Interviews are a useful data collection tool to gain in-depth understanding in relation to a research question from the perspective of participants.

I ensured that the participants understood the risks of participation, and I worked to reduce those risks and increase the benefits of participation by following the guiding principles of the Belmont report. The Belmont report frames an ethical protocol for research studies involving human subjects (U.S. Department of Health and Human Services, 1979). Ethical principles in the report include (a) respect to persons, (b) beneficence, and (c) justice (Adams & Miles, 2013). Further, the Belmont report identifies boundaries between behavioral research and routine practices for research. The Belmont report also indicates the requirement for risk assessment of human research subjects and informed consent.

I provided participants an informed consent form, which described their rights, the protections I built into the study, and the study's voluntary nature. I maintained ethical principles by assigning private codes to participant data, protecting participants' identities, respecting all study participants, and enabling the participants' autonomy. I respected the participants' opinions without obstruction. Snelgrove (2014) reemphasized

that researchers should build trust with participants, which I sought to do in each interview. I ensured that no harm came to the participants and did not take advantage of their positions. As a novice researcher, I could not ignore the fear of being biased while preparing my doctoral study, especially during the process of selecting interview participants, collecting and analyzing data, and finally, coming up with findings and conclusions.

I mitigated against bias in relation to participants' responses by applying member checking during the data collection process. I gave the participants opportunities to review my interpretations of their statements. Hammersley (2013) stated that researchers should assure participants' independence when providing information. I ensured that participants were able to express their opinions throughout the interview process by not asking leading questions. Further, I respected their contributions while preserving transparency in the findings.

Adedokun, Ogunsemi, Aje, Awodele, and Dairo (2013) pointed out that interviewing participants is the primary collection tool for qualitative researchers. I conducted the interviews in places chosen by the participants, and I designed semistructured interviews with open-ended questions. Open-ended questions are effective for collecting information from participants (Andersen, Christensen, Kehlet, & Bidstrup, 2015). The interview questions (see Appendix D) emerged from my research question and the line of inquiry I established for the study. Frich, Røthing, and Berge (2014) marked the significance of an interview protocol to ensure that researchers cover the research question and topics consistently. An interview protocol enables researchers to reduce deviation from the objectives of the study and maintain consistency from one

interview to another (Baskarada, 2014; Wang, Xiang, & Fesenmaier, 2014). Researchers should also provide satisfactory time for participants to answer questions (Malone, Nicholl, & Tracey, 2014; Yin, 2014). Hence, my objective was to follow an interview protocol (see Appendix A) to maintain consistency in data collection, enhance efficiency, and ensure an organized interview structure.

Participants

The goal of qualitative researchers is to explore the depth and complexity inherent in phenomena; qualitative researchers employ a subjective approach to describe participants' life experiences and to provide them meaning (Yin, 2014). Using a case study design allows a researcher to explore a business-related bounded system involving a group of people who have experience in a field (Dasgupta, 2015). Yin (2014) highlighted that a case study is limited in scope to a particular issue at a specific site. Sowman, Sunde, Raemaekers, and Schultz (2014) stated that it is important that participants have experienced the researched phenomenon. Hence, I restricted my data collection to three private contracting companies in Qatar. The population for this study included business leaders responsible for financial reporting, such as an accounting manager, finance managers, a chief internal controller, a finance controller, an estimation manager, and cost control managers, who worked in private contracting companies in Qatar and had experience and knowledge relevant to the topic.

The eligibility criteria specified that participants needed to be personnel with direct involvement in financial statements, project budgets, and internal audit reports at three private contracting companies in Qatar. Yin (2014) indicated that qualitative researchers should establish participant eligibility for effective data collection. Using

eligibility criteria helps researchers to select participants who have experience in the appropriate field and can provide useful and relevant data (Latiffi, Brahim, & Fathi, 2016). As identified by Sowman et al. (2014), researchers should ensure that potential participants are knowledgeable and have experience relevant to the research topic. The eligibility criteria for the selection of participants in this study included the following: (a) current employees in high management positions such as accounting managers, project managers, estimation managers, and cost control managers; (b) more than 5 years of professional and industry experience; (c) willingness to participate in an audio-recorded interview; and (d) experience with developing and implementing internal control strategies concerning revenue recognition.

Upon receiving Walden University and Institutional Review Board (IRB) approval (Walden IRB # 11-16-17-0553599), I visited each targeted company to discuss with a company representative the purpose of the research study, criteria for participation, participant confidentiality, and the informed consent process. Researchers can effectively identify participants through gatekeepers (Gülmez, Sağtaş, & Kahyaoğlu, 2016). Gatekeepers make decisions about gaining access to participants and related organizational data (Whicher, Miller, Dunham, & Joffe, 2015). Thus, prior to any data collection, I requested that a representative of each company (see Appendix B) sign a letter of cooperation. Each company representative provided contact information for participants meeting the criteria for participation. To ensure comfortable interaction with potential participants, I sent, via email, each potential participant an invitation to participate (see Appendix C). The invitation provided a brief overview of the purpose of my study and criteria for participation. Further, I met with all potential participants and

encouraged them to ask questions about the evolving topic and research study before agreeing to participate.

Doody and Noonan (2013) claimed that establishing comfortable interaction and communication with participants promotes detailed and accurate responses to questions. Confidentiality and anonymity maintenance is a method advocated by Seidman (2013) as a means of establishing trust. I requested that participants sign an informed consent form. In the form, I explained the purpose and meaning of the study to the participants, along with other details such as the protection of the participants' information, ethical considerations relevant to the study, risks associated with the research, and my contact information. The ethical guidelines included the confidentiality of data collected, anonymity, and data storage. Furthermore, in the informed consent form, I reminded participants of their right to discontinue their participation at any time during the proceedings.

Following the guidance of Rowley (2012), I conducted interviews with participants face to face, and with each participant's consent, I recorded the interviews for accuracy. This setup allowed me the flexibility of follow-up questions for further exploration and helped to accommodate the interviewees. Mohsin and Alhabshi (2015) outlined that meeting with participants face to face before interview processes occur helps researchers and participants get to know each other and enables researchers to form meaningful working relationships with participants. Furthermore, I took notes during the interviews about any observations I identified during the interviews. O'Reilly and Parker (2012) posited that saturation occurs when participants offer no new ideas or new

patterns. Interviews continued until I reached data saturation, interviewing all participants cyclically.

Research Method and Design

Research Method

I employed a qualitative research method because my objective was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. Makrakis and Kostoulas-Makrakis (2016) indicated that to be able to generate an understanding of a phenomenon, researchers have to choose from three different types of research methods: (a) qualitative, (b) quantitative, and (c) mixed method. Nyaribo (2013) pointed out that the qualitative research method is flexible because it gives the researcher an opportunity to amend and improve an interview as it progresses. Likewise, Blum (2013) noted that the qualitative method enables researchers to incorporate unexpected findings that assist in understanding the research problem.

A qualitative research method includes four elements, according to Holt and Goulding (2014), to understand a phenomenon: (a) interview, (b) data analysis, (c) quality check analysis, and (d) synthesis of the literature. Venkatesh et al. (2013) outlined that the focus of qualitative research is identifying and exploring experiences of participants. Further, qualitative research methodology employs unstructured or semistructured interviews to elicit conversation about the participants' lived experiences. The goal of qualitative researchers is to explore the depth and complexity inherent in phenomena; qualitative researchers employ a subjective approach to describe life experiences and provide them meaning (Yin, 2014). Quantitative researchers analyze

numerical data by employing statistical procedures and make deductive conclusions about the relationships and differences among variables (Venkatesh et al., 2013). According to Guta (2013), quantitative researchers use hypotheses, statistics, and numbers. Petty, Thomson, and Stew (2012) posited that researchers employ numerical data in quantitative methods to explain phenomena. Guta (2013) pointed out that a quantitative research method is a deductive style of research with hypotheses for data collection, whereas a qualitative research method is an inductive style of research. Daigneault (2014) highlighted that stakeholders' participation is absent in the findings of a quantitative research method.

Using the mixed method requires the researcher to be an expert in quantitative and qualitative methods (Bernard, 2013). Parker (2014) stated that combining quantitative and qualitative methods in a single research study enhances and validates research findings. The combination of quantitative and qualitative methods challenges the underlying assumptions of the two paradigms. I did not choose a mixed method approach due to the time constraints for my study. I did not plan to use quantitative data; thus, I rejected both quantitative and mixed methods. My research objective was to understand and not to measure a phenomenon; thus, I adopted the qualitative method. The qualitative research method was suitable for my research to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues.

Research Design

Qualitative researchers use various research designs, including ethnographic, phenomenological, and case study. Onwuegbuzie and Byers (2014) identified numerous

qualitative designs, of which I considered ethnography, phenomenology, and case study. A phenomenological researcher seeks to gain the meaning of the lived experiences of study participants about a concept or phenomenon (Bowden & Galindo-Gonzalez, 2015). The purpose of this study was not to explore the lived experiences of participants. Thus, I rejected phenomenology as a research design. Ethnographic researchers study cultures to obtain an understanding of group's cultural experiences (Mutchler et al., 2013). The ethnographic researcher employs a population that may include an entire culture with a shared reality (Campbell-Reed & Scharen, 2013). Ethnographic researchers are interested in the culture and interact with the members of the cultural society during the research project (Campbell-Reed & Scharen, 2013). Part of risk management relates to developing a culture of ethics (Wójcik, 2013). Thus, an exploration of culture may create value when exploring internal controls within an organization. The purpose of this study was to explore a business problem from the perspective of a bounded system, not the culture of a group. Thus, I rejected ethnography as a research design.

The purpose of a case study design is to explore a bounded system or a case over time through detailed, in-depth data collection comprising multiple sources of information in rich context. Yin (2014) stated that researchers who use qualitative case study design gain better comprehension of a bounded system through interviews, observations, and artifacts. Yin (2014) described the two designs that case study researchers can conduct, single case study and multiple case study. The two case study designs have holistic and embedded variants. According to Yin (2014), a researcher's choice between the case designs with their variants depends on the specific phenomenon and the research question. Ketokivi and Choi (2014) noted that multiple case study allows

cross-case analysis through case comparisons for measurable characteristics. Although multiple case studies are more expensive and time consuming than single case studies (Yin, 2014), I selected this approach to add further value to the study. A researcher using a case study design explores both *what* and *how* or *why* questions in relation to a process or phenomenon working within a bounded system (Yin, 2014). Using a case study design enables a researcher to explore a business-related bounded system involving a group of people (Dasgupta, 2015). Further, Tsang (2014) outlined that case study researchers collect data from the natural set up of events. De Massis and Kotlar (2014) posited that researchers employ case study design to achieve in-depth analyses of phenomena in real-life context. My goal was to explore a business-related bounded system; thus, I employed a qualitative case study design to address the purpose of my study.

Qualitative researchers ensure the achievement of data saturation before making a decision to end data collection processes. O'Reilly and Parker (2012) stated data saturation occurs when the data are repetitive, no new information is obtainable through data collection, and fresh data does not lead to additional findings. Hanson, Balmer, and Giardino (2011) stated that making a decision is possible by the researchers until themes repeat. Trotter (2012) observed data saturation is interviewing to redundancy. To reach data saturation, I continued to interview participants and collected supporting documents until no new data or themes emerge, and I was confident that data saturation was reached.

Population and Sampling

A population is a group of people who provide the researcher with significant information regarding the purpose of the study. The population for the study was from three private contracting companies in Qatar. Ritchie, Lewis, Nicholls, and Ormsto

(2013) posited that a population is a group contributing valuable information to research in which this information affects the population through a coordinated method. I selected three participants from each company for this qualitative research case study design to explore strategies business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. Yin (2013) posited that researchers recommend various sample sizes for case studies, but there is no set sample size for qualitative research; instead, the focus is on gathering sufficient data to meet research objectives.

Sampling allows for the selection of a small unit of experts to represent the perspective of the total population on a specific subject. Strnad (2013) pointed out the use of sampling is cost and time-consuming. The sampling technique for this study was purposive. I used purposive non-probabilistic sampling because this process enabled me to ensure that the sample participants are qualified and have knowledge about the topic. Purposive sampling is a judgmental sampling technique employed to select participants who have experience and sufficient knowledge to be able to provide researchers significant information regarding a phenomenon of interest (Palinkas et al., 2015). Daniel (2012) posited probabilistic samples require random selection. IFRS (2015a) identified the project budget as a critical element in the project cost estimation, which affects the company's profitability. The sample population for this study was three private contracting companies in Qatar. Dissimilar to quantitative research, O'Reilly and Parker (2012) outlined that the purpose of selecting participants in qualitative studies does not aim to collect a count of opinions or people or other quantifiable data. O'Reilly and

Parker (2012) stated qualitative researchers concentrate on the range of participants' opinions and experiences.

Interviews continued until the study reached saturation. O'Reilly and Parker (2012) posited saturation occurs when the participants offer no new ideas or emergent patterns. Also, O'Reilly and Parker (2012) stated data saturation occurs when the data are repetitive, no new information is obtainable through data collection, and fresh data does not lead to additional findings. Similar to Chung et al. (2014) I conducted in-depth interviews and review additional data. In-depth interviews with the relevant business leaders, who are responsible for financial reporting can provide rich data. The interviews contributed a holistic view of the target companies.

Doody and Noonan (2013) claimed that establishing a comfortable interaction and communication with the participants will promote detailed and accurate responses to questions. Collecting data from inexperienced participants, who do not possess knowledge about the relevant topic, will affect the quality of the information obtained (Latiffi et al., 2016). Using a participant criterion helped me eliminate participants who do not have an appropriate level of experience about implementing internal control strategies.

Ethical Research

After receiving Walden University IRB approval and a signed letter of cooperation (see Appendix B), I discussed the informed consent process with each potential participant along with the purpose of the research and criteria for participation. Participants who agreed to take part in this research received and signed the informed consent form. I asked participants how they preferred to receive the informed consent

form (i.e., postal delivery, e-mail, or hand delivery). Barazzetti, Hurst, and Mauron (2016) outlined how the researcher shows respect, maintain commitment, and confirm there was no stress or harm to participants. Researchers must abide by the rules of research for human subjects presented by the Belmont Report (U.S. Department of Health and Human Services, 1979).

Informing the participants before and during the interview process of their inherent rights to withdraw from the study gives further encouragement to the participants to take part in the study. Cox and McDonald (2013) recommended that participants sign the informed consent form before interviews. Yin (2014) stated researchers have to obtain the informed consent form from each participant before setting an interview. I encouraged potential participants to ask questions about the research study and process before consenting to participate. Chung et al. (2014) outlined that researchers should have comprehensive knowledge about the topic to be able to encourage participants to enhance interaction with the researcher and collect rich data. Once a participant agreed to participate in the study, the individual signed the informed consent form. Participants who wished to withdraw from the study after they signed the informed consent form were required to notify me of such desire.

Incentives come in different forms such as shopping cards, gifts, substantial invitation, and cash. Chen, Lei, Li, Huang, and Mu (2014) pointed out incentives play a major role in the willingness of study participants because of the increasing demand of research protocols. Chen et al. (2014) stated due to the financial constraints of the researcher and ethical concerns do not offer any form of incentives. I did not provide an incentive to participants, hence their participation is voluntary at all times.

Protecting participants' identities is significant to the research protocol; hence, I assigned a code to each participant. Yin (2014) highlighted researchers' accountability regarding the confidentiality of the participants' identities. It is significant to build trust in the minds of the participants by respecting and protecting their rights and enjoying their trusts. I placed all correspondence and interview information in password-encrypted files and saved on a flash drive and Dropbox. Before destructing the files, I securely stored the data for a 5-year period. Storing data enables later access and usage to the information by the researchers (Shao, Bian, & Zhang, 2013).

Data Collection Instruments

As a researcher, I was the primary instrument used in the data collection process. Seidman (2013) identified the researcher as the primary data collection instrument. Using data collection in qualitative research, a researcher can gather data through direct interactions with an individual or interaction in a group setting (Houghton, Casey, Shaw, & Murphy, 2013). As suggested by Cridland, Jones, Caputi, and Magee (2015), semistructured interviews were the interface for data collection. Semistructured interviews enable flexibility of follow-up questions between the researcher and interviewees for further investigating and help to accommodate the interviewees (Onwuegbuizi & Hwang, 2014). Further, semistructured interviews enable the researcher to use open-ended questions, with the benefit of asking follow-up questions to gather further explanation and additional responses that add value to the research. I supplemented interview data with multiple collection techniques including casual observation, note taking, and a review of documentary evidence to substantiate the

findings from my interviews. Documentary evidence included financial statements, project budgets, and internal audit reports.

My objective during data collection was to present reliable and accurate findings, maintain the participants' confidentiality, and remain ethical and objective during the interview process. Additionally, I practiced the desired skills of the researcher outlined by Cronin (2014), which included: (a) a researcher should be able to ask good questions and interpret the answers, (b) a researcher should be a good listener and not be trapped by his or her own ideologies or preconceptions, (c) a researcher should be adaptive and flexible, so that researchers can perceive a newly encountered situation as an opportunity, not a threat, and (d) a researcher should not be biased by preconceived perceptions, including those derived from theory. Hence, a person should be sensitive and responsive to contradictory evidence.

Researchers must take the necessary steps to mitigate research bias; hence, I diminished my personal views and recognized the existence of bias. Similar to Yin (2014), a role of the researcher is to plan to mitigate bias by maintaining a high ethical standard through honesty, professional competence, reading articles related to the study, and seeking peer review. Researchers also focus on self-understanding along with the impact of their expectations and biases on their study (Berger, 2015). The goal was to hear and interpret the experiences and reflections from the participants about the phenomena. I remained consistent to ensure reliability by identifying the procedures, reviewing the informed consent form with the participants, and following the interview question guide.

Member checking is a technique used to assure research validity (Harper & Cole, 2012). To conduct member checking, I wrote my interpretation of the data and presented my analysis to the interviewees to verify the accuracy of their meanings. The use of member checking increased the accuracy of interview data. Member checking involves presenting interpretations of the interviews to participants to receive feedback and reduce potential misinterpretation (Harper & Cole, 2012). Similar to Marshall and Rossman (2016), each participant had the opportunity to review my interpretation of the interview data to ensure no data were taken out of context and all interpretations were accurate.

Data Collection Technique

I conducted Skype or face-to-face semistructured interviews with open-ended questions. I used the interview protocol (see Appendix A) and informed consent form as guides to adhere to the procedures. An interview protocol enables researchers to reduce deviation from the objectives of the study and maintain consistency from one interview to another (Baskarada, 2014; Wang, Xiang, & Fesenmaier, 2014). Yin (2014) identified six sources of data appropriate for case studies including documentation, archival records, interviews, direct observations, participant observation, and physical artifacts. From the perspective of Yin, any of the six sources of the data collection method is appropriate for a case study design. Battistella (2014) pointed out using more than one source to collect data lead to diversification of data, mitigating biases, and increased information basis. I collected data from the interviews and company documents.

I targeted three private contracting companies where business leaders responsible for financial reporting have solved the business problem identified in my study. Before receiving IRB approval, I contacted a company representative from each company via

telephone or e-mail to introduce myself, review the background of my doctoral study, address any questions, and request that each sign a letter of cooperation. Afterward, I asked potential participants within these three private contracting companies if they would like to participate in a study. If a business leader agreed to participate and signed the informed consent form, I set up an interview in their office, or another comfortable location. Scheibe, Reichelt, Ballman, and Kirch (2015) pointed out a location familiar to the participant will promote a comfortable interviewing environment. After setting up the interview, I raised the interview questions including follow-up probing questions to get more in-depth information. Further, I scheduled follow-up member checking interviews, and share a copy of my synthesis of each question.

Semistructured interviews are opportunities ask targeted and insightful questions, which provide a maximum degree of communication and interaction between the researcher and participant. Figgins, Smith, Sellars, Greenlees, and Knight (2016) stated semistructured interviews are insightful and help establish confidentiality with the participants during the interview process. The interviewers took advantage of the semistructured interviews to clarify responses from the participants. De Massis and Kotlar (2014) stated that interviews help to make a study insightful and meaningful to collect efficient and rich data. Cardamone, Eboli, and Mazzulla (2014) highlighted that the advantage of face-to-face interviews is to enrich a study by enabling freedom of expression between the researcher and participant. Face-to-face interviews are connected with elaborating quality data (Cardamone et al., 2014). Another benefit of face-to-face interviews according to Irvine, Drew, and Sainsbury (2013) is that the researcher can observe behaviors and nonverbal signals. There are disadvantages with face-to-face

interviews. Potential disadvantages, as stated by Szolnoki and Hoffman (2013), include interviewer bias, participant time constraints, and geographic limitations. Yin (2014) also identified the potential lack of control over the interviews as a disadvantage to face-to-face interviews. However, for the purpose of this case study, the advantages of face-to-face interviews outweighed the disadvantages.

Participants benefit from member checking. Harper and Cole (2012) highlighted that participants receive a therapeutic benefit through member checking because they are able to validate their contribution. Member checking enables participants to make corrections to perceived errors in the data collection process because through member checking participants verify the interpretation of the interview data (Brandburg, Symes, Mastel-Smith, Hersch, & Walsh, 2015). The process for assessment of reliability and validity in qualitative research starts with member checking or transcript review.

Data Organization Technique

Data organization is a significant part of a research study. Data organization is a substantial part of the research study because through proper data organization, researchers can store, access, evaluate, and communicate research findings effectively and efficiently (Korhonen, 2014). Research workers do suffer from disorganized data especially in survey-based research studies (Karanja, Zaveri, & Ahmed, 2013). Hence, it is imperative to organize data appropriately to avoid missing data of the essential elements of the research studies and also to achieve effective data analysis (De Waal, Goedegebuure, & Tan Akaraborworn, 2014). The process of data organization enables researchers to identify emergent patterns from the data (Yin, 2014). Therefore, to be able to achieve an effective and efficient data organization, I intended to build up a database

using an Excel spreadsheet to keep a record of interview dates, the name of participants, and data derived from the participants during the interview process. Further, to avoid revealing the identity of the participants, I organized data by coding all participants' information.

Creating a filing system is significant in a research study to be able to store the data and track information obtained from the participants. I created a system to file the raw data using a password-protected USB device and Dropbox, which is cloud storage. Researchers should use cloud applications to store data and be able to track participants (Hashem et al., 2015). Also, Hashem et al. emphasized using cloud storage application avoid unauthorized access. I will store hard copies of the documents in a fireproof safe in my personal residence including the USB drive for at least 5 years and I will have sole access to the stored data. Banks (2013) pointed out storing participants' information for at least 5 years helps to protect confidentiality. I labeled participants as Participant 1, Participant 2, and so on. Morse et al. (2015) emphasized protecting participant information is a core tenet of research ethics. Hence, to protect the participants' information after the stipulated period of storing the data, I will destroy both electronic and hard copies after 5 years to avoid privacy violation and data leak.

Data Analysis

The purpose of qualitative data analysis was to explore the meaning of the content. Meanings in qualitative research derive from words spoken and textual and images, not numbers (Yin, 2014). Thus, this indicates that the quality of qualitative research depends on the interaction between data gathering and data analysis to enable exploration, clarification, and interpretation of meanings (Yin, 2014). Guo and Guo

(2016) stated qualitative data analysis involves studying the content of information to identify, classify, and transforming data into theme process. Data analysis consists of preparing, organizing, and reporting (Elo et al., 2014). To analyze data, I employed triangulation to enhance accuracy. Triangulation during data analysis enhances the credibility and accuracy of the interpretation (Van Dijk, Vervoort, Van Wijk, Kalkman, & Schuurmans, 2015). Joslin and Müller (2016) described triangulation as identifying alternative perspectives to gain richer and holistic understanding of a phenomenon. Carter et al. (2014) articulated employing triangulation as the use of the many sources that enable the researchers to enhance their understanding of a study. Cronin (2014) pointed out triangulation decreases and negates the deficiencies of a single data collection strategy, thus increasing the scope for interpreting the findings. I employed multiple data collection strategies including casual observation, note taking, and a review of documentary evidence to substantiate the findings from my interviews. Documentary evidence included financial statements, project budgets, and internal audit reports.

A logical and sequential data analysis process requires researchers to examine data for the purpose of enhancing valid interpretation (Yin, 2014). I applied the three phases of data analysis process identified by Elo et al. (2014). The phases included: (a) preparation, which includes the collection of data, sampling strategy, and selecting the unit of analysis (b) data organization, which includes categorization and abstraction, interpretation, and responsiveness, and (c) reporting. To collect data, I engaged participants in recorded semistructured interviews and triangulated interview data with a review of documentary evidence including financial statements, project budgets, and internal audit reports. As recommended by Cridland et al. (2015), I transcribed the

recorded interviews to reflect on participants' responses to obtain relevant data and to ensure data are not lost. Researchers use multiple data sources to increase the confidence and trustworthiness in the findings (Elo et al., 2014). In addition, Elo et al. (2014) described trustworthiness for the main qualitative content analysis as phases from data preparation to reporting of the results. To retrieve data from the companies' documents, I (a) narrowed my search to information related to strategies for preparing project budget and relevant internal control, (b) pursued participants' guidance on where to find the information I needed, and (c) took notes and requested participants to make copies of relevant documents that supported my findings as a researcher. Further, after collecting and extracting relevant information from the companies' documents, I incorporated collected information along with the transcribed interview data. The trustworthiness of data collection can be verified by providing accurate details of the sampling method in which purposive sampling is convenient for qualitative studies where the researcher is interested in informants who have the best knowledge concerning the research topic and participants' descriptions (Elo et al., 2014). Next, I classified narrative segments into topical themes for effective data analysis, and concluded by interpreting the findings to ensure the findings are accurate.

Computer-aided qualitative data analysis software along with the Microsoft Excel play a significant role in helping researchers to analyze data. Sotiriadou, Brouwers, and Le (2014) recommended the use of computer-assisted qualitative data software such as NVivo, which helps researchers to analyze data by identifying themes, gathering insights, and developing conclusions. NVivo software enables a detailed analysis of specific topics. Further, once information was coded, NVivo delivers a methodical process in

research to be able to assure validity and reliability (Zamawe, 2015). Derobertmeasure and Robertson (2014) and Sotiriadou et al. (2014) recommended the use of NVivo software, which aids in data management, coding, sorting, and organizing the data in themes. Thus, I applied NVivo Pro software, which assisted me in the data analysis process.

Researchers can use thematic analysis to be able to identify, examine, and record meaningful themes appropriately within a data (Teruel, Navarro, González, López-Jaquero, & Montero, 2016). The thematic analysis offers a systematic and accessible approach to analyzing qualitative data (Pascoal, Narciso, & Pereira, 2014). Systematic as it provides an orderly and logical way to analyze qualitative data. Also, thematic analysis can be used to analyze large and smaller qualitative data, leading to rich descriptions, explanations, and theorizing (Elo et al., 2014). Researchers who use thematic analysis code qualitative data to identify themes and patterns for further analysis related to the research question (Pascoal et al., 2014). Thus, researchers must ensure identified themes address the research question (Braun, Clarke, & Terry, 2014).

Reliability and Validity

Establishing quality in a doctoral study requires ensuring mutual reliability and validity, when collecting and analyzing data to support the findings of the research study. Gheondea-Eladi (2014) pointed out reliability and validity are relevant standards to ensure the rigor and credibility of the research findings. There are four essential criteria for evaluating a qualitative study: credibility, confirmability, dependability, and transferability (Cronin, 2014; Yin, 2014).

Reliability

Researchers have to verify the reliability of the data and the ability to replicate studies by reevaluating findings in different contexts to obtain the same results. As identified by Elo et al. (2014), reliability refers to replication and consistency.

Dependability and consistency are pertinent to qualitative research. There is a distinction between internal and external reliability. Internal reliability refers to ensuring consistency throughout a research project, whereas external reliability refers to whether your data collection techniques and analysis would produce consistent findings if they were repeated by other researchers (Elo et al., 2014). Also, Hess, McNab, and Basoglu (2014) indicated dependability ensures future researchers repeating the same research procedure will get similar results. Dependability, which is the parallel criterion to reliability, proves the finding's validity through triangulation, member validation, and replication (Funder et al., 2013). Researchers should detail the procedure of the research starting from the selection of participants, data collection to the data analysis and presentation of findings (Elo et al., 2014). Researchers ensure dependability to mitigate errors in their study (Polit, 2014).

Error or bias on the part of participant or researcher affects the results of the research (Carter et al., 2014). Thus, threats imply that researchers require being methodologically rigorous in the way they carry out the study to be able to avoid threatening the reliability of the results (Carter et al., 2014). I employed member checking by discussing the interpretation of collected data with participants. Member checking ensures data validation, mitigates error and preconceptions in the research findings (Yin 2014). Member checking is a method to assure reliability and validity

(Harvey, 2015). Reliability occurs when data collection and analysis is consistent and accurate (Fan & Sun, 2013; Hess et al., 2014).

Validity

Validity refers to the accuracy of the data analysis and generalizability of the findings. Researchers ensure validity by making sure the research findings are consistent and accurate (Yin, 2014). As suggested by Cronin (2014), researchers confirm study validity by ensuring the credibility, transferability, and confirmability of study results. Validation is the process of verifying research and data analysis, and interpretation to be able to prove data validity, credibility, and authenticity (Noble & Smith, 2015). Researchers establish validity by ensuring research findings are consistent and accurate (Yin, 2014).

Credibility is an internal validation process that establishes the trustworthiness of research findings. Credibility, which is the parallel criterion to internal validity, refers to systematic, in-depth research that yields high-quality data (Elo et al., 2014). Also, credibility involves the judgment made by participants regarding a researcher's findings (Westerman, Spence, & Van Der Heide, 2014).

I employed the member checking strategy to be able to address credibility. There are two validation techniques, which may assist to establish a quality of the research: triangulation and member checking. As indicated by Burau and Andersen (2014), triangulation involves using multiple sources of data and method of collections to be able to confirm validity, credibility, interpretation, and authenticity of a research data. Member checking involves sending the researcher's interpretation of the data back to the participants to enable them to check the result validity (Burau & Andersen, 2014). Also,

allowing participants to note any observation that contradicts with what we have collected; hence, this process enables them to validate the results (Allen, Schetzle, Mallin, & Ellen, 2014).

Confirmability refers to the quality and confirmation of the results by the participants (Elo et al., 2014). Confirmability implies when a researcher does not incorporate any of his/her perspectives, instead of direct confirmation from data collected from participants (Yin, 2014). I employed the use of triangulation to be able to ensure the confirmability of my doctoral study. The purpose of using multiple sources of data and method of collections within one study was to ensure consistency in data interpretation. The use of more than one data sources helps to ensure the validity of the findings (Hussein, 2015). Researchers ensure validity by employing multiple sources to make a consistent judgment of the study results (Noble & Smith, 2015).

Transferability is the responsibility of the person making the generalization. Transferability, which is the parallel criterion to external validity, refers to the ability of other researchers to generalize a study's results (Elo et al., 2014). Transferability refers to the ability to apply the findings of a study to other studies given similar circumstances and subject matter (Houghton et al., 2013). To enhance transferability, I provided sufficient context of the research and the assumptions central to the study. This will allow readers to assess the transferability of my results to other areas of research.

Data saturation occurs when the participants offer no new information or emergent themes. Researchers should stop collecting any new information when they identify that there are no emerging ideas (Cleary, Horsfall, & Hayter, 2014). Researchers use data saturation to ensure the validity of the research study (Yin, 2014). The member

checking follow-up interview can help one reach data saturation and enhance the academic rigor through obtaining in-depth information (Yin, 2014). Hence, data saturation is a significant component of rigor in a qualitative research study (Morse, 2015). To achieve data saturation, I continued to interview participants until I reached a point where additional interviews revealed no new information or emergent themes.

Transition and Summary

Section 2 began with the purpose statement. Next, I explained my role as the researcher and provided in-depth information about the selected participants of the study. The section also included reasons for choosing a qualitative research method and a multiple case study design to address the research question. Furthermore, the section also contained information regarding the population and sampling, ethical research, data collection instruments, as well as data organization and analysis. I concluded the section on how to assure reliability and validity of my doctoral study.

Section 3 began with the introduction that includes the purpose statement and a summary of the findings. Next, I provided the presentation of the findings, the applications to professional practice, and implications for social change. Furthermore, I discussed recommendations for action and further research, and my reflections and conclusions.

Section 3: Application to Professional Practice and Implications for Change

In Section 3, I provide a thorough description of the findings of the research study on strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. In this section, I present (a) an overview of the study, (b) the findings, (c) applications to professional practice, (d) implications for social change, (e) recommendations for action, (f) recommendations for further research, (g) reflections, and (h) a conclusion.

Overview of the Study

The purpose of this qualitative multiple case study was to explore strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. I interviewed nine participants from three private contracting companies in Qatar using face-to-face semistructured interviews with open-ended questions. The data came from nine participants, who had sufficient experience and technical knowledge in this field to be able to answer the interview questions adequately. Of the nine participants, I purposively selected three finance managers (PFM1, PFM2, PFM3), two cost control managers (PCCM1, PCCM2), one chief internal controller (PCIC1), one estimation manager (PEM1), one finance controller (PFC1), and one accounting manager (PAM1). Participants signed an informed consent form indicating their willingness to participate in the study. I named participants as PFM1, PFM2, PFM3, PCIC1, PEM1, and so forth in order to protect their names and keep participation confidential. Additionally, I used methodological triangulation, supplementing data collected through interviews with supporting documents and observations. I collected and reviewed supporting documents

that included financial statements, project budgets, and internal audit reports to validate my findings and ensure data credibility.

The semistructured interviews contained nine interview questions. Each interview lasted no more than 30 minutes. I audio recorded all interviews. After completing the interviews, I converted the interview recordings to text and used NVivo Pro software to analyze data, organize themes, and retrieve material easily and efficiently. I maintained a high ethical standard during the interview process, demonstrating honesty and professional competence. Meeting doctoral study rubric requirements was one of my primary objectives. As a CPA with international audit firm experience, I had acquired experience, knowledge, professional competence, integrity, objectivity, and honesty. All of the above enabled me to exercise professional competence in my academic journey. I presented the summary of findings to the participants for member checking, which enhanced the accuracy of my interpretations of the information provided by the interviewees. I organized the data collected into thematic groups. I later coded narrative segments into themes. Lastly, I made a few adjustments to my interpretation of themes based upon remarks from participants to ensure accuracy and preceded to a final write-up of the findings of this study. The themes included (a) control environment, (b) control activities, (c) systemized project budget, (d) accounting standards compliance, and (e) risk assessment and monitoring.

Presentation of the Findings

The overarching research question that guided this study was the following: What strategies do business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues? The

population for this study comprised managers of private contracting companies located in Qatar. Participants had unique codes (PCIC1, PFM1, PFM2, etc.) to ensure confidentiality. I conducted face-to-face semistructured interviews with participants. Through a process of methodological triangulation, I collected and reviewed supporting documents including financial statements, internal audit reports, project budgets, and casual observations to ensure the credibility of the data collected through interviews. The findings from this study extend the knowledge created by existing studies, as presented in the literature review. The conceptual framework for this qualitative multiple case study was the COSO internal control conceptual framework developed in 1992 by the Treadway Commission for the purpose of developing efficient and effective internal controls (Moeller, 2014). Since 1992, using the COSO model has helped managers design, operate, and evaluate the effectiveness of internal controls (Rose, Sarjoo, & Bennett, 2015).

The five main themes identified through data analysis were (a) control environment (CE), (b) control activities (CA), (c) systemized project budget (SPB), (d) accounting standards compliance (AS), and (e) risk assessment and monitoring (RA&M). I identified emergent themes through an analysis of the narrative segments from interviews and other data sources. These emergent themes seemed relevant in exploring strategies that business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. Table 1 shows the interview questions, themes, and percentage of participant references.

Table 1

Interview Questions, Themes, and Percentage of Participant References

Interview questions	Emergent themes	% of participant references
1. What internal control framework do you have in place to assure compliance with revenue recognition accounting standards?	CE, CA, AS, RA&M	80%
2. What strategies have you used to ensure that the internal controls are operating effectively regarding contracting revenue recognition?	CE, CA, AS, SPB, RA&M	100%
3. What are the key strategies managers use to develop and implement appropriate internal controls for recognizing contracting revenues to be able to mitigate the risk of financial statement manipulation?	CE, CA, AS, SPB, RA&M	100%
4. How do you assess the effectiveness of the strategies for using your budget as an internal control mechanism to manage projects?	CA, SPB, RA&M	60%
5. How did you address the barriers to implementing the strategies for using project budget variances as a learning experience to strengthen internal controls?	CE, CA, SPB, RA&M	80%
6. How does the accounting team validate the reliability and accuracy of revenue recognition in the financial statements?	CA, AS, SPB, RA&M	80%
7. How does management adapt the internal control system for recognizing contracting revenues?	CE, CA, SPB, RA&M	80%
8. What else would you like to share about your experiences on the effectiveness of the internal control regarding the contracting revenue recognition?	CE, CA, SPB, RA&M	80%

Theme 1: Control Environment

All of the participants I interviewed acknowledged the importance of having good corporate governance in the company. The main objective of corporate governance is to increase the value of the company and enhance the shareholders'/partners' equity, hence ensure the effectiveness of the companies' internal control. COSO (2013) and Rubino, Vitolla, and Garzoni (2017) stated that the control environment component consists of (a) organizational structure, (b) integrity and ethical values, (c) financial reporting competencies, (d) authority and responsibility assignment, (e) human resources policies and procedures, (f) management's philosophy and operating style, and (g) board of director's oversight. Company leaders who insist on high standards of governance mitigate many risks that arise from daily operations; these companies are then able to attract further investors whose investments in the company may help to further growth and development (Odorovic, 2013). Guo et al. (2015) found that material weaknesses in internal controls decrease when management establishes more employee-friendly policies.

Participants indicated the importance of maintaining a good working environment, which enhances internal control in a company and ensures its effectiveness. PAM1, PFM1, PFM2, PCIC1, PEM1, and PFC1 emphasized enhancing corporate governance in the companies. Tak (2014) stressed that internal control is an important part of an organization, and when it is ignored, the organization tends to lose power over the governance of the entire company. Dimitrijevic (2015) emphasized that control environment is important to the successful prevention of employee fraud.

Participants confirmed these comments. PFM1 acknowledged,

Treating the employees with good corporate governance, improving their knowledge and experience through regular training and coaching, keep their morale up and motivated, will have a positive impact on the internal control processes, which in turn mitigate the financial statements restatements caused by intentional or unintentional accounting errors.

PCIC1, PEM1, and PFC1 emphasized the importance of communicating with, educating, and observing employees in relation to various internal control procedures developed by the management to ensure effectiveness and efficiency in running the business. PFC1 stated, “the top management is focusing on improving the corporate governance in the company to be able to increase efficiency and keep the morale of the employees and managers up.” PFC1 also emphasized that “sharing ideas between the employees and managers, and enabl[ing] them to participate in an economic decision will motivate and incentive them to observe the implementation of internal control in the companies.” Participants focused on regular training on IFRS, the code of ethics and objectivity, and the ERP system because training and development in these particular subjects improves knowledge and experience in contracting revenue recognition. PCCM2 acknowledged that “during the recruitment process, management gives more concern on the candidates, who have sufficient experience in the contracting industry and knowledge of the accounting standards related to revenue recognition.” Kehinde (2015) stressed that management should ensure that the code of ethics and objectivity are well established in the company to enhance the effectiveness of corporate governance to mitigate the incidence of exogenous errors, fraud, and irregularities. Soltani (2014) found that factors

that contribute to intentional errors include weak internal control, inefficient corporate governance, accounting irregularities, and lack of core organizational values.

Maintaining good corporate governance and effective internal controls can mitigate financial statements manipulation within an organization (Zalata & Roberts, 2016). The findings from the study indicate the importance of management's commitment to corporate governance to ensure that internal control is working effectively and employees and managers are getting regular training in IFRS, ERP, and the code of ethics to ensure effective internal control over contracting revenue recognition.

To ensure data credibility and to validate the findings, I reviewed the internal control reports generated by internal controllers from the years 2014 to 2016. The internal controllers stressed in the observations part of the 2014 and 2015 reports the weakness of internal control over project budget estimation and its effect on revenue recognition. In the observation part, the internal controller highlighted that the project estimation had a negative impact on the company's profitability during the year 2014 because the management did not calculate the completion date for the project accurately. Hence, this inaccurate estimation caused the management to assume significant expenses that were not included in the project budget calculation, such as expenses for labor or manpower. I also noticed the problem of the accounting system the companies used in the previous years. I noticed in the management response to the internal controller observation from a 2016 internal audit report that due to the error of estimation and weakness of internal control over the project estimation, the management resolved to replace the old accounting system with an advanced ERP system to tighten internal control and make it

more effective, as well as improve the internal control system and comply with the entire components of the COSO framework.

Theme 2: Control Activities

All participants indicated that the management had set proper internal policies and procedures as a framework followed and implemented by employees and managers. The control activities component of COSO indicated the organizational policies and procedures used by management to implement adequate internal controls and ensure the achievement of organizational goals (Dorsey, 2015). All participants stated that implementing the internal policies and procedures effectively ensured the accuracy of recognizing contracting revenue. I reviewed the internal policies and procedures for day-to-day operations. These policies ensure the following: (a) appropriate segregation of duties, (b) maintenance of appropriate records and relevant supporting documents, and (c) regular review of the effectiveness of internal controls by the internal audit team. As stated by PAM1,

I reviewed the internal policies and procedures of the three contracting companies along with other significant points regarding the process of the entire cycles such as procurement, costing and estimation, human resources, and revenue, and noticed that all are well documented and circulated between the employees and managers.

Segregation of duties among individuals in a company leads to the development of an effective internal controls system. Frazer (2016) posited that inadequate segregation of duties within small companies is one of the leading irregularities for employees.

Lämsiluoto et al. (2016) confirmed that different individuals should handle the

responsibilities for enhancing internal controls in the entire cycle, including revenue recognition, to achieve appropriate segregation of duties and prevent financial statements manipulation. PAM1, PEM1, PFM1, PFM2, PFM3, PCIC1, and PFC1 stated that multiple authorizations are an effective control strategy to ensure that internal controls are functioning effectively. All participants also stated that controls related to contract costs were in place to ensure that the project budget included properly allocated costs. Estimation managers calculate the project budget on the basis of the entire cost of the specific project according to International Accounting Standard 11 (Malaj & Shuli, 2015).

PAM1, PEM1, PFM1, PFM2, PFM3, PCIC1, and PFC1 acknowledged that management was using the following strategies to ensure that internal controls were operating effectively regarding contracting revenue recognition. Table 2 shows the combined internal control strategies I identified through the methodological triangulation method employed during the interview process with seven participants.

Table 2

Internal Control Strategies Regarding the Project Budget

Internal control strategies	Methodological triangulation employed	# of participants who discussed these strategies
1. Ensuring that a contract is signed with the customer before starting any work.	Observation	7
2. Ensuring that the project budget includes all project costs, such as direct, indirect, and overhead, and is approved by the respective managers of the company.	Project budget	5
3. Ensuring that all progress certificates/completion certificates are approved by the respective managers of the company, project consultant, and client.	Project budget and observation	5
4. Ensuring that generated progress billing matches the percentage completed as per the progress certificate/completion certificate.	Project budget and financial reports	5
5. Ensuring that quantity surveyor department submits progress reports along with sufficient and appropriate supporting documents to the finance department to check the accuracy of the progress billing for the client.	Observation and financial reports	7
6. Obtaining the proof of work completed regarding plans, photographs, and inspection report to ensure that work is actually completed.	Financial reports	7
7. Obtaining client confirmation of financial statements assertions regarding the revenue element to ensure its accuracy, completeness, valuation, and cut-off test to validate the figures of the relevant accounting period.	Financial reports	7
8. Use in-house internal auditor's report and external auditor's management letter as a benchmark to improve any weak point detected regarding the internal controls.	Internal audit reports	6

Furthermore, PAM1, PEM1, PFM1, PFM2, PFM3, PCIC1, and PFC1 emphasized that the following internal controls be in place to mitigate the risk of financial statements manipulation regarding the contracting revenue recognition. Management should deploy, modify, and replace control activities at all stages of the organization to mitigate risk and meet operation objectives (Urbanik, 2016). PEM1 stated:

It is not only a matter of preparing a project budget, however; the most important is to ensure that all relevant costs are included in the project budget along with a proper allocation of profit margin, considering the risk of uncertainties the project may face during the implementation phase, and monitoring it.

Table 3 shows the combined internal control strategies I identified throughout the methodological triangulation method employed during the interview process from 7 participants.

Table 3

Internal Control Strategies to Mitigate the Risk of Financial Statements Manipulation

Internal control strategies	Methodological triangulation employed	# of participants who discussed these strategies
1. Respective managers should approve initial Bill of Quantity, and prepare the project budget accordingly.	Observation and financial reports	7
2. Incorporating the project budget in the ERP system, and confirm the employees and managers approvals in the system.	Observation	4
3. Management use cost benchmarking to prepare the project budget.	Observation and financial reports	3
4. Management estimate the entire project budget costs and profit margin at the inception of the contract.	Financial reports	6
5. Management ensure that there is a written prior approval from the client for any variation clauses to the contracted price and durations to avoid any unexpected foreseeable losses.	Observation and financial reports	5
6. Maintaining detailed cost schedule for each project undertaken by the company to be able to compute the percentage of work completed (based on cost-to-cost method) and according to the IAS 11 and IFRS 15.	Financial reports, project budget, and observation	6
7. Management re-measure the budgeted cost regularly to be able to raise any variation to the clients and avoid any unexpected foreseeable losses.	Financial reports and observation	7
8. Maintaining a summary of all the contracted jobs including the followings: (a) contract identification (contract number, and customer name), (b) contract value (including initial value and subsequent variations), (c) costs details (Budgeted, the total cost incurred previously, total project budget cost, and cost incurred for the relevant financial period), (d) revenue (contract value, revenue previously recognized, and revenue recognized for the current period), and (e) retentions and advances.	Project budget, financial reports, and observation	5

Using the findings from this study revealed the importance of adopting the accounting standards, accurately calculating the project budget, and strengthening the internal controls to be able to validate all the accounting transactions related to the particular project budget, and any transaction or job executed at the relevant project. The findings from this study confirmed the conceptual framework and extended the knowledge in the literature review. Participants explicitly expressed the importance of having strong internal controls, and applicable accounting standards to be able to ensure that revenue recognized indeed reflect the real figures that appearing in the financial statements. PFM1 stated, “that complying with IFRS is the milestone behind a successful and profitable project, and so, ensuring the sustainability of the company.” In addition, PFM1 identified the following effective controls:

All deliveries to project site are supported by the relevant delivery notes along with appropriate approvals, project progress report are approved by the respective client on a regular basis (monthly), each progress report supports the evidence of completed work (drawings, photographs, and any inspection certificate /report), completion certificate or hand over certificate approved by the responsible personnel by both client and project consultant.

All participants confirmed that revenue recognition is on the percentage of completion method. Any difference between the percentage of completion method and approved progress billing is reversed in the financial statements to be able to meet the objective of contracting revenue recognition as per the IAS 11. Using these findings confirmed the previous and current literature review in both accounting standards IAS 11 and IFRS 15 respectively. International Financial Reporting Standards (IFRS) require

reporting revenue based upon the percent of completion of a project as of the last day of the reporting year (International Financial Reporting Standards [IFRS], 2015a).

Theme 3: Systemized Project Budget

Participants acknowledged the importance of using an advanced ERP system, which does not enable users to make any adjustment other than the authorizations provided by the management to the respective managers. Also, participants indicated that an advanced ERP system embeds a project budget module that enables the management to follow up and monitor the budgeting process effectively and efficiently. Using an advanced ERP system mitigates the risk of financial statement manipulation, enable employees and managers to incorporate the project budget, and monitor it effectively and efficiently from the commencement date of the project to the completion date as stated by PFM2, “applying an ERP system enhances internal controls and decision taken by management.”

Management is considering an advanced ERP system as the main strategy to ensure an effective internal control over the contracting revenue recognition as stated by PFM1, PFM2, PCIC1, PAM1, PEM1, and PCCM2. Participants acknowledged that systemized project budget is a primary tool that gives us the ability to control and monitor the project's status during the project’s execution phase. PFM1 stated, “a systemized project budget enables us to monitor any deviation from the project budget, budgeted versus actual cost incurred.” PFM1 stated, “systemized budget is enabling us to mitigate the risk of incurring foreseeable losses.” PEM1 also added, “any cost incurred and exceeded the budget require from the project and estimation managers a proper

justification in which the management would decide to charge back the client to avoid any loss.” PEM2 indicated as follows:

Management developed key performance indicators (KPIs) for each project related to the budgeting process, such as *Cost Variance* and *Return on Investment* (ROI) for the managers, and number of hours for the labors. This cost variance and the projected ROI is used as an alarm on our ultimate profitability of the project as stated by PEM1.

Managers used strategies to sustain the company's business by implementing an effective internal control over the contracting revenue recognition. PCIC1 indicated,

We are using the following strategies to ensure that internal control is effectively operating regarding the contracting revenue recognition, (a) automated procurement process through the ERP system, (b) hourly labors properly allocated and monitored through the ERP system, (c) incorporation of project budget in the ERP system, and (d) payment process.

Using these findings revealed the importance of using an advanced ERP system in the contracting companies to be able to incorporate and monitor the project budget properly. Using these findings confirmed the literature review regarding the impact of project budget on the contracting revenue recognition. The measurement of revenue in the contracting contract is affected by various uncertainties depending on the consequences of the future events (Tunçez, 2015). Further, the budget of the contracting projects has a direct effect on the revenue recognition. Moreover, the substantial issue in the accounting practice of the contracting and construction field is to know how to recognize the revenues and allocate expenses within the scope of a contract (Tunçez,

2015). When the ends, and uncertainties resolve, management reviews estimated compared to actuals revenues and adjusts the records accordingly (Tunçez, 2015). Thus, revenue recognition in the contracting sector is vulnerable to an intentional and unintentional error at the highest level in the financial statements since the finance department recognizes revenue according to IAS 11 (IFRSa, 2015).

Theme 4: Accounting Standards Compliance

All participants acknowledged that the management follows IAS 11 to recognize the contracting revenue recognition. Using the findings from this study revealed the importance of applying accounting standards properly to be able to meet the objective of generating accurate financial reports. All participants indicated that they applied the percentage of completion method to recognize contracting revenue. Starting January 2018, management has to follow IFRS 15, which is a new accounting standard related to contracting revenue recognition, this new accounting standard replaces the IAS 11 (IFRSc, 2015). Nevertheless, PFM1, PFM2, and PFM3 acknowledged that there is no significant difference in the contracting revenue recognition calculation between the IAS 11 and IFRS 15. Both methods rely on the project budget and cost incurred to recognize the revenue or cost-to-cost method. IFRS (2015c) indicated that input method applies to measure the progress of the project work. Input method includes cost incurred, and total project budget cost (IFRSc, 2015).

The input method depends on the budget to recognize the revenue, and the management assumption is the basis to measure the progress of the contracting project. The project budget costs of both, the percentage of completion method, and input method are the same costs and detailed as follows: (a) direct labor, (b) direct materials; (c)

subcontractor costs, (d) allocations of costs related directly to contract activities, if those depict the transfer of control to the customer, (e) costs explicitly chargeable to the customer under the contract, and (f) other costs incurred solely due to the contract. PAM1, PFM2, and PFM1 stated that there is an immaterial difference between these two accounting standards regarding the inclusive of wasted materials and abnormal amounts of labor or other costs because these items represent inefficiencies in the entity's performance and should be excluded from the measure of progress unless included at the contract negotiations.

By adopting IFRS 15, companies have to recognize revenue according to the project budget, and incurred cost as of the end of each accounting period. The findings from this study confirmed the conceptual framework and extended the knowledge in the literature review regarding IFRS 15. Also, Huefner (2015) stated that companies should ensure that the following points are met to be able to recognize the revenue (a) identify the contract with the client, (b) identify the performance obligations in the contract, (c) determine the transaction price, (d) allocate the transaction price to the performance obligation in the contract, (e) recognize revenue when (or as) an entity satisfies a performance obligation. Hence as stated by PAM1, "the substance of the two accounting standards is the same; however, there are new measurements regarding the form of the contract that management should consider before signing the contract to be able to meet the objective of IFRS 15."

To ensure data credibility and to validate the findings, I reviewed the financial statements and project budget of the companies. I was able to check the notes, which are an integral part of the financial statements, and validate the percentage of completion

calculation with the revenue recognition. I noticed that the management stated in the notes to financial statements that revenue is recognized according to IAS 11, and I noticed that in the notes, the management disclosed and met the classification and disclosure of IFRS. I also reviewed the budgets of the projects, compared the figures of the signed budgets with the figures appearing in the notes to the financial statements, and documented improvements in the budget calculation the management exercised from the year 2014 till the date of the last audited financial statements. I also compared the current with previous projects budgets and noticed an immaterial difference between the amounts allocated initially to the relevant projects budgets.

Theme 5: Risk Assessment and Monitoring

The importance of assessing the risk of the contract and monitor the implementation phase was prominent in interviews with all participants. Croitoru (2014) stressed in assessing risk; management would have to evaluate the adequacy of internal controls and ensure the proper use of business resources. PFM2 stated, “we focus, and we regularly monitor the costing of the project with the actual figures the company incur through the implementation process.” The project budget is the platform that enables us to monitor and prevent any deficiency in the internal control or any financial statement manipulation. Continuous monitoring of the workflow as stated by PFC1:

Continuous monitoring starts by the following stages: (a) client request and bill of quantities, (b) selecting the appropriate suppliers and sub-contractors, (d) comparing the price list of the suppliers and sub-contractors, (e) approving the final price of the suppliers and sub-contractors by the authorized managers, (f) management should ensure that all the costs and expenses related directly or

indirectly to the projects are considered in the calculation of the project budget, (g) putting a certain profit margin by the top management, and finally (e) signing the agreement.

PCCM1 indicated, “we are monitoring the daily activities properly in the projects, and the managers at sites schedule a weekly meeting to see the progress of the project.” Managers regularly monitor the internal control process through a regular review to be able to ensure its effectiveness. Also, the internal auditor department is regularly doing spot checks to ensure that the processes are effective at the group level. Management monitor regularly the documentation process approvals of different projects individually to ensure whether relevant authorized employees and managers adhere to the policies and procedures.

PAM1 and PCCM1 emphasized the risk assessment process when initiating the project. As stated by Dorsey (2015), conducting fraud risk assessment enhances management’s awareness of internal control weaknesses and potential fraud opportunities. PCCM1 acknowledged, “management assess the business before signing the contract based on the (a) relationship history with the client, (b) origin of the client (local/ foreign), (c) financial stability of the client, or creditworthiness, and (e) nature of the contract.” Using the findings from this study revealed the importance of selecting the appropriate clients, doing a proper risk assessment before signing any contract to be able to prevent any difficulties during the implementation phase.

Application to Professional Practice

The findings from this study are relevant to improved business practice in that the study provides additional information on the strategies used by business leaders

responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. Business leaders responsible for financial reporting will benefit from this study as they develop and implement effective internal controls for recognizing contracting revenues. The specific business problem is that some business leaders responsible for financial reporting lack strategies to develop and implement effective internal controls for recognizing contracting revenues. The results of this study can provide business leaders of private contracting companies with information on how to enforce internal controls over contracting revenue recognition to ensure business sustainability and prevent financial statements manipulation. Hari (2016) posited that well designed internal controls provide reasonable assurance concerning the effectiveness and efficiency of operations, the reliability of reporting, and compliance with applicable laws and regulations.

Internal control is an important part of an organization, and when the management ignore it, the organization tends to lose power over the corporate governance of the entire entity (Tak, 2014). Mukhina (2015) acknowledged the importance of internal control to the growth and success of businesses. Using the results of this study can provide business leaders of contracting companies with information on (a) how to make internal control more stringent, (b) improve the corporate governance, and (c) identify the importance of using advanced ERP system, which enables them to incorporate project budget, monitor it, ensure internal control effectiveness, and sustain profitability in the projects. Ensuring adequacy of internal control in the project will mitigate financial statements manipulation. Business leaders of small businesses can adopt cultures that discourage employees and managers irregularities, through the proper recruitment process, and the

implementation of strong internal controls (Frazer, 2016). The findings from this study concurred the conceptual framework and literature review because business leaders in the contracting companies can use the COSO framework to understand the components that ensure internal control effectiveness over the entire organization. Business leaders can use the conceptual framework to understand why the effectiveness of internal controls is critical, the impact of good corporate governance over the stakeholders, effective monitoring, and risk assessment over the project budget that lead to generate accurate revenue recognition and mitigate the risk of financial statements manipulation. Using the results from this study would provide professional practice of business, business leaders of contracting companies with relevant information on COSO framework could design and implement effective systems of internal controls to mitigate the possibility of financial statements manipulation, and inaccurate contracting revenue recognition.

Implications for Social Change

Society could benefit from the results of this study because private contracting companies represent a significant source of employment opportunities in Qatar (Jarkas & Haupt, 2015). Kasztelnik (2015) noted that there is a significant increase in the value relevance of revenue recognition after the adoption of International Financial Reporting Standards (IFRS) along with an increase in the value relevance of accruals. Thus, the results of this study could contribute positively to social change by enhancing financial statement reliability. Financial statement reliability can lead to increased access to capital and debt financing, which may increase business opportunities and improve employment opportunities in Qatar. Furthermore, enhancing financial statement reliability promotes

investors' confidence in the financial statements and enable investors to make appropriate business decisions, catalyzing economic growth through capital spending.

Business leaders could benefit from the findings of this study and adopt good corporate governance, which leads to treating the employees and other stakeholders properly, improving their knowledge and experience through regular training and coaching, and keep their morale up and motivated. This process will have a positive impact on the internal control processes, which in turn mitigate the financial statements manipulations caused by intentional or unintentional accounting errors. Mitigating financial statements manipulations and increasing profitability in the company could increase business opportunities and improve employment opportunities in Qatar. Increased employment opportunities could boost economic growth through capital spending.

Recommendations for Action

The findings of this study led to some recommendations for action for business leaders of contracting companies to develop and implement adequate internal controls for recognizing contracting revenues. Other individuals who need to pay attention to the results of this study include potential business leaders such as finance managers, accounting managers, estimation managers, cost control managers, CEO, CFO, and project managers, who all manage and run the operation of contracting companies and interfere in the project budget calculation. Some of the recommendations derived from reviewing the findings of this study and emerged themes are:

1. Management should emphasize developing the COSO framework in the companies.

2. Business leaders might gain knowledge on the importance of enforcing the understanding of COSO framework among employees and managers to (a) ensuring good corporate governance, and tone-at-the top (b) ensuring the effectiveness of risk assessment, (c) enhancing the internal controls within an organization and its control activities (d) ensuring the effectiveness of communication within an organization, and (e) ensuring the effectiveness and efficiency of monitoring.
3. Management has to develop a control framework and then educate and coach employees and managers regarding its implementation.
4. Management should make sure that the employees and managers in the finance department have enough knowledge and experience in the accounting standards. Understanding the accounting standards and their application in the accounting books is important to be able to prepare and generate accurate financial statements.
5. Management should emphasize on using an advanced ERP system that embeds modules connected to the accounting standards and especially IFRS 15.
6. Hiring people who have experience and knowledge in the ERP system and accounting standards will enforce the understanding of the entire cycles and ensure the effectiveness of internal controls along with generating an accurate outcome of financial reports.
7. Management should also ensure that costing and estimating a new project budget is crucial before signing any agreement. Signing an agreement does

not suffice to ensure business continuity. Management should include in the project budget all the costs, direct such as labor and materials, overhead expenses, and other expenses related to the project.

8. Participating, sharing, and enhancing communication between the estimation department, project management, and finance department are significant to ensure that project will not incur losses but instead, will generate profit.
9. Although internal policies and procedures are effective, the policies may not cover the entire components of COSO framework. This process leads to educate and train individuals on (a) strengthen internal controls over contracting revenue recognition, and make it more stringent, (b) implement and monitor project budget, (c) gain knowledge of the new accounting standards, (d) sustain the business of the companies, and (e) mitigate financial statements manipulation.

Disseminating the findings from this study in conferences, such as the annual American Accounting Association conference, could enhance learning in accounting, and spotlight the importance of internal control over the contracting revenue recognition. Management should mandate employee training and COSO awareness program as an important prevention internal control weakness. Management should also incorporate training programs that cover what constitutes a weakness of internal control over the contracting revenue recognition, its effect, the effect of the project budget on the revenue recognition, and how to report unusual activities. Management should tailor COSO related training to individual employee job responsibilities.

Recommendations for Further Research

The purpose of this qualitative multiple case study was to explore strategies business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. Using the findings from this study and as a foundation for future research, researchers could entail a deeper look at best practice in exploring other strategies not covered in this study that managers could use to ensure the effectiveness of internal control over contracting revenue recognition. Business leaders of contracting companies can also benefit from a further study on how to mitigate financial statements manipulation and apply an effective and efficient project budget through an advanced ERP system.

Participants in this study consisted of managers of contracting companies in Qatar. Further research may expand the geographical location outside Qatar. It was noticeable during the data collection process that participants underestimated the effect of ineffective internal controls and advanced ERP system on the contracting revenue recognition. Future research on increasing awareness of the impact of internal control over contracting revenue recognition could provide more specificity to organizations on what controls to maintain, enhance or develop.

Reflections

In the process of completing this study, I experienced academic growth and gained a better understanding of strategies business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. In my effort to mitigate personal bias or preconceived ideas and values, I refrained from personal bias by not offering any opinion or any information that

might influence the interview. Hence, I used an interview protocol to stay on track, and avoid any possible bias and ensured that I treated each participant the same without any preconceived ideas.

It was unusual to see how hard the participants work to ensure business sustainability and maintain profitability in the companies. They acknowledged that the previous business problems management encountered were the benchmark to improve their work in their organizations. The participants were passionate and thrilled about what they do and willing to participate in the study and share their experiences on implementing strategies to develop and implement an effective internal control over contracting revenue recognition. After completing the study, I gained substantial insight into participants perspective on the effectiveness of internal control over contracting revenue recognition. The research experience has been invaluable. I discovered the value of research and how to integrate processes in a research study. I have learned research designs, sampling methods, data instruments, data collection techniques, data organization, data analysis, reliability, validity, and complying with ethical standards in research. I also learned how to interview, transcribe, member-check, and code data. I believe the experiences from this research study have better prepared me for future research challenges. Using the findings from this study could provide business leaders of contracting companies with additional information on how to develop and implement strategies to develop and implement effective internal controls for recognizing contracting revenues.

Conclusion

Some business leaders responsible for financial reporting lack strategies to develop and implement effective internal controls for recognizing contracting revenues. The purpose of this qualitative multiple case study was to explore strategies business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues. The conceptual framework for this study was the COSO framework. The data collection methods I used included supporting documents, casual observation, and semistructured interviews using open-ended questions. Supporting documents encompassed financial statements, project budgets, and internal audit reports.

The five main emerging themes from data collection included (a) control environment, (b) control activities, (c) systemized project budget, (d) accounting standards compliance, and (e) risk assessment and monitoring. The implications for positive social change include enhancing financial statement reliability. Financial statement reliability can lead to increased access to capital and debt financing, which may increase business opportunities and improve employment opportunities in Qatar. Furthermore, enhancing financial statement reliability promotes investors' confidence in the financial statements and enable investors to make appropriate business decisions, catalyzing economic growth through capital spending. Using the findings from this study revealed (a) the need for business leaders of contracting companies to employ strategies to develop and implement effective internal controls for recognizing contracting revenues, (b) help potential and existing business leaders of contracting companies understand the importance of developing, and implementing effective internal controls

within an organization, and (c) lack of corporate governance could result in financial statements manipulation, intentional errors and give employees and managers an opportunity to commit and conceal fraudulent activities.

References

- Abdullah, A. B. M., Murad, W., & Hasan, M. (2014). A decision dynamic model of cost control and corporate governance. *Journal of Developing Areas, 49*, 397-405. doi:10.1353/jda.2015.0023
- Adams, D. P., & Miles, T. P. (2013). The application of Belmont Report principles to policy development. *Journal of Gerontological Nursing, 39*, 16-21. doi:10.3928/00989134-20131028-07
- Adedokun, O. A., Ogunsemi, D. R., Aje, I. O., Awodele O. A., & Dairo, D. O. (2013). Evaluation of qualitative risk analysis techniques in selected large construction companies in Nigeria. *Journal of Facilities Management, 11*, 123-135. doi:10.1108/14725961311314615
- Agyei-Mensah, B. K. (2016). Internal control information disclosure and corporate governance: Evidence from an emerging market. *Corporate Governance: The International Journal of Business in Society, 16*, 79-95. doi:10.1108/cg-10-2015-0136
- Allen, C., Schetzle, S., Mallin, M. L., & Ellen, B. P. (2014). Intergenerational recruiting: The impact of sales job candidate perception of interviewer age. *American Journal of Business, 29*, 146-163. doi:10.1108/AJB-03-2013-0018
- Altheebeh, Z. A., & Sulaiman, M. T. (2016). Impact on internal control system according to Committee of Sponsoring Organizations (COSO) to reduce illegal financial transactions in commercial bank listed in Amman Stock Exchange. *International Review of Management and Business Research, 5*, 12-23. Retrieved from <http://irmbrjournal.com/index.php>

- Andersen, K. G., Christensen, K. B., Kehlet, H., & Bidstrup, P. E. (2015). The effect of pain on physical functioning after breast cancer treatment. *Clinical Journal of Pain, 31*, 794-802. doi:10.1097/AJP.0000000000000156
- Aziz, N. A. A., Manab, N. A., & Othman, S. N. (2016). Sustainability Risk Management (SRM): An extension of Enterprise Risk Management (ERM) concept. *International Journal of Management and Sustainability, 5*, 1-10. doi:10.18488/journal.11/2016.5.1/11.1.1.10
- Ball, R. (2013). Accounting informs investors and earnings management is rife: Two questionable beliefs. *Accounting Horizons, 27*, 847-853. doi:10.2139/ssrn.2211288
- Banks, G. P. (2013). *Exploring small-business change and strategic adaptation in an evolving economic paradigm* (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3597451)
- Barazzetti, G., Hurst, S. A., & Mauron, A. (2016). Adapting preclinical benchmarks for first-in-human trials of human embryonic stem cell-based therapies. *Stem Cells Translational Medicine, 5*, 1058–1066. doi:10.5966/sctm.2015-0222
- Baskarada, S. (2014). Qualitative case studies guidelines. *Qualitative Report, 19*(40), 1-25. Retrieved from <http://tqr.nova.edu/>
- Battistella, C. (2014). The organization of Corporate Foresight: A multiple case study in the telecommunication industry. *Technological Forecasting & Social Change, 87*, 60-79. doi:10.1016/j.techfore.2013.10.022

- Bendickson, J., Muldoon, J., Liguori, E., & Davis, P. E. (2016). Agency theory: The times they are a-changin'. *Management Decision*, *54*, 174-193. doi:10.1108/md-02-2015-0058
- Berchowitz, G., & Whitehead, S. (2014, July 1). IFRS 15: Revenue recognition will never be the same again. *Accountancy SA*. Retrieved from <http://www.accountancysa.org.za/>
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, *15*, 219–234. doi:10.1177/1468794112468475
- Blum, D. A. (2013). *Exploring best practice skills to predict uncertainties in venture capital investment decision-making* (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3588186)
- Bowden, C., & Galindo-Gonzalez, S. (2015). Interviewing when you're not face-to-face: The use of email interviews in a phenomenological study. *International Journal of Doctoral Studies*, *10*, 79-92. Retrieved from <https://www.informingscience.org/Journals/IJDS/>
- Brandburg, G. L., Symes, L., Mastel-Smith, B., Hersch, G., & Walsh, T. (2013). Resident strategies for making a life in a nursing home: A qualitative study. *Journal of Advanced Nursing*, *69*, 862-874. doi:10.1111/j.1365- 2648.2012.06075.x
- Brant, E. C., Steven, M. G., & Christopher, J. W. (2014). Do critical audit matter paragraphs in the audit report change nonprofessional investors' decision to invest? *Auditing*, *33*, 71-93. doi:10.2139/ssrn.2318590
- Braun, V., Clarke, V., & Terry, G. (2014). Thematic analysis. *Qualitative Research*

Clinical Health Psychology, 2, 95-114. doi:10.1037/13620-004

Brustbauer, J. (2016). Enterprise risk management in SMEs: Towards a structural model. *International Small Business Journal*, 34, 70-85.

doi:10.1177/0266242614542853

Burau, V., & Andersen, L. B. (2014). Professions and professionals: Capturing the changing role of expertise through theoretical triangulation. *American Journal of Economics & Sociology*, 73, 264-293. doi:10.1111/ajes.12062

Cameran, M., Campa, D., & Pettinicchio, A. (2014). IFRS adoption among private companies impact on earnings quality. *Journal of Accounting, Auditing & Finance*, 29, 278-305. doi:10.1177/0148558x14534260

Campbell-Reed, E. R., & Scharen, C. (2013). Ethnography on holy ground: How qualitative interviewing is practical theological work. *International Journal of Practical Theology*, 17, 232-259. doi:10.1515/ijpt-2013-0015

Cardamone, A. S., Eboli, L., & Mazzulla, G. (2014). Drivers' road accident risk perception: A comparison between face-to-face interview and web-based survey. *Advances in Transportation Studies*, 33(2), 59-72. doi:10.4399/97888548728995

Carenza, G. S. (2011). *A phenomenological study of mindfulness of curriculum directors in a Midwest state* (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3474865)

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41, 545-547.

doi:10.1188/14.ONF.545-547

- Celenk, H. (2013). The view of the members of accountancy profession on ethical behavior and the effect of tax payers on displaying ethical behavior: A qualitative and quantitative research on a local scale in Turkey. *International Journal*, 7, 93-108. Retrieved from <http://www.econ-society.org/journals/ijep/ijep.htm>
- Chappell, C. (2014). *The executive guide to enterprise risk management*. London, England: Palgrave MacMillan.
- Chen, K., Lei, H., Li, G., Huang, W., & Mu, L. (2014). Cash incentives improve participation rate in a face-to-face survey: An intervention study. *Journal of Clinical Epidemiology*, 68, 228-239. doi:10.1016/j.jclinepi.2014.08.002
- Chen, T. (2016). Internal control, life cycle and earnings quality—An empirical analysis from Chinese market. *Open Journal of Business and Management*, 4, 301-311. doi:10.4236/ojbm.2016.42032
- Chenhall, R. H., & Moers, F. (2015). The role of innovation in the evolution of management accounting and its integration into management control. *Accounting, Organizations and Society*, 47, 1-13. doi:10.1016/j.aos.2015.10.002
- Choi, Y., Ye, X., Zhao, L., & Luo, A. C. (2016). Optimizing enterprise risk management: A literature review and critical analysis of the work of Wu and Olson. *Annals of Operations Research*, 237, 281-300. doi:10.1007/s10479-015-1789-5
- Chung, J., & McCracken, S. (2014). Understanding the restatement process. *Accounting Perspectives*, 13, 253-281. doi:10.1111/1911-3838.12036
- Cleary, M., Horsfall, J., & Hayter, M. (2014). Data collection and sampling in qualitative research: Does size matter? *Journal of Advanced Nursing*, 70, 473-475. doi:10.1111/jan.12163

- Committee of Sponsoring Organizations of the Treadway Commission. (1992). *Internal control-integrated framework* (2nd ed.) New York, NY: Author.
- Committee of Sponsoring Organizations of the Treadway Commission. (2013). *Internal control-integrated framework*. Retrieved from <http://coso.org/>
- Connelly, L. M. (2013). Limitation section. *Medsurg Nursing*, 22, 325-325, 336. Retrieved from <http://www.medsurnursing.net/cgi-bin/WebObjects/MSNJournal.woa>
- Cox, S. M., & McDonald, M. (2013). Ethics is for human subjects too: Participant perspectives on responsibility in health research. *Social Science & Medicine*, 98, 224-231. doi:10.1016/j.socscimed.2013.09.015
- Cridland, E. K., Jones, S. C., Caputi, P., & Magee, C. A. (2015). Qualitative research with families living with autism spectrum disorder: Recommendations for conducting semistructured interviews. *Journal of Intellectual and Developmental Disability*, 40(1), 78-91. Retrieved from <http://aaidjournals.org/>
- Croitoru, I. (2014). Operational risk management and monitoring. *Internal Auditing & Risk Management*, 9, 21-31. Retrieved from <http://www.univath.ro/aimr/content/home>
- Cronin, C. (2014). Using case study research as a rigorous form of inquiry. *Nurse Researcher*, 21(5), 19-27. doi:10.7748/nr.21.5.19.e1240
- Daigneault, P.-M. (2014). Taking stock of four decades of quantitative research on stakeholder participation and evaluation use: A systematic map. *Evaluation and Program Planning*, 45, 171-181. doi:10.1016/j.evalprogplan.2014.04.003

- Dasgupta, M. (2015). Exploring the relevance of case study research. *Vision: The Journal of Business Perspective*, 19, 147-160. doi:10.1177/0972262915575661
- Daniel, J. (2012). *Sampling essentials: Practical guidelines for making sampling choices*. Los Angeles, CA: Sage.
- De Massis, A., & Kotlar, J. (2014). The case study method in family business research: Guidelines for qualitative scholarship. *Journal of Family Business Strategy*, 5, 15-29. doi:10.1016/j.jfbs.2014.01.007
- De Waal, A. A., Goedegebuure, R., Tan Akaraborworn, C. (2014). Adapting the high performance organization framework to the Thai context. *Measuring Business Excellence*, 18(2), 28-38. doi:10.1108/mbe-08-2013-0043
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Derobertmeasure, A., & Robertson, J. E. (2014). Data analysis in the context of teacher training: Code sequence analysis using QDA miner (R). *Quality and Quantity*, 48, 2255-2276. doi:10.1007/s11135-013-9890-9
- Dimitrijevic, D. (2015). The detection and prevention of manipulations in the balance sheet and the cash flow statement. *Ekonomski Horizonti*, 17, 135-150. doi:10.5937/ekonhor1502137d
- Donelson, D. C., Ege, M., & McInnis, J. M. (2015). Internal control weaknesses and financial reporting fraud. *Social Science Research Network*. 1-57. doi:10.2139/ssrn.2449287
- Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, 20(5), 28-32. doi:10.7748/nr2013.05.20.5.28.e327

- Dorsey, A. (2015). COSO 2013: The path forward. *Internal Auditor*, 72(4), 71-73.
Retrieved from <http://www.theiia.org/intauditor/>
- Edmonds, C. T., Edmonds, J. E., Leece, R. D., & Vermeer, T. E. (2015). Do risk management activities impact earnings volatility? *Research in Accounting Regulation*, 27, 66-72. doi:10.1016/j.racreg.2015.03.008
- Elbardan, H., Ali, M., & Ghoneim, A. (2015). The dilemma of internal audit function adaptation: The impact of ERP and corporate governance pressures. *Journal of Enterprise Information Management*, 28, 93-106. doi:10.1108/jeim-10-2013-0074
- Ellis, T. J., & Levy, Y. (2009). Towards a guide for novice researchers on research methodology: Review and proposed methods. *Issues in Informing Science and Information Technology*, 6, 323-337. Retrieved from <http://www.informingscience.org/>
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *Sage Open*, 4, 1-19. doi:10.1177/2158244014522633
- Elshafie, E., & Nyadroh, E. (2014). Are discretionary accruals a good measure of audit quality? *Journal of Management Policy & Practice*, 15(2), 43-59. Retrieved from <http://jmppnet.com/>
- Fang, J. (2016). The risk assessment method based on multi-attribute fuzzy decision-making in the application of the internal control. *International Journal of Security and Its Applications*, 10, 21-32. doi:10.14257/ijisia.2016.10.4.03

- Fan, X., & Sun, S. (2013). Generalizability theory as a unifying framework of measurement reliability in adolescent research. *The Journal of Early Adolescence*, 34(1), 38–65. doi:10.1177/0272431613482044
- Feng, M., Li, C., McVay, S. E., & Skaife, H. (2014). Does ineffective internal control over financial reporting affect a firm's operations? Evidence from firms' inventory management. *The Accounting Review*, 90, 529-557. doi:10.2308/accr-50909
- Figgins, S. G., Smith, M. J., Sellars, C. N., Greenlees, I. A., & Knight, C. J. (2016). You really could be something quite special. A qualitative exploration of athletes' experiences of being inspired in sport. *Psychology of Sport and Exercise*, 24, 82-91. doi:10.1016/j.psychsport.2016.01.011
- Flood (2017). ASC 606 revenue from contracts with customers. *Wiley GAAP 2017- Interpretation and Application of Generally Accepted Accounting Principles*, 635-706. doi:10.1002/9781119357032.ch38
- Frazer, L. (2016). Internal control: Is it a benefit or fad to small companies? A literature dependency perspective. *Journal of Accounting and Finance*, 16, 149-161. Retrieved from <http://www.na-businesspress.com/jafopen.html>
- Frich, J. C., Røthing, M., & Berge, A. R. (2014). Participants', caregivers', and professionals' experiences with a group-based rehabilitation program for Huntington's disease: A qualitative study. *BMC Health Services Research*, 14, 1-8. doi:10.1186/1472-6963-14-395
- Funder, D., Levine, J., Mackie, D., Morf, C., Sansone, C., Vazire, S., & West, S. (2013). Improving the dependability of research in personality and social psychology:

- Recommendations for research and educational practice. *Personality and Social Psychology Review*, 18, 3–12. doi:10.1177/1088868313507536
- Gheondea-Eladi, A. (2014). Is qualitative research generalizable? *Journal of Community Positive Practices*, 14(3), 114-124. Retrieved from <http://jppc.ro/>
- Gooden-Sanderson, K. A. (2014). *The internal audit function as an auditor persuasion tactic*. (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3642845).
- Griffith, E. E., Hammersley, J. S., Kadous, K., & Young, D. (2015). Auditor mindsets and audits of complex estimates. *Journal of Accounting Research*, 53, 49-77. doi:10.1111/1475-679x.12066
- Gülmez, M., Sağtaş, S., & Kahyaoğlu, D. Y. (2016). The effects of technoparks on absorptive capacity and the role of gatekeepers in this process. *Cag University Journal of Social Sciences*, 13, 92-102. Retrieved from <http://www.cag.edu.tr/en/arama>
- Guo, X., & Guo, X. (2016). A panel data analysis of the relationship between air pollutant emissions, economics, and industrial structure of China. *Emerging Markets Finance & Trade*, 52, 1315-1324. doi:10.1080/1540496X.2016.1152792
- Guo, J., Huang, P., Zhang, Y., & Zhou, N. (2015). The Effect of employee treatment policies on internal control weaknesses and financial restatements. *The Accounting Review*. 1-59. doi:10.2308/accr-51269
- Guta, L. A. (2013). Quantitative versus qualitative research in knowledge management. *Social Science Research Network*, 99, 311-326. doi:10.2139/ssrn.2218594

- Hajiha, Z., & Bazaz, M. S. (2016). Impact of internal control material weaknesses on executive compensation: Evidence from Iran. *International Journal of Accounting, Auditing and Performance Evaluation*, 12, 70-84.
doi:10.1504/ijaape.2016.073891
- Hammersley, M. (2013). On the ethics of interviewing for discourse analysis. *Qualitative Research*, 14, 529-533. doi:10.1177/1468794113495039
- Hanson, J., Balmer, D., & Giardino, A. (2011). Qualitative research methods for medical educators. *Academic Pediatrics*, 11, 375-386. doi:10.1016/j.acap.2011.05.001
- Hari, S. (2016). Effect of weaknesses of the internal control systems and noncompliance with statutory provisions on the audit opinion of the audit board of the republic of Indonesia. *International Journal of Engineering Research and Applications*, 6(9), 1-6. Retrieved from <http://www.ijera.com>
- Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy? *The Qualitative Report*, 17, 510–517. Retrieved from <http://tqr.nova.edu/>
- Harvey, L. (2015). Beyond member checking: A dialogic approach to the research interview. *International Journal of Research & Method in Education*, 38, 23-38.
doi:10.1080/1743727X.2014.914487
- Hashem, I. A. T., Yaqoob, I., Anuar, N. B., Mokhtar, S., Gani, A., & Khan, S. U. (2015). The rise of “big data” on cloud computing: Review and open research issues. *Information Systems*, 47, 98-115. doi:10.1016/j.is.2014.07.006

- Hassan, R., & Marimuthu, M. (2015). Corporate governance effect on ownership and control in firms: An empirical evidence from Pakistan. *International Journal of Business and Management*, *10*, 212-217. doi:10.5539/ijbm.v10n8p212
- Hess, T. J., McNab, A. L., & Basoglu, K. S. (2014). Reliability generalization of perceived ease of use, perceived usefulness, and behavioral intentions. *MIS Quarterly*, *38*, 1–28. Retrieved from <http://www.misq.org/>
- Ho, Z. J.-Y. (2012). What makes hotel expatriates remain in their overseas assignments: A grounded theory study. *The Qualitative Report*, *17*, 1-22. Retrieved from <http://tqr.nova.edu/>
- Holt, G. D., & Goulding, J. S. (2014). Conceptualisation of ambiguous-mixed-methods within building and construction research. *Journal of Engineering, Design and Technology*, *12*, 244–262. doi:10.1108/jedt-02-2013-0020
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher*, *20*(4), 12–17.
doi:10.7748/nr2013.03.20.4.12.e326
- Huefner, R. J. (2015). The impact of new financial reporting standards on revenue management. *Journal of Revenue & Pricing Management*. *15*, 78–81.
doi:10.1057/rpm.2015.45
- Hussein, A. (2015). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined? *Journal of Comparative Social Work*, *4*(1), 1-12. Retrieved from journal.uia.no/
- International Financial Reporting Standards. (2015a). IAS 11: Construction contracts. *IFRS Foundation*. Retrieved from <http://www.ifrs.org/>

- International Financial Reporting Standards. (2015b). IAS 1: Presentation of financial statements. *IFRS Foundation*. Retrieved from <http://www.ifrs.org/>
- International Financial Reporting Standards. (2015c). IFRS 15: Revenue from contracts with customers. *IFRS Foundation*. Retrieved from <http://www.ifrs.org/>
- International Financial Reporting Standards. (2015d). IAS 8: Accounting policies, changes in accounting estimates and errors. *IFRS Foundation*. Retrieved from <http://www.ifrs.org/>
- Irvine, A., Drew, P., & Sainsbury, R. (2013). 'Am I not answering your questions properly?' Clarification, adequacy, and responsiveness in semistructured telephone and face-to-face interviews. *Qualitative Research*, 13, 87-106. doi:10.1177/1468794112439086
- Jackson, M. P. (2006). *Sarbanes-Oxley for small business leveraging compliance for maximum advantage*. Hoboken, NJ: John Wiley & Sons.
- Jahmani, Y., Ansari, M. I., & Dowling, W. (2014). Testing for internal control weaknesses in accelerated filers. *Academy of Accounting and Financial Studies Journal*, 18, 97-113. Retrieved from <http://www.alliedacademies.org/>
- James, P. (2015). Corruption in the Middle East management implications at a Qatar construction project. *Journal of Management Research*, 7, 79-95. doi:10.5296/jmr.v7i5.8379
- Jarkas, A. M., & Haupt, T. C. (2015). Major construction risk factors considered by general contractors in Qatar. *Journal of Engineering, Design and Technology*, 13, 165-194. doi:10.1108/jedt-03-2014-0012
- Joslin, R., & Müller, R. (2016). Identifying interesting project phenomena using

- philosophical and methodological triangulation. *International Journal of Project Management*, 34, 1043-1056. doi:10.1016/j.ijproman.2016.05.005.
- Kacmar, K. M., & Tucker, R. (2014). The moderating effect of supervisor's behavioral integrity on the relationship between regulatory focus and impression management. *Journal of Business Ethics*, 1-12. doi:10.1007/s10551-014-2464-5
- Kapić, J., & Bašić, M. (2013). Accounting policies and accounting estimates for the purpose of ensuring the satisfactory level of financial reporting quality. *Business Consultant/Poslovni Konsultant*, 5, 9-13. Retrieved from <http://www.finconsult.ba/>
- Karanja, E., Zaveri, J., & Ahmed, A. (2013). How do MIS researchers handle missing data in survey-based research: A content analysis approach. *International Journal of Information Management*, 33, 734-751. doi:10.1016/j.ijinfomgt.2013.05.002
- Kasztelnik, K. (2015). The value relevance of revenue recognition under International Financial Reporting Standards. *Accounting and Finance Research*, 4(3), 88-98. doi:10.5430/afr.v4n3p88
- Kehinde, J. S. (2015). Asset protection and financial statement fraud: The audit and management function in Nigeria business organization. *Journal of Policy and Development Studies*, 9, 166-175. doi:10.12816/0011174
- Ketokivi, M., & Choi, T. (2014). Renaissance of case research as a scientific method. *Journal of Operations Management*, 32, 232-240. doi:10.1016/j.jom.2014.03.004
- Kirkwood, A., & Price, L. (2013). Examining some assumptions and limitations of research on the effects of emerging technologies for teaching and learning in

higher education. *British Journal of Educational Technology*, 44, 536-543.

doi:10.1111/bjet.12049

Knott, C. L. (2012). *The manipulation of revenue impact on earnings management and investor's earning potential* (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3511522)

Korhonen, J. J. (2014). Big data: Big deal for organization design? *Journal of Organization Design*, 3(1), 31-36. doi:10.146/jod.3.1.13261

Kornhaber, R. A., de Jong, A. E. E., & McLean, L. (2015). Rigorous, robust and systematic: Qualitative research and its contribution to burn care. An integrative review. *Burns*, 41, 1619-1626. doi:10.1016/j.burns.2015.04.007

Kumar, K. A. (2015). International Financial Reporting Standards (IFRS) adoption on financial decisions. *Journal of Accounting & Marketing*, 4, 2-6.
doi:10.4172/2168-9601.1000141

Lail, B., MacGregor, J., Stuebs, M., & Thomasson, T. (2015). The influence of regulatory approach on tone at the top. *Journal of Business Ethics*, 126, 25-37.
doi:10.1007/s10551-013-1992-8

Lakis, V., & Giriunas, L. (2012). The concept of internal control system: Theoretical aspect. *Ekonomika*, 91(2), 142-152. Retrieved from <http://www.leidykla.vu.lt/>

Lämsiluoto, A., Jokipii, A., & Eklund, T. (2016). Internal control effectiveness—a clustering approach. *Managerial Auditing Journal*, 31, 5-34. doi:10.1108/maj-08-2013-0910

Latiffi, A. A., Brahim, J., & Fathi, M. S. (2016). Transformation of Malaysian construction industry with building information modelling (BIM). *MATEC Web of*

Conferences, 66, 1-8. doi:10.1051/mateconf/20166600022

Laxman, S., Randles, R., & Nair, A. (2014). The fight against fraud: internal auditors can use COSO components to develop and deliver an effective fraud mitigation program. *Internal Auditor*, 71, 49-54. Retrieved from <http://www.theiia.org/intauditor/>

Leedy, P. D., & Ormrod, J. E. (2013). *Practical research: Planning and design* (10th ed.). Upper Saddle River, NJ: Pearson Education.

Leins, D. A., Fisher, R. P., Pludwinski, L., Rivard, J., & Robertson, B. (2014). Interview protocols to facilitate human intelligence sources' recollections of meetings. *Applied Cognitive Psychology*, 28, 926-935. Retrieved from <http://onlinelibrary.wiley.com>

Lenard, M. J., Petruska, K. A., Alam, P., & Yu, B. (2016). Internal control weaknesses and evidence of real activities manipulation. *Advances in Accounting*, 33, 47-58. doi:10.1016/j.adiac.2016.04.008

Li, H. (2015). Managerial ability and internal control quality: Evidence from China. *International Journal of Financial Research*, 6, 54-66. doi:10.5430/ijfr.v6n2p54

Lin, S., Pizzini, M., Vargus, M., & Bardhan, I. R. (2011). The role of the internal audit function in the disclosure of material weaknesses. *The Accounting Review*, 86, 287-323. doi:10.2308/accr.00000016

Lin, Y. C., Wang, Y. C., Chiou, J. R., & Huang, H. W. (2014). CEO characteristics and internal control quality. *Corporate Governance: An International Review*, 22, 24-42. doi:10.1111/corg.12042

- Lu, P., Guo, S., Qian, L., He, P., & Xu, X. (2015). The effectiveness of contractual and relational governances in construction projects in China. *International Journal of Project Management*, 33, 212-222. doi:10.1016/j.ijproman.2014.03.004
- Mafrolla, E., Matozza, F., & D'Amico, E. (2016). Enterprise risk management in private firms: Does ownership structure matter? *Journal of Applied Business Research*, 32, 671-686. doi:10.19030/jabr.v32i2.9603
- Maghariee, A., Neghabi, Z., & Abdi, R. (2015). Application of accrual accounting in Iran municipalities. *Management Science Letters*, 5, 257-260. doi:10.5267/j.msl.2015.1.013
- Makrakis, V., & Kostoulou-Makrakis, N. (2016). Bridging the qualitative–quantitative divide: Experiences from conducting a mixed methods evaluation in the RUCAS programme. *Evaluation and Program Planning*, 54, 144–151. doi:10.1016/j.evalprogplan.2015.07.008
- Malaj, A., & Shuli, I. (2015). Problems and challenges facing today's construction sector in Albania. *Academic Journal of Interdisciplinary Studies*, 4, 572-576. doi:10.5901/ajis.2015.v4n3s1p572
- Malone, H., Nicholl, H., & Tracey, C. (2014). Awareness and minimization of systematic bias in research. *British Journal of Nursing*, 23, 279-282. Retrieved from <http://www.magonlinelibrary.com/>
- Mandzila, E. E. W., & Zeghal, D. (2016). Content analysis of board reports on corporate governance, internal controls and risk management: Evidence from France. *Journal of Applied Business Research (JABR)*, 32, 637-648. doi:10.19030/jabr.v32i3.9668

- Marchetti, M. A. (2005). *Beyond Sarbanes-Oxley compliance effective enterprise risk management*. Hoboken, NJ: John Wiley & Sons.
- Mardini, G. H., & Power, D. M. (2015). Determinants of revenue recognition disclosures: The case of Jordanian industrial listed companies. *Middle East Journal of Management*, 2, 178-194. doi:10.1504/mejm.2015.070756
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). Thousand Oaks, CA: Sage.
- Martin, K., Sanders, E., & Scalan, G. (2014). The potential impact of COSO internal control integrated framework revision on internal audit structured SOX work programs. *Research in Accounting Regulation*, 26, 110-117. doi:10.1016/j.racreg.2014.02.012
- McCarthy, M., & McCarthy, R. (2014). Financial statement preparers' revenue decisions: Accuracy in applying rules-based standards and the IASB-FASB revenue recognition model. *Journal of Accounting and Finance*, 14, 21-43. Retrieved from <http://www.na-businesspress.com/jafopen.html>
- Ministry of Finance. (2015). *Law no. 21 of the year 2009 issuing the income tax law*. Retrieved from <https://www.mof.gov.qa/>
- Moeller, R. R. (2014a). Importance of the COSO internal control framework. *Executive's Guide to COSO Internal Controls: Understanding and Implementing the New Framework*, (pp. 1-4). doi:10.1002/9781118691656.ch1
- Moeller, R. R. (2014b). COSO Internal control components: Risk assessment. *Executive's Guide to COSO Internal Controls: Understanding and Implementing the New Framework*, (pp. 59-71). doi:10.1002/9781118691656.ch5

- Mohsin, M. I. A., & Alhabshi, S. O. (2015). Microfinance through Islamic banks & Zakah (A novel practice). *Journal of Wealth Management & Financial Planning*, 2, 49-61. Retrieved from <http://www.mfpc.org>
- Morse, J. M. (2015). "Data were saturated..." *Qualitative Health Research*, 25, 587-588. doi:10.1177/1049732315576699
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Mukhina, A. S. (2015). International concept of an assessment of internal control efficiency in the conduct of an audit. *Asian Social Science*, 11, 58-64. doi:10.5539/ass.v11n8p58
- Mustapha, M. (2014). Monitoring costs of multinational companies: An agency theory perspective. *Asian Journal of Business and Accounting*, 7(2), 23-43. Retrieved from <https://ajba.um.edu.my/>
- Mustapha, M., & Adnan, A. (2015). A Case study of enterprise risk management implementation in Malaysian construction companies. *International Journal of Economics and Financial Issues*, 5, 70-76. Retrieved from <http://www.econjournals.com/>
- Mutchler, M. G., McKay, T., McDavitt, B., & Gordon, K. K. (2013). Using peer ethnography to address health disparities among young urban. Black and Latino men who have sex with men. *American Journal of Public Health*, 103, 849-852. doi:10.2105/ajph.2012.300988
- Neogy, D., & Kumar, T. (2014). Evaluation of efficiency of accounting information systems: A study on mobile telecommunication companies in Bangladesh. *Global*

- Disclosure of Economics and Business*, 3, 40-55. Retrieved from <http://gdeb.weebly.com/>
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, 18(2), 34-35. doi:10.1136/eb-2015-102054
- Nyaribo, O. K. (2013). *Exploring foreclosure-related costs in the city of Minneapolis* (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3599993)
- Odorovic, I. (2013). Impact of corporate governance on performance of companies. *Montenegrin Journal of Economics*, 9, 47-53. Retrieved from <http://www.mnje.com/>
- Onwuegbuzie, A. J., & Byers, V. T. (2014). An exemplar for combining the collection, analysis, and interpretations of verbal and nonverbal data in qualitative research. *International Journal of Education*, 6(1), 183-246. doi:10.5296/ije.v6i1.4399
- Onwuegbuzie, A. J., & Hwang, E. (2014). Interviewing successfully for academic position: A framework for candidates for asking for asking question during the interview process. *International Journal of Education*, 6, 98-113. doi:10.5296/ije.v6i2.4424
- O'Reilly, M., & Parker, N. (2012). 'Unsatisfactory Saturation': a critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research Journal*, 13(2), 190-197. doi:10.1177/1468794112446106
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed

- method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42, 533-544. doi:10.1007/s10488-013-0528-y
- Parker, L. (2014). Qualitative perspectives: Through a methodological lens. *Qualitative Research in Accounting & Management*, 11, 13-28. doi:10.1108/QRAM-02-2014-0013
- Pascoal, P. M., Narciso, I. B., & Pereira, N. M. (2014). What is sexual satisfaction? Thematic analysis of lay people's definitions. *Journal of Sex Research*, 51(1), 22-30. doi:10.1080/00224499.2013.815149
- Public Company Accounting Oversight Board. (2015, July). Concept release on audit quality indicators. Retrieved from <http://pcaobus.org/>
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 1: Introducing the philosophy of qualitative research. *Manual Therapy*, 17, 267–274. doi:10.1016/j.math.2012.03.006
- Polit, D. F. (2014). Getting serious about test-retest reliability: A critique of retest research and some recommendations. *Quality of Life Research*, 23, 1713-1720. doi:10.1007/s11136-014-0632-9
- Prabowo, H., Jap, T., & Agoes, S. (2015). Is there a correlation between ERP implementation, adherence to COSO and GCG implementation? *Journal of Theoretical & Applied Information Technology*, 73, 283-289. Retrieved from <http://www.jatit.org/>
- Quadackers, L., Groot, T., & Wright, A. (2014). Auditors' professional skepticism: Neutrality versus presumptive doubt. *Contemporary Accounting Research*, 31, 639-657. doi:10.1111/1911-3846.120

- Rahman, R. A., Sulaiman, S., Fadel, E. S., & Kazemian, S. (2016). Earnings management and fraudulent financial reporting: The Malaysian story. *Journal of Modern Accounting and Auditing*, *12*, 91-101. doi:10.17265/1548-6583/2016.02.003
- Rasmussen, S. J. (2012). Revenue recognition, earnings management, and earnings informativeness in the semiconductor industry. *Accounting Horizons*, *27*, 91-112. doi:10.2308/acch-50291
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide to social science students and researchers*. Thousand Oaks, CA: Sage.
- Rittenberg, L. E. (2013). COSO 2013 a reflection of the times: The long-awaited Internal Control-Integrated Framework update aims to help organizations better design and implement controls, with an eye toward today's business challenges. *Internal Auditor*, *70*, 60-66. Retrieved from <http://www.theiia.org/intauditor/>
- Rose, M., Sarjoo, P., & Bennett, K. (2015). A boost to fraud risk assessments: Reviews based on the updated COSO internal control-integrated framework may help prevent fraud. *Internal Auditor*, *72*, 22-24. Retrieved from <http://www.theiia.org/intauditor/>
- Roussy, M. (2013). Internal auditors' roles: From watchdogs to helpers and protectors of the top manager. *Critical Perspectives on Accounting*, *24*, 550-571. doi:10.1016/j.cpa.2013.08.004
- Rowley, J. (2012). Conducting research interviews. *Management Research Review*, *35*(3/4), 260-271. doi:10.1108/01409171211210154

- Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks, CA: Sage.
- Rubino, M., & Vitolla, F. (2014). Internal control over financial reporting: Opportunities using the COBIT framework. *Managerial Auditing Journal*, 29, 736-771.
doi:10.1108/maj-03-2014-1016
- Rubino, M., Vitolla, F., & Garzoni, A. (2017). The impact of an IT governance framework on the internal control environment. *Records Management Journal*, 27, 19-41. doi:10.1108/RMJ-03-2016-0007
- Scheibe, M., Reichelt, J., Bellmann, M., & Kirch, W. (2015). Acceptance factors of mobile apps for diabetes by patients aged 50 or older: A qualitative study. *Medicine 2.0*, 4, 1-13. doi:10.2196/med20.3912
- Shao, B.-l., Bian, G.-q., & Zhang, W.-q. (2013). The method of distribute data storage and location on weights of jump table. *AASRI Procedia*, 5, 120-125.
doi:10.1016/j.aasri.2013.10.067
- Shapiro, D. (2014). COSO embraces enhanced fraud risk management. *Journal of Corporate Accounting & Finance*, 25(4), 33-38. doi:10.1002/jcaf.21952
- Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.
- Snelgrove, S. R. (2014). Conducting qualitative longitudinal research using interpretative phenomenological analysis. *Nurse Researcher*, 22, 20-25.
doi:10.7748/nr.22.1.20.e1277

- Sepasgozar, S. M., Razkenari, M. A., & Barati, K. (2015). The importance of new technology for delay mitigation in construction projects. *American Journal of Civil Engineering and Architecture*, 3, 15-20. doi:10.5176/2301-394x_ace15.156
- Silviu, C. (2014). The Importance of the accounting information for the decisional process. *Annals of Faculty of Economics*, 1, 593-603. Retrieved from <http://anale.steconomieuoradea.ro/en/>
- Soltani, B. (2014). The anatomy of corporate fraud: A comparative analysis of high profile American and European corporate scandals. *Journal of Business Ethics*, 120, 251-274. doi:10.1007/s10551-013-1660-z
- Sotiriadou, P., Brouwers, J., & Le, T. (2014). Choosing a qualitative data analysis tool: A comparison of NVivo and Leximancer. *Annals of Leisure Research*, 17, 218-234, doi:10.1080/11745398.2014.902292
- Sowman, M., Sunde, J., Raemaekers, S., & Schultz, O. (2014). Fishing for equality: Policy for poverty alleviation for South Africa's small-scale fisheries. *Marine Policy*, 46, 31-42. doi:10.1016/j.marpol.2013.12.005
- Srivastava, A. (2014). Selling-price estimates in revenue recognition and the usefulness of financial statements. *Review of Accounting Studies*, 19, 661-697. doi:10.1007/s11142-013-9263-6
- Streaser, S., Sun, K. J., Zaldivar, I. P., & Zhang, R. (2014). Summary of the new FASB and IASB revenue recognition standards. *Review of Business*, 35, 7-15. Retrieved from <http://www.stjohns.edu/academics/schools-and-colleges/peter-j-tobin-college-business/about/review-business-journal>

- Strnad, M. A. (2013). *Recommended skill requirement of recent management information systems graduate for employment: A modified Delphi study* (Doctoral dissertation). Available from Dissertations & Full Text database. (UMI No. 3576351)
- Szolnoki, G., & Hoffman, D. (2013). Online, face-to-face and telephone surveys: Comparing different sampling methods in wine consumer research. *Wine Economics and Policy*, 2, 57–66. doi:10.1016/j.wep.2013.10.001
- Tak, I. (2014). The importance of the internal control in detecting errors and frauds on corporate governance: Case study "IAS 16". *Valahian Journal of Economic Studies*, 5, 75-84. Retrieved from <http://www.vjes.eu>
- Teruel, M. A., Navarro, E., González, P., López-Jaquero, V., & Montero, F. (2016). Applying thematic analysis to define an awareness interpretation for collaborative computer games. *Information and Software Technology*, 74, 17-44. doi:10.1016/j.infsof.2016.01.009
- Trotter, R. T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive Medicine*, 55, 398- 400. doi:10.1016/j.ypmed.2012.07.003
- Tsang, E. W. K. (2014). Case studies and generalization in information systems research: A critical realist perspective. *Journal of Strategic Information Systems*, 23, 174-186. doi:10.1016/j.jsis.2013.09.002
- Tunçez, H. A. (2015). Turkish Accounting Standard 11: Construction Contract Standard. *IIB International Refereed Academic Social Sciences Journal*, 6, 90-100. doi:10.17364/iib.20151912615

- Urbanik, V. (2016). Making internal control a priority in local government. *Journal of Government Financial Management*, 65(3), 20-25. Retrieved from <https://www.agacgfm.org/Research-Publications/Journal.aspx>
- U.S. Department of Health and Human Services. (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. Retrieved from <http://www.hhs.gov/>
- Van Dijk, J., Vervoort, S., van Wijk, A., Kalkman, C., & Schuurmans, M. (2015). Postoperative patients' perspectives on rating pain: A qualitative study. *International Journal of Nursing*, 53, 260-269. doi:10.1016/j.ijnurstu.2015.08.007
- Vandervelde, S., Brazel, J., Jones, K., & Walker, P. (2012). Comments by the auditing standards committee of the auditing section of the American Accounting Association on public exposure draft: Internal control – Integrated framework (COSO framework). *Current Issues in Accounting*, 6(1), C35-C42. doi:10.2308/ciia-50180
- Venkatesh, V., Brown, S., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 37, 21-54. Retrieved from <http://www.misq.org/>
- Wagenhofer, A. (2014). The role of revenue recognition in performance reporting. *Accounting and Business Research*, 44(4), 349-379. doi:10.1080/00014788.2014.897867
- Wang, D., Xiang, Z., & Fesenmaier, D. R. (2014). Adapting to the mobile world: A model of smartphone use. *Annals of Tourism Research*, 48, 11-26. doi:10.1016/j.annals.2014.04.008

- Wang, Y., & Yu, X. (2015). The Impact of internal control quality in engineering projects on the corporate value: An empirical study in construction industry. In *Proceedings of the Ninth International Conference on Management Science and Engineering Management*. 1201-1213. doi:10.1007/978-3-662-47241-5_101
- Westerman, D., Spence, P. R., & Van Der Heide, B. (2014). Social media as information source: Recency of updates and credibility of information. *Journal of Computer-Mediated Communication*, 19, 171-183. doi:10.1111/jcc4.12041
- White, J., & Drew, S. (2011). Collecting data or creating meaning? *Qualitative Research Journal*, 11, 3-12. doi:10.3316/QRJ1101003
- Wilford, A. L. (2016). Internal control reporting and accounting standards: A cross-country comparison. *Journal of Accounting and Public Policy*, 35, 276-302. doi:10.1016/j.jaccpubpol.2015.12.006
- Wisuttee Wong, G., & Rompho, N. (2015). Linking balanced scorecard and COSO ERM in Thai companies. *Journal of Management Policy and Practice*, 16, 127-134. Retrieved from <http://www.na-businesspress.com/jmppopen.html>
- Whicher, D. M., Miller, J. E., Dunham, K. M., & Joffe, S. (2015). Gatekeepers for pragmatic clinical trials. *Clinical Trials*, 12, 442-448. doi:10.1177/1740774515597699
- Wójcik, D. (2013). Where governance fails: Advanced business services and the offshore world. *Progress in Human Geography*, 37, 330-347. doi:10.1177/0309132512460904

- Yin, L. (2014). The relevance of accounting to micro and small scale entrepreneurs. *Interdisciplinary Journal of Research in Business*, 3, 1-13.
Retrieved from <http://www.idjrb.com/index.php>
- Yin, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation*, 19, 321–332. doi:10.1177/1356389013497081
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Ying, Y. (2016). Internal control information disclosure quality, agency cost and earnings management-based on the empirical data from 2011 to 2013. *Modern Economy*, 7, 64-70. doi:10.4236/me.2016.71007
- Zalata, A., & Roberts, C. (2016). Internal corporate governance and classification shifting practices. *Journal of Accounting, Auditing & Finance*, 31, 51-78.
doi:10.1177/0148558X15571736
- Zamawe, F. C. (2015). The implication of using NVivo software in qualitative data analysis: Evidence-based reflections. *Malawi Medical Journal*, 27(1), 13-15.
doi:10.4314/mmj.v27i1.4
- Zhao, X., Hwang, B. G., & Low, S. P. (2015). Enterprise risk management in international construction firms: drivers and hindrances. *Engineering, Construction and Architectural Management*, 22, 347-366. doi:10.1108/ecam-09-2014-0117

Appendix A: Interview Protocol

Interview: Finding out about what strategies do business leaders use to develop and implement effective internal controls for recognizing contracting revenues in Qatar.

1. I will contact the participants by telephone, e-mail, or meeting with them for inviting them to participate in the interview.
2. I will begin the interviews by thanking the participants for their approvals to participate in the interview. Afterward, I will make sure I introduce myself and the purpose of the study to the participant.
3. I will explain the participants the voluntary nature to participate and the flexibility to withdraw from the study at any time at their discretion.
4. I will obtain consent from the participants, and afterward, I will give a copy of the informed consent form to each participant to ensure confidentiality.
5. I will inform participants of the interview procedures, which involves the use of audio recording the interview.
6. The interview will be restricted to 30 minutes for responses to 8 interview questions including any follow-up question, and I will mail a thank-you card to each participant one day after the interview.
7. I will inform participants that I will make the transcribed interviews available to them via email to ensure member checking validation and accuracy of their responses.
8. At the end of the interviews, I will thank the participants for agreeing to take part in the research study.

Appendix B: Letter of Cooperation From a Research Partner

<Community Research Partner Name>

<Contact Information>

<Date>

Dear Antonio Ghaleb,

Based on my review of your research proposal, I give permission for you to conduct the study entitled Effective Internal Controls for Recognizing Contracting Revenues in Qatar. As part of this study, I authorize you to select from a sample of business leaders within our firm to conduct interviews for data collection. Once you have completed your interviews, you may conduct member checking interviews allowing the participants to review your interpretive report of each interview. You have permission to take notes and audio record the interviews at your discretion. you are also permitted to use the results of the interviews to complete your case study and to share the information with the committee members at Walden University. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: providing access to participants, facility use, organizational progress reports and international business policies, and use of personal time for research purposes. We reserve the right to withdraw from the study at any time if our circumstances change.

I understand that the student will not be naming our organization in the doctoral project report that is published in Proquest.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

<Authorization Official>

<Contact Information>

Appendix C: Invitation to Participate

<Date>

<Address Block>

Dear Potential Participant,

I am Antonio Ghaleb, a doctoral researcher at Walden University pursuing a Doctor of Business Administration degree in Accounting. As part of my doctoral dissertation research at Walden University, I invite you to participate in a research study to explore strategies business leaders responsible for financial reporting use to develop and implement effective internal controls for recognizing contracting revenues in Qatar. I select you as potential participants to participate in my doctoral study because you have sufficient experience and knowledge in the area of my research. I want you to make sure that your participation in the study is voluntary and confidential and you can withdraw at your discretion. Enclosed is an informed consent form. I request that you read the consent form and ask any questions for further clarification before making any decision to accept or reject this invitation.

Your participation depends on meeting the following criteria: (a) current employees in high management position such as accounting managers, project managers, estimation managers, and cost control managers, (b) more than 5 years professional and industry experience, (c) willingness to participate in an audio-recorded interview and (d) have developed and implemented internal control strategies over revenue recognition.

If you meet these criteria, kindly notify me via mobile +974 66443556 or e-mail antonio.ghaleb@waldenu.edu about your availability.

I will contact you again via phone call to schedule the interview. The interview,

which will last for about 30 minutes involves 8 open-ended questions and will be audio recorded and transcribed. To ensure privacy, the location will be coordinated before the interview at your convenience. I will provide you with the opportunity to conduct a member checking interview for at maximum 15 minutes to review my interpretation of the transcribed interviews to be able to validate completeness, and accuracy of themes.

Please do not hesitate to contact me for any further clarification or questions. I appreciate your kind assistance and cooperation with my request.

Sincerely,

Thank you in advance for your kind cooperation.

Respectfully,

Antonio Ghaleb

Doctoral candidate

Doctorate of Business Administration: Accounting

Appendix D: Interview Questions

To complement the research question, I will use open-ended semistructured interviews.

The interview questions are as follows:

1. What internal control framework do you have in place to assure compliance with revenue recognition accounting standards?
2. What strategies have you used to ensure that the internal controls are operating effectively regarding contracting revenue recognition?
3. What are the key strategies managers use to develop and implement appropriate internal controls for recognizing contracting revenues to be able to mitigate the risk of financial statement manipulation?
4. How do you assess the effectiveness of the strategies for using your budget as an internal control mechanism to manage projects?
5. How did you address the barriers to implementing the strategies for using project budget variances as a learning experience to strengthen internal controls?
6. How does the accounting team validate the reliability and accuracy of revenue recognition in the financial statements?
7. How does management adapt the internal control system for recognizing contracting revenues?
8. What else would you like to share about your experiences on the effectiveness of the internal control regarding the contracting revenue recognition?

Appendix E: Protecting Human Research Participants Training Certificate

