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Performance Evaluation Criteria for Project Managers

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This is to certify that the doctoral study by

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Walden University
2020

Abstract

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MBA, University of Phoenix, 2011

BS, Mapua Institute of Technology, Philippines, 1981

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Supervisors of business project managers lack strategies to effectively evaluate the work of project managers, increasing the probability of project failure, and costing organizations billions of dollars in losses each year. Effective evaluation of the work of project managers is essential to avoid project failure. Grounded in Kaplan and Norton's balanced scorecard theory, the purpose of this qualitative single case study was to explore strategies supervisors of business project managers use to evaluate the project managers' work. The participants comprised 3 supervisors of project managers in the Rocky Mountain area of the United States with successful experience in evaluating the work of project managers. Data were collected from semistructured interviews and organizational documents and artifacts. Yin's 5-step analysis process guided the data analysis. Member checking and methodological triangulation were used to validate the study data. The following 4 themes emerged from analyses of data collected: performance evaluation based on the level of customer satisfaction, performance evaluation based on compliance to regulations, performance evaluation based on control of project cost and schedule, and performance evaluation based on the strength of work relationships. Supervisors of business project managers should establish clear expectations of factors used to evaluate business project managers' work to improve project performance and avoid project failure. The implications for social change include the identification of strategies used to effectively evaluate the work of project managers that may assist in improving project performance and reducing project failure. These strategies could translate into improvements to local communities in which these projects are implemented.

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Dedication

I would like to dedicate this study to my beloved wife, Fides, to my deceased parents Lucila and Sulpicio, to Uncle John Bybee, to my children, Jerome, Amanda, Mary Joy, Cayle, Jessie, Janine, Grace, Sabian, and Joshua, to my grandchildren Maya Emmelene, Arnel Francis, Eli Miguel, Jasper Bjorn, and Kyle Everette who are my inspirations with my quest for scholarship and excellence. You all will continue to be my strength as I anticipate celebrating my doctoral study graduation and application for future success with the help of The Almighty God.

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Section 1: Foundation of the Study

Executive leaders practice project management and governance to evaluate project success and performance of project managers. In these company settings, the performance evaluation criteria used should ideally cover all relevant human aspects of project management, as well as accommodate specific project situations, such as unusually difficult project circumstances that the project managers experience (Sullivan, Asmar, Chalhoub, & Obeid, 2017; Xu & Yeh, 2014). In addition, Xu and Yeh (2014) claimed that future research is needed to examine the performance evaluation criteria used to best assess the actual performance of project managers in specific settings. Xu and Yeh recommended that future researchers should conduct studies to examine the input and output variables that supervisors of project managers may use to best measure the relative performance of the projects and that of the project managers in specific environments. Xu and Yeh's ideas became the foundation for pursuing this study.

Background of the Problem

Project managers play a vital role in the success or failure of a project; consequently, countless researchers have focused on the characteristics of project managers that help achieve project success (Hannah, 2013). Business leaders conduct the process of evaluating the project manager's performance appropriately (Perrenoud & Sullivan, 2014). In addition, leaders conduct the process of evaluating the project manager's performance in accordance with the project portfolio because a correct matching between project managers and projects positively affects the performance of the projects and the organization's success (Perrenoud & Sullivan, 2014). The lack of

performance metrics on project manager performance and projects causes the actual project performance expectations to be misleading to the stakeholders (Perrenoud & Sullivan, 2014; Xu & Yeh, 2014).

Project management involves many different kinds of skills, such as technical, business, people, management, leadership, and human resource management (Moraveck, 2013). The multitude of skills required of project managers sets high expectations of the project stakeholders. These expectations are set so high that the ineffective evaluation of project manager performance becomes a factor that has a negative impact on the achievement of success in organizations (Moraveck, 2013).

Problem Statement

Inadequate performance evaluation metrics used to evaluate business project managers increase the probability of project failure (U.S. Office of Personnel Management, 2014; Yin et al., 2019). Project failure costs business organizations billions of dollars in losses each year, as 70% of projects in 2018 failed (Robbins, 2019). The general business problem is that inadequate performance evaluation metrics used to evaluate the performance of business project managers result in significant financial losses. The specific business problem is that some supervisors of business project managers lack strategies to effectively evaluate the work of project managers.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies supervisors of business project managers use to effectively evaluate the work of project managers. The target population consisted of three project manager supervisors, located

in the Rocky Mountain area of the United States, with successful experience in evaluating the work of project managers. Business projects cover many areas that involve positive social change, including water, transportation, electricity, sewage, energy, nutrition, health, education, and social and urban development (Ika & Donnelly, 2017). The implications for positive social change include improving project performance and reducing project failures could translate into improvements to local communities in which project managers operate.

Nature of the Study

Three types of research methods are available to researchers: qualitative, quantitative, and mixed methods (Saunders, Lewis, & Thornhill, 2015). I selected the qualitative research method for this study. Researchers use this type of research to collect data in the form of words, images, video, and other nonnumeric means to analyze the data to identify emerging themes (Yin, 2018). Researchers use the qualitative research method to investigate a question without attempting to quantifiably measure variables or look to potential relationships between variables and to understand human behavior and the reasons that govern such behavior (Marshall & Rossman, 2016). The qualitative method is best suited for the study because I collected and analyzed nonnumeric data to identify themes. Quantitative researchers conduct statistical analysis and test hypotheses to determine the relationship between variables (Saunders et al., 2015). I did not select the quantitative method because I did not conduct statistical analysis or test hypotheses to establish the relationships between variables. Researchers using mixed methods integrate qualitative and quantitative methods into one research study (He & Van de Vijver, 2015).

The mixed method was not the best choice because the focus of the study was not to conduct statistical analysis or test hypotheses.

Qualitative research designs include case study, narrative, ethnographic, and phenomenological (Saunders et al., 2015). Researchers use the case study design to explore the *what, why,* and *how* of a phenomenon in its real-world setting (Yin, 2018). I selected the case study design to explore the what, why, and how of the phenomenon of inadequate performance metrics used to evaluate the work of project managers. Researchers use the narrative design to explore individual or small groups' life stories (Marshall & Rossman, 2016). The narrative design was not chosen because the focus of the study was not to explore individual or small groups' life stories. In ethnographic research design, the researcher examines shared behavioral patterns, beliefs, and language of cultural groups (Saunders et al., 2015). Because the focus of the study was not to examine cultural groups' shared behavioral patterns, beliefs, and language, the ethnographic design was not suitable for the study. Researchers use the phenomenological design to explore individuals' lived experiences about phenomena (Yin, 2018). I did not select the phenomenological design because I did not explore individuals' lived experiences about phenomena.

Research Question

What strategies do supervisors of business project managers use to effectively evaluate the work of project managers?

Interview Questions

1. What strategies did you use to effectively evaluate the work of your project managers?
2. How did your project managers respond to those strategies?
3. How did you assess the performance metrics used to evaluate the work of project managers?
4. What modifications did you apply to any strategy to improve its effectiveness in evaluating the work of your project managers?
5. What barriers did you encounter when implementing strategies to effectively evaluate the work of your project managers?
6. What else would you like to add about strategies to effectively evaluate the work of project managers?

Conceptual Framework

I selected the balanced scorecard (BSC) theory as the conceptual framework for the study. Kaplan and Norton (1992, 1996) conceived and recommended the BSC theory as a way of evaluating project managers' performance. The BSC theory is a management tool that supervisors of project managers use to present project managers with a comprehensive view of project performance in relation to the organization's strategic objectives. Kaplan and Norton's goal was to provide a clear indication of the areas organizational leaders should be measuring and the issues organizational leaders should focus their efforts to ensure continuous organizational improvements in strategic performance. Supervisors of business project managers may use the BSC theory to assess

and communicate organizational performance, in both financial and nonfinancial terms, and use these results to address both short and long-term organizational objectives (Kutsch, Ward, Hall, & Algar, 2015). I selected the BSC theory as the conceptual framework for the study because supervisors of business project managers use the BSC theory to assess and communicate organizational objectives and performance.

Operational Definitions

Project management: Project management is a multifaceted discipline and includes both technical skills and human resources management skills to administer stakeholder expectations. Project managers control both internal and external factors and use various communication tools and techniques to minimize the gap and implement projects effectively and efficiently (Singh & Lano, 2014).

Stakeholders: Stake holders are those who have an interest in the decisions and actions of a company: clients, employees, shareholders, suppliers, and the community (Martens & Carvalho, 2017).

Cognitive styles: Cognitive styles are the findings of scholars (e.g., creating, planning, and knowing styles) indicating that a project manager's cognitive style that relates to perception, thoughts, experiences, and problem-solving abilities are significantly associated with individual's performance under various conditions (Armstrong, Cools, & Sadler-Smith, 2012). Cognitive style is a description of the way project managers organize and process information and make judgements with their human intellect in project management from the psychological perspective (Esa, Alias, & Samad, 2014).

Creating style: Creating style is a style that some project managers possess, which allows them to be creative, prefer experimentation, treat problems as opportunities and challenges, possess other interesting characters such as making decisions based on intuition ("gut-feel") in unconventional ways and creative, be flexible, and have a strong imagination (Esa et al., 2014).

Knowing style: Knowing style refers to strong analytical skills. Individuals possessing this style prefer a logical, rational, and impersonal way of information processing and make informed decisions based on a thorough analysis of data and rational arguments (Esa et al., 2014).

Planning style: Planning style refers to a need most project managers have for structure. Project managers prefer to organize and control in a well-structured work environment, make decision in a structured way, and focus in the process of preparation and planning to reach targeted objectives (Esa et al., 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are perceptions that the researcher believes to be true and accurate conditions of the study (Marshall & Rossman, 2016). I assumed that, while conducting this study, there would be no change in or adjustment to the respective policies and procedures regarding project manager performance evaluation in their organizations. Such changes in policies and processes could have affected the validity of the data collected and conclusions from the data analysis. I also anticipated that the management team would not adjust organizational policy concerning the superiors of project

managers' skills and training relative to how they would rate the performance of project managers. I anticipated that the interview questions I formulated and the responses the participants provided would be relevant in answering the overarching research question. I assumed that the timeframe provided by Walden University for the completion of the study was adequate. I assumed that participants would answer all interview questions truthfully, completely, and without my undue influence. I expected that the experiences of the supervisors of project managers would provide the basis for determining the efficiency or deficiency of project managers' performance.

Limitations

Limitations are conceivable constraints of the study that are normally out of the researcher's control (Marshall & Rossman, 2016). A limitation of the study was that only a few supervisors of business project managers will participate in this study. Another limitation was that interpretations of what it takes to effectively evaluate the work of project managers could vary among supervisors of business project managers. Furthermore, the time limit of interviews was another limitation of the study.

Delimitations

Delimitations refer to the choices, set boundaries, and design parameters, which are within the control of the researcher, such as the location of the site for the study (Marshall & Rossman, 2016). I conducted this study in a company that employs supervisors and project managers. The study included an organization located in the Rocky Mountain region of the United States; other geographical locations will not be included. I excluded project managers undergoing project performance evaluation with

less than 5 years of actual project management practice at the time of the study. I invited only supervisors of project managers with successful experience in using strategies to evaluate the performance of their project managers.

Significance of the Study

The results of this study may have implications for positive business and social change by improving the sense of accountability and motivation for business leaders. When project managers have clear expectations of their accountability, project managers promote the values of continuous improvement in the organization. Supervisors of business project managers may use the results of the study as guidelines to produce value-added and competitive advantage for the company, as other researchers (Das, Mahapatra, & Pradhan, 2013) found similar results.

Contribution to Business Practice

This study may be relevant to current project managers' practices, as project managers continue to play a vital role in various industries, both in the private and public sectors. Rajablu, Marthandan, and Yusoff (2014) argued that project management is an organizational strategic component that leads to innovation, value creation, and the realization of corporate strategic mission and vision. The results of the research study may produce metric frameworks for supervisors of project managers to evaluate and rate the efficiency and effectiveness of project managers during and after the completion or closure of a given project. The resulting models may provide a community of project managers with greater motivation for, and insight into, their projects and stakeholder

management activities. Supervisors of project managers must rate their project managers' performance accurately and fairly (Hanna, Lotfallah, Aoun, & Asmar, 2014).

Implications for Social Change

The results of this study may contribute to positive social change by identifying standard expectations of project manager supervisors' behavior, thereby improving the motivation and career satisfaction of project managers. Project managers could become more satisfied with their jobs, which may affect project managers' quality of life, financial stability of their families, and social progress of their communities. Improving project performance and reducing project failures could save business organizations many dollars and increase revenue that could translate into improvements to local communities. Business projects cover many areas that involve positive social change, including water, transportation, electricity, sewage, energy, nutrition, health, education, and social and urban development.

A Review of the Professional and Academic Literature

The literature review section has several subsections, starting with an introduction that includes information about the literature search strategy, frequencies, and percentages of peer-reviewed articles as well as publication dates. In the next section, I focus on the application of the literature to the overarching research question and included a brief description of the purpose of the study. Throughout the literature review, I compared and contrasted different points of view and relationships between previous research and findings with the study. After the preliminary subsections, I begin the literature review by presenting a brief history of the conceptual framework I selected for

the study, which is the BSC theory, followed by a critical analysis and synthesis of this theory, using supporting and contrasting theories from relevant literature on the topic of project managers' performance. I then discuss the four BSC performance perspectives, including a brief overview of the development of project management performance construct over time. I discuss common concerns relating to the construct as well as the various definitions, antecedents, and consequences of project management performance. I then presented a discussion about the BSC theory for project leadership measurement. Finally, I explain the BSC theory as a tool for innovation and strategic initiatives.

I reviewed the literature on adequate performance metrics to evaluate the work of project managers published in various journals and seminal scholarly books. Google Scholar, linked to the Walden University Library's website, served as the primary source for accessing journal articles. Databases accessed through the Walden University Library to obtain literature for this study included Business Source Complete, ABI/INFORM Complete, Emerald Management, Sage Premier, Academic Search Complete, and ProQuest Central. I also accessed various open journals to obtain literature related to project management, leadership, and accountabilities. AOSIS OpenJournals provides open access to peer-reviewed scholarly journals from various academic disciplines. Similarly, ScienceDirect has both tolled and open access to a full-text scientific database containing journal articles and book chapters. In some instances, I accessed government websites to obtain information about public sector projects.

The strategy for searching through existing literature entailed the use of keywords and phrases in the various databases listed above. To narrow down the search results, I

applied filters to database searches, including specific keywords, a specified period, and specific databases. When using Google Scholar, I gave preference to articles published in or after 2016, ensuring the literature is topical and relevant. Secondly, I gave preference to articles that were available in the Walden University Library. The keywords and phrases used in my search were *project management*, *project performance*, *project governance*, *project stakeholders*, *project accountabilities*, *project standards*, *manager competencies*, *project leadership*, and *balanced scorecard*. Crossref and Ulrich's Periodicals Directory are tools to verify that literature is peer-reviewed. There are 244 references in this study; 198 of the references are scholarly peer-reviewed articles representing 81% of the total. In addition, there are 17 books representing 7% and one government website representing 0.04% of the total. Of the total number of references in this study, 78 (33%) were published within the 2016-2020 period. The literature review included 57 references. The publication date for 35 (61%) of these references is within the 2016-2020 period. In addition, 55 (96%) of the sources cited in the literature review are peer-reviewed journal articles and exclude websites and nonscholarly articles.

BSC Theory

BSC theory is a performance measurement framework that individuals use to add strategic nonfinancial performance measures to traditional financial metrics to give managers and executives a more balanced view of organizational performance. The BSC theory is a strategic planning and management system that individuals use extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and

external communications, and monitor organization performance against strategic goals (Self, Self, Matuszek, & Schraeder, 2015). Kaplan, from the Harvard Business School, and Norton developed the BSC theory as a performance measurement framework that added strategic nonfinancial performance measures to traditional financial metrics to give managers and executives a more balanced view of organizational performance (Kaplan & Norton, 1992, 1996).

The BSC has its roots in the early 1950s. While the phrase *balanced scorecard* was coined in the early 1990s, the roots of this type of approach were deep and included the pioneering work of General Electric on performance measurement reporting in the 1950s and the work of French process engineers responsible for the creation of the tableau de bord (Badewi, 2016). The tableau de bord literally meant a "dashboard" of performance measures in the early part of the 20th century (Badewi, 2016). The Gartner Group has suggested that over 50% of large U.S. firms adopted the BSC. More than half of major companies in the United States, Europe, Asia, Middle East, and Africa are using BSC approaches (Self et al., 2015). A recent global study by Bain & Co listed the BSC as an essential management tool to evaluate the performance of business project managers (Badewi, 2016). Harvard Business Review editors selected the BSC as one of the most influential business ideas in the 1950-2015 period (Badewi, 2016).

Leaders use the BSC framework to conduct performance measurements and to identify what should be done and measured. The BSC evolved from its early use as a simple performance measurement framework to a full strategic planning and management system (Kaplan & Norton, 1992, 1996). The new BSC practitioners transformed an

organization's strategic plan from an attractive but passive document into an active and influential document used in a daily basis (Yau & Sun, 2015). Leaders use the BSC framework to conduct performance measurements and to identify what should be done and measured. Executives use the BSC to implement their strategies effectively (Shou & Wang, 2017).

The BSC is a management and measuring system organizational leaders use to clarify their vision and strategy and translate them into action. Kaplan and Norton (1992, 1996) first detailed this new approach to strategic management in a series of articles and books. Recognizing some of the weaknesses and vagueness of previous management approaches, leaders use the BSC approach to obtain a clear prescription of the areas that need measuring to balance the financial perspective (Kaplan & Norton, 1992, 1996). The BSC is a management and measuring system organizational leaders use to clarify their vision and strategy and translate them into action (Kaplan & Norton, 1992, 1996). Organizational leaders using the BSC obtain feedback regarding both the internal business processes and external outcomes to continuously improve strategic performance and results. When fully deployed, the BSC effectively allows leaders to transform strategic planning from an academic exercise into the most important actions of an enterprise (Kaplan & Norton, 1992, 1996).

Leaders describe the BSC's innovation with the inclusion of traditional financial measures considered inadequate. Kaplan and Norton (1996) described the innovation of the BSC with the inclusion of traditional financial measures. Kaplan and Norton described these financial measures as a revelation of historical business performance that

they considered inadequate. Organizational leaders could use the BSC theory to guide them in the creation of future value through investments in customers, suppliers, employees, processes, technology, and innovation (Kaplan & Norton, 1992, 1996).

The value perspective of the BSC theory and the job satisfaction of project managers affect the continued existence of the project management office (PMO). Kutsch et al. (2015) analyzed the relationship among the purpose of the PMO, services provided, and perceptions of the PMO's contributions. Kutsch et al.'s findings included the development of strategy maps structured to match the four perspectives included in an adapted BSC model, which are process, users, learning, and value. Kutsch et al. conducted a longitudinal study over 15 months, which involved in-depth interviews from multiple stakeholders providing services and receiving support from the PMO in the United States. In addition, Kutsch et al. analyzed service documents and performance reports. Although the BSC approach to analyzing the data is not without limitations, Kutsch et al. offered a structured approach to assessing the contributions of a PMO from these four perspectives and how these can influence a PMO's development and continued existence. Although Kutsch et al. admitted that their study had limitations, they proved that the value perspective of the BSC theory and the job satisfaction of project managers affected the PMO's continued existence.

The BSC theory is effective in public administration. Skotnický's (2015) study proved that the application of the BSC theory in public administration is effective. The implementation of the BSC theory was characterized by the sufficient degree of independence and autonomy from the public authorities trying to ensure compliance with

laws and the transparency of their activities (Skotnický, 2015). The strategic objectives of public administration emerged from documents, such as government programs, political parties, and development programs of municipalities and regions. Managers of these public offices explained their objectives to the citizens and presented ways to achieve them as well (Skotnický, 2015).

Public agency leaders used the BSC theory to develop an overall strategy to evaluate and rate the role of senior officials. Public administration went through a considerable development during the 1994-2014 period. Skotnický (2015) explained that the senior officials in charge of implementing the changes focused on professionalizing the agencies and adopting modern management methods in public administration. The public administrators embraced a combination of professional perspectives when running the office, dealing with citizens, and using economic perspectives to reduce costs and increase performance efficiency. The implementation of the BSC theory, as one of modern management methods, improved the efficiency of their operations in their respective government entities (Skotnický, 2015). These government entities included county and city agencies where the managers facilitated transparency in the use of their funds and eliminated corruption in the work environment. The managers used the BSC theory to set the standards of strategic thinking to increase organizational effectiveness (Skotnický, 2015).

Madsen and Slåtten (2015) conducted a research study regarding the BSC theory and declared that the BSC theory is one of the most popular and contagious management ideas of the 20th century. Madsen and Slåtten analyzed the effectiveness of the BSC

theory in the business environment and found that the dissemination and introduction of the BSC theory have been viewed through different theoretical lenses, most notably through the management idea with the fashion perspective. Having introduced the virus perspective as an alternative theory for the proliferation of the BSC theory, Madsen and Slåtten found that the fashion and virus lens perspectives provided complimentary insights into the diffusion and institutionalization of the BSC theory in various organizations. Madsen and Slåtten presented perspectives well suited for explaining the infectiousness of the BSC theory and the ways in which organizations are exposed to the BSC theory idea. According to Madsen and Slåtten, organizational leaders implemented the BSC theory as a practice in the organization, resulting in different trajectories and contexts of the theory. A combination of the fashion and virus perspective provided a fuller picture of the diffusion and institutionalization of the BSC theory (Madsen & Slåtten, 2015).

Using the BSC theory as a performance tool measurement results in positive outcomes for business organizations. According to Madsen and Slåtten (2015), the core of the BSC theory is a set of balanced key performance indicators (KPIs). Before applying the BSC theory, it is necessary to clarify the vision and strategic priorities of an organization. The implementers of the BSC theory ensured that the vision and strategy of the individual city, county, or any other public administration office were achieved using the four perspectives of the BSC theory. Shannak (2015) conducted a research study to appraise the organizational performance of an existing business enterprise called Alpha Company. Alpha is an exclusive shopping entity covering eight countries, providing

exclusive access to time limited sales of different brands at discounts reaching 50-85% off retail price to its three million members and one million Facebook followers. The company executives created their company's distinction against their competitors by offering a rich collection of new brands and latest fashions at privileged prices and acceptable purchase lead time. The implementers of ERP and BSC at Alpha experienced positive effects after using the BSC theory as a performance tool measurement. Shannak concluded that after implementing BSC with the ERP system, the company became more efficient and effective in the value chain activities. In addition, its performance was enhanced and most of the problems were resolved successfully, which led to better customer satisfaction and reputation in the market (Shannak, 2015).

Social, political, and theoretical perspectives motivate the integration of social, environmental, and ethical issues into the BSC theory. Hansen and Schaltegger (2016) conducted a research study regarding the sustainability balanced scorecard (SBSC). Hansen and Schaltegger proved that integration of social, environmental, and ethical issues into the BSC theory could be motivated by helpful, social, political, and theoretical perspectives. The different recommendations of various scholars in the literature review that Hansen and Schaltegger conducted integrated these issues into the BSC theory and led to a broad spectrum of different SBSC architectures. Hansen and Schaltegger synthesized the growing and scattered research in the BSC theory and developed two-dimensional typologies.

The first dimension is the value system of the organization that specifies the design of the BSC hierarchy and the nature of causal or logical links between financial

outcomes and various other performance perspectives and strategic objectives. Hansen and Schaltegger (2016) explained that profit maximization of investor-driven public limited companies, family businesses, and cooperatives operate in both profit- and care-driven value systems. The second dimension pertains to the corporate sustainability strategy that determines the extent to which leaders integrate sustainability-related strategic objectives into the performance perspectives. Scholars developed these two dimensions extensively, resulting in organizational leaders gaining a better understanding of these two dimensions and applying them in their businesses effectively. Hansen and Schaltegger revealed that an SBSC implementation is not a one-time practice of managers but a continuous and repetitive organizational learning experience. Leaders could use the SBSC as a comprehensive management system, applying it from the corporate level, over business units and functions, to other employees via incentive and compensation schemes.

The BSC implementation outcomes, despite the challenges, enhance the efficiency and effectiveness of an organization's performance. Martello, Watson, and Fischer (2016) used the BSC theory as the conceptual framework in their studies related to for-profit organizations. Martello et al. described the manner in which managers implemented the BSC approach in a rehabilitation center when managers placed equal emphasis for both the consumer and the financial perspective. This equal focus has its foundation in the necessity of such institutions to carry out their primary mission for their consumers with developmental disabilities while remaining financially stable. The emphasis on both of these perspectives became a necessity in order for the center to serve

its customers efficiently and effectively. Although the use of the BSC in the long-range planning process for the center is relatively new, the managers accepted the challenge to continue to develop outcome measures for the individual departments within the center and to tie these outcome measures to the strategic objectives of the center. Martello et al. concluded that the BSC implementation outcomes, despite the challenges, enhanced the efficiency and effectiveness of the rehabilitation center's performance.

Leaders use the BSC to support managers' control of knowledge workers in the research and development (R&D) sector of an organization. Staniszkis (2015) conducted a research study to measure the *knowledge of work*. Staniszkis defined a *knowledge worker* as a worker creating value transformations based on ideas or symbols, which require a high degree of expertise, education, and experience. Staniszkis explored the manner in which leaders use the BSC to support managers' control of knowledge workers in the R&D sector of an organization. Staniszkis explained that four measures exist on the BSC related to the work of the R&D personnel. R&D personnel used the first two measures to monitor the R&D department's progress by measuring R&D expenses and R&D milestones completed. The two measures balanced each other because while one measure represented the actual progress based on the original plan, the second measure indicated actual progress based on the financial target. Staniszkis found crucial to consider these measures individually and jointly because a discrepancy in spending either over or under the established target may not in itself necessitate the attention of the management team. The other two measures related to the R&D personnel's responsiveness to customer demands. R&D personnel use the first measure to calculate

the number of open customer issues and use the second to add the number of days that customer issues had been opened. The managers in the R&D department were in charge of supporting the designed resolutions for the customers, focusing on supporting customers instead of having employees concentrating on the new R&D activity (Staniszkis, 2015).

Leaders using an effective BSC articulate the strategic direction of business organizations. In 2005-2013, the number of published papers that focused on hotel performance grew 3.7% (Sainaghi, Phillips & Corti, 2013). The expectation was that the trend would continue to increase with the BSC perspectives to measure operating margins, cash flows, financial ratios, and stock returns as metrics for the shareholders and financial analysts. Sainaghi, Phillips and Corti (2013) found that salient features of the BSC were beneficial to hotel managers having the causal linkages of the multidimensional coverage linked with the drivers of hotel strategy with supporting BSC perspectives. The BSC implementers observed that if the final measure is financial, the managerial and research perspective was more focused on customer indicators (i.e., occupancy, room prices, and customer satisfaction), internal business measures (i.e., efficiency, productivity, new product and service development), or innovation and learning indices (i.e., human and organizational capital, employee performance and satisfaction). Sainaghi, Phillips and Corti concluded that an effective BSC articulated the strategic direction of the hotel company, motivation for that strategic direction, and effectiveness of addressing key stakeholders' needs. Ultimately, hotel leaders used the BSC theory to improve hotel performance.

Implementers of the original BSC explicitly considered environmental, social, or ethical issues and referred to a modified BSC as sustainability balanced scorecards (SBSCs). Hansen and Schaltegger (2014) related the BSC theory to the increasing strategic importance of corporate sustainability performance measurement and management systems. By definition, the implementers of the original BSC explicitly considered environmental, social, or ethical issues and referred to a modified BSC, termed SBSCs. Hansen and Schaltegger argued that individuals should design the BSC to relate performance dimensions, strategic objectives, and the logical links among these elements. Hansen and Schaltegger synthesized their research findings and publications on the SBSC based on a systematic literature review containing 69 relevant articles spanning a period of two decades. Hansen and Schaltegger contributed to the development of the emerging SBSC literature and practice by determining that individuals could enhance the BSC on corporate sustainability performance measurement and management to a SBSC status. Overall, an SBSC implementation is not a one-time exercise but a continuous, iterative, and organizational learning experience of growing organizational leaders' understanding of corporate sustainability, the adaptation of the strategic management approach, and the reformulation and reinvention of the SBSC. Hansen and Schaltegger concluded that the three theoretical perspectives, including instrumental, social-political, and normative, were a promising framework for integrating strategy and sustainability in businesses.

Leaders use the BSC to balance financial and nonfinancial performance measures to concentrate on measurement and management of organizational resources, which are

critical to the sustainability of the organization. Harden and Upton (2016) conducted a research study in the financial service sector, as managers face competitive pressures to maximize firm and employee performance. Harden and Upton contributed to the BSC's strength to improve the competitive advantage of financial service firms. Many organizations using solely the traditional financial measures inadvertently provide incentives for employees to focus on short-term sales results rather than the long-term performance of the organization. Harden and Upton found that managers of financial firms should consider the benefits of the BSC by using nontraditional measures, as part of the performance evaluation system in addition to more traditional measures. Leaders use the BSC to balance financial and nonfinancial performance measures, as a means to enhance focus on measurement and management of organizational resources, which are critical to the sustainability of the organization (Harden & Upton, 2016). With increasingly competitive global markets, the BSC evolved into an effective strategic planning tool leader use to facilitate successful strategy implementation. Top managers use fully developed BSC systems' implementation to assess and improve organizational performance (Harden & Upton, 2016).

Leaders use the BSC framework to obtain software development efficiency. According to Álvarez, Rodríguez, Ortega, and Villanueva (2015), the BSC framework can be very useful to obtain software development efficiency. Álvarez et al. conducted a research study in the software factories of their financial institutions to achieve a sustainable and feasible model. Employees of these software factories achieved sustainability by improving their strategic management. Based on the concepts and

practices of the BSC, Álvarez et al. proposed a specific model to establish this kind of software factory as a way of improving organizational sustainability and applying it to a large firm specializing in the financial sector software. Álvarez et al. included a preliminary validation plan for banks that have always been at the forefront of innovation in management policies to improve their performance.

The field of banking is suitable for leaders to more effectively measure productivity and efficiency in virtually all aspects of their businesses. However, one area still fails the productivity of its software development projects (Álvarez et al., 2015). During several decades, leaders of banking institutions chose to outsource their software projects using software firms created by them for this purpose; however, the deadline for the delivery of the projects was more important than the efficiency with which they were developed (Álvarez et al., 2015). The last economic crisis forced financial institutions to review and improve the software development efficiency related to their software factories to achieve a sustainable and feasible model (Álvarez et al., 2015).

Adopting the BSC framework that connects software development with the business strategy confirms the enhancement of productivity to reach high-level goals. Kaplan and Norton (1996) found that traditional financial measures offer a narrow and incomplete picture of the business and suggested that leaders must supplement financial measures with other nonfinancial measures that reflect customer satisfaction, internal business processes, and the ability to learn and grow (Tan, Zhang, & Khodaverdi, 2017). Kaplan and Norton presented new views and ways to improve the initial BSC approach and linked them with measures and the business strategy (Kaplan & Norton, 1992, 1996).

The idea of linkages between objectives and measurements led to the creation of the strategy map (Kaplan & Norton, 1992, 1996). Leaders using this strategic map obtain a robust structure to express their strategic objectives and give managers the framework for a generic interactive system (Tan et al., 2017). Managers can design a customized interactive system based on their strategy and use the strategy map and the scorecard as the cornerstone of their management system for executing the strategy (Kaplan & Norton, 1992, 1996). Furthermore, the results of adopting the BSC framework that links the software development with the business strategy confirm the effective enhancement of productivity to reach the high-level goals established (Kaplan & Norton, 1992,1996).

Since the introduction of the BSC, many authors made some modifications to adapt the initial BSC to other scorecards that were specific to different areas or industrial environments. Two of the best-known examples are the IT BSC in the information technologies sector (ul Hassan, Ahmad, & Zuhaira, 2018) and the SBSC related to sustainable management (Shibani & Gherbal, 2018). To address the increasing need for leaders to operationalize strategy through projects, Sherafat, and Yavari, (2013) hypothesized that a project-level BSC might enable leaders to use appropriate performance measurement and leadership techniques, which already exist in other parts of most corporations to help project teams improve their understanding of their organization's business strategy.

Leaders using a project BSC address a project vision gap by making strategy easier to understand in a practical rather than theoretical form. Norrie and Walker (2004) developed, tested, and applied a strategic measurement system, based on the BSC

methodology, specifically for projects. Norrie and Walker anticipated that this approach would itself be immediately valuable to project managers and senior executives of large corporations facing increasingly complex issues. Some of the complex issues related to ensuring a timely understanding of business strategy among disparate and dispersed global project teams that may have varying degrees of ability and interest in understanding the company's overall strategy (Norrie & Walker, 2004). Leaders using a project BSC improve their organization's competitive position by ensuring that project managers pursue the on-strategy and on-quality aspects of project management with the same level of effort and vigor project managers pursue the on-budget and on-time concerns (Norrie & Walker, 2004). By making this exercise easier to accomplish and more visible at the project level, leaders are able to achieve their overall objectives (Norrie & Walker, 2004). Norrie and Walker found that projects completed successfully required a task-management focus and an appropriate emphasis on process as a method of tracking and reporting tasks, usually in the form of a project plan based on a work breakdown structure. A clear understanding of the project management process, its phases, and the appropriate methods to manage deliverables is clearly the emphasis of the early evolution of project management standards (Gallagher, Mazur, & Ashkanasy, 2015). However, project managers must not over-emphasize the management aspects only, without paying attention to the essentials of leadership in a project management context.

Four Performance Perspectives of the BSC Theory

The focus of the BSC theory is on the two main challenges of modern business

organizations, which are effectiveness of performance measurement and assessment of the success in the implementation of strategic initiatives. The BSC is a system for strategic management and measurement of organizational performance through a combination of financial and nonfinancial indicators (Grigoroudis, Orfanoudaki, & Zopounidis, 2012). The BSC is a tool for solving complex problems in the long-term perspective, which allows leading the strategy to its implementation (Grigoroudis et al., 2012). When using the BSC method in the public sector, organizational leaders measure the performance of the organization using indicators separated into four perspectives, which are financial, customer, internal process, and learning and growth (Kaplan & Norton, 1992, 1996).

To evaluate the systems, it is necessary to identify the KPIs. Organizational leaders widely embrace KPIs as a performance assessment tool. In another study, Eskafi, Roghanian, and Jafari-Eskandari (2015) designed a new combined method of the BSC. These methods are path analysis, evolutionary game theory, and cooperative game theory for strategic planning. Eskafi et al. implemented these methods in a food-producing organization and found that the KPIs are the cornerstone of the performance system, which convert the strategic targets of an organization into long-term objectives. The establishment of clear and possible KPIs contributes to better performance management. The KPIs are the benchmarked metrics in evaluating performance. In establishing such metrics, leaders must realize the desired outcome for the function of each section (Fauzi & Anshari, 2016).

Several examples of KPIs associated with each BSC perspective exist. Chaharsooghi, Beigzadeh, and Sajedinejad, (2016) identified the various examples of KPIs associated with each BSC perspective. The financial perspective has its foundation in leaders monitoring the overall efficiency of financial management that within its application takes into account all possible risks and benefits. Strategic directions in this perspective include reducing costs, using resources efficiently, expanding service offerings, and using assets more efficiently (Chaharsooghi et al., 2016). The financial aspect KPIs are the (a) service cost, (b) financial earning, (c) appropriate budget control, (d) sales growth rate, (e) market share, (f) return on investment (ROI), (g) liquidity management, (h) added value to customers, (i) net profit rate, (j) turnover volume, (k) cost control, (l) productivity, (m) investment strategies, and (n) advertising cost.

Customer perspective of the BSC has its foundation in segments of business customers that are important for the organization. The for-profit organizational leaders will always be interested in individuals and groups that can contribute to their profitability (Chaharsooghi et al., 2016). Public administration organizations are different because their activities must cover the entire society, as opposed to only certain individuals or groups (Chaharsooghi et al., 2016). Customer aspect KPIs are the (a) willingness to purchase, (b) customer satisfaction, (c) product information, (d) increase in trust, (e) convenience in product, (f) payment options, (g) rapid delivery, (h) appearance of the site, (i) technical characteristics, (j) web interface personalization, (k) brand products, (l) after-sales service, (m) accuracy of content, (n) profit per customer, (o) customer retention rate, (p) customer growth rate, (q) profit per online customer, (r)

number of new strategies, (s) customer retention rate, (t) new service items, (u) customer relationships, (v) product quality, (w) image and reputation, (x) flexibility of service system, (y) range of products, and (z) range of features (Chaharsooghi et al., 2016).

Organizational leaders deal with the perspective of internal processes only after they establish goals and the customer and financial perspective measurements. The perspective of internal processes may result in a need to implement a completely new internal processes or to modify and improve the existing internal processes (Chaharsooghi et al., 2016). For instance, organizational leaders recognizing the need to improve communication with the public and to implement such processes that enable at least basic anticipation of customers' future needs (Chaharsooghi et al., 2016). Internal Business Processes KPIs are (a) efficiency in managing orders, (b) function of the information, (c) ability to write marketing advertisements, (d) ability to conduct internet surveys, (e) ability to handle complaints, (f) transaction safety and security, (g) innovative service process, (h) information facility support, (i) process of status inquiry, (j) document management, (k) risk management, (l) management performance, (m) customized courses, (n) standard operating procedures, (o) teaching quality, (p) evaluation, (q) increasing administration, and (r) operational business process.

The perspective of learning and growth sets such goals that create the conditions that will enable the achievement of the objectives set out in other perspectives. This perspective is particularly aimed at skills of employees, information system capabilities, motivation and delegation of power or commitment (Chaharsooghi et al., 2016). Attention to be devoted to own employees is determined not only by the need to dispose

of qualified and experienced staff, but also the fact that ordinary employees are those who meet the customers' needs. These employees know best the customer requirements and understands the operational processes of the organization (Chaharsooghi et al., 2016). Therefore, they have a good overview of improvement possibilities. Besides, they also represent their employer in the contact with customers. Learning and growth KPIs are the (a) employees' willingness to learn, (b) employee training, (c) employees' ability to collaborate (d) efficiency of teamwork, (e) knowledge sharing culture, (f) employee satisfaction, (g) application of market demands, (h) site development, (i) staff selection, (j) responses to customer feedback, (k) encouraging methods, (l) employees' productivity, (m) employees' retention, (n) employee stability, and (o) increasing quality of labor (Chaharsooghi et al., 2016).

Causal correlations are present among the KPIs in the performance of an e-commerce web entity. Chaharsooghi et al. (2016) confirmed the existence of causal correlations among the KPIs in the performance of an e-commerce web entity. Chaharsooghi et al. found that in terms of importance, the financial perspective ranks the highest, followed by the learning and growth perspective and the internal process perspective and, lastly, the customer perspective. The learning and growth perspective is the major construct affecting other constructs. The learning and growth perspective has the greatest effect on the customer perspective, followed by the internal process and the financial perspective. The financial perspective was an important item affected by others. The financial perspective is affected mostly by the internal process, followed by customer and learning and growth perspective. Chaharsooghi et al. found that for managers of a

commercial website or virtual store to achieve success, managers should concentrate on their internal standard operating procedures and ensure the satisfaction of customers based on organizational operational processes, including the management of orders, product selection and representation, organizational innovation and after-sales services. Chaharsooghi et al. revealed that the indicators of the customer construct signaled that websites and virtual store administrators should consider customers who tend to buy and guarantee their satisfaction level in order to enhance customer confidence. The online platform for e-commerce should be user friendly, fast in delivery operations after the customer places an order, and include proper after-sales service. After obtaining the KPIs, the website administrators should collect, extract, share, publish, and adopt innovative methods for their application as core values of the organization and convert the mission of the web-based shop into management activities and daily tasks of the different departments. Moreover, organizational leaders could apply the KPIs as a communication channel for employees to understand the organization's overall strategy and to enhance their cooperation. Improving performance through KPIs for any website and virtual shop can be different and unique; therefore, the priority of the indicators should be determined based on operational programs of the organization or websites, customer needs, and external changes and threats. An Internet service provider needs to strengthen management and operational models of its web shop and become familiar with the Internet marketing tactics to earn more income and enhance the website competitiveness (Chaharsooghi et al., 2016).

Other Contrasting Theories

Despite much appreciation from the implementers of the BSC, several individuals criticized the BSC for its theoretical approach of detachment from financial metrics and its breaches of the controllability principle. Several researchers expressed their contrasting theories that resulted in the opposition to the guiding principles of BSC (Lueg & Vu, 2015). Northcott and Taulapapa (2012) stated that the BSC theory implementation process is unaffordable, time-consuming, and subject to uncertainty. Lueg and Vu (2015) explained that the criticisms of other authors indicated that the application of the BSC was not as straightforward and easy as Kaplan and Norton (1992, 1996) promoted.

The BSC differs from other management practices in several aspects. Lueg and Vu (2015) postulated these differences, including that the BSC (a) belongs to the strategic planning and management practices, which distinguishes it from many operative management practices; (b) is a comprehensive practice that should be implemented across an entire organization and, therefore, does not have the control systems to compliment with BSC; (c) uses both financial and non-financial information and, consequently, has a much broader focus than merely costing practices; and (d) includes both trailing and heading indicators that allow cause-and-effect analysis of the performance.

A theory that contrasts with the BSC theory is the performance dashboard (PD) theory. Savkin (2015) claimed that three differences exist between the BSC and the PD theories. First, while employees responsible for implementing the BSC use the business objectives from the strategy map (target vs. actual) as the basis of rating their

performance, practitioners of the PD use system-generated event calculations in the form of a diagrammatic presentation, such as a chart. Second, if the performance of the employees drops below the normal rating, the managers implementing the PD theory give corrective action as they receive dashboard notification. There is no automated notification to managers using the BSC theory and the managers use the updated strategy maps and KPI charts with comparative analysis of performance when failing to attain the target values and thresholds. Third, while managers fix the performance problem in the organization by applying the cause-and-effect technique with the PD theory, managers track the progress to remedy the performance crisis by formulating and updating the development plan in the BSC theory (Savkin, 2015).

Several researchers have presented common features of PD and BSC theories according to users' preferences of a dashboard versus a scorecard. For instance, Savkin (2015) stated that while some companies' leaders report that their BSC is available only for executives, others prefer to share it with all of their employees. PD is supposed to be available for supervisors' roles only; however, some company executives think that this valuable information can help line-level employees in their daily jobs as well. Generally speaking, both tools are historically business measurements and management tools of executives and top managers (Savkin, 2015). For cause and effect, when a supervisor receives a warning signal generated by PD, the supervisor is supposed to understand the cause and effect relationship among business objectives, actions, and measures. Savkin explained that PD and BSC have similar frameworks but differ in how the performance is measured. Savkin argued that it is possible to identify when managers need PD and BSC

in their organizations. Savkin provided an analogy that PD is similar to the dashboard of an automobile that shows the current speed and the fuel level. Following this analogy, the BSC might be a global positioning satellite (GPS) that provides a business with information about the current position and the time one needs to get to the destination. In most cases, when one drives from city A to city B, the individual uses a GPS only; however, if something happens to the car, the driver first looks at the car's control dashboard (Savkin, 2015).

Several researchers have reviewed other performance measurement theories that are in contrast with the BSC theory. For instance, Sorooshian, Fillianie, Asraf, Norsyahira, and Mahirah (2016) reviewed nine other performance measurement theories that contrast with the BSC theory. Sorooshian et al.'s findings presented arguments to compare the all performance measurement models, but most of them preferred the BSC to achieve the strategic goals of their organization. The featured performance measurement systems (PMS) models that were compared are: theory of constraint (TOC), performance measurement matrix, European Foundation for Quality Management (EFQM), Strategic Measurement and Reporting Technique, Performance Pyramid, Result and Determinants Framework, BSC, Performance Prism, Medori and Steeple Framework, Dynamic Multidimensional Performance Framework (DMPF), and Holistic Performance Management Framework. Striteska and Spickova (2012) conducted a literature review to analyze, compare, and summarize the strong and weak points of these ten most widely cited performance measurement systems. Striteska and Spickova explained that every

conceptual performance measurement system has a clear theoretical background, but seldom provides detailed guidance on how a company should design its unique model.

The prism theory is another framework in contrast with the BSC theory. Striteska and Spickova (2012) analyzed the performance prism theory introduced in 2001. The initial proponents of the prism theory constructed the theory based on the BSC but the prism theory focuses more on the internal and external stakeholders of projects. Striteska and Spickova examined the EFQM theory. The EFQM theory has no focus or priorities in the models, which was more suitable for benchmarking purposes (Striteska & Spickova, 2012). TOC is far from being the complete performance system; therefore, the TOC is the least popular performance measurement (Striteska & Spickova, 2012).

Service sector managers used the results and determinant framework (RDF) as a performance model; however, because of its limitations, the BSC is still considered the acceptable model for efficient performance measurement in organizations, although some researchers disagree with its comprehensiveness. Sorooshian et al. (2016) investigated another model having the strengths and weaknesses of the two original models of the BSC. This model is known as a dynamic multidimensional performance framework (DMPF), which has imperfections as well. Holistic performance measurement framework is the closest competitor of the BSC. It has advantages in line with the BSC but it is a new model and still has less proven efficacy than the BSC (Sorooshian et al., 2016).

Project Managers' Performance Measurement

Project manager success is a much more elusive topic because the evaluators perceive that the application of project management methodology varies over time and

combines with other applications. Millhollan and Kaarst-Brown (2016) considered project managers different from regular managers because project managers require different skills. Millhollan and Kaarst-Brown explained that project managers are often the scapegoats when projects fail, which may explain the need to emphasize methods as contributing factors with success criteria or metrics.

The BSC is a comprehensive approach to measure projects consisting of the current project results and the project progression. Lent (2013) articulated that the BSC is the comprehensive approach to measure projects comprising of the current project results and the project progression. The BSC is the only process which, in a balanced way, organizational leaders integrate all the project impact factors and allow the overall project evaluation. Lent discussed the Kaplan and Norton's BSC and German Project Excellence models to prove the effectiveness of the BSC in project leadership measurement. Shen, Chen, and Wang (2016) proved that the hierarchical balanced scorecard (HBSC) model with respect to multiple criteria decision-making is a systematic approach to ERP project performance measurement. An ERP evaluation framework that integrates the BSC provides an objective approach to measuring both the performance level of the ERP system projects and their contribution to the strategic objectives of businesses using high technology in Taiwan. Shen et al. demonstrated the effectiveness of the BSC integrated approach to measure the performance of ERP systems at the post-implementation stage. Ferreira, Silva, and Azevedo (2016) conducted an assessment research of the BSC with companies needing to excel in many business aspects to gain a competitive advantage. The regulators and customers imposed pressure on the managers regarding sustainability

concerns. Ferreira et al. recommended the BSC model for the assessment of the environmental performance of supply chain projects. Ferreira et al. stated that managers identified performance indicators within the International Standards Organization and a panel of experts validated these performance indicators.

Company executives are using a combination of the BSC and the EFQM model, as they introduced a variation of project leadership measurement, termed *project scorecard.* Company executives are using the project scorecard to correlate the strategic decision-making process to objectives and expectations at the operational level of a project (Scheiblich, Maftei, Just, & Studeny, 2017). The project scorecard entails the determination of measuring each component's impact on project success, defined by staff and project parameters, indicative of BSC maturity practice in the organization (Scheiblich et al., 2017). Several authors (Koufteros, Verghese, & Lucianetti, 2014; Llach, Bagur, Perramon, & Marimon, 2017) conjectured that different types of financial and non-financial KPIs determine the performance of project leaders in organizations. Siadat, Abdollahi, and Garshasbi (2017) found that there is value in the effective execution of knowledge management using the BSC theory. Siadat et al. revealed that the successful implementation of the BSC past IT projects led to a more enhanced communication between the IT managers and subordinates, enabling strategy efficient implementation, quick defect fixes, and competitive advantage (Kafchehi, Hasani, & Gholami, 2016).

Leaders improve motivation, commitment, and satisfaction when using the BSC. Lane, Alino, and Schneider (2017) conducted research to evaluate the effectiveness of the

BSC as a tool by examining the effects of setting project goals, perception of fairness, rewarding subordinates, and response to feedback on manager behavior. Managers improved motivation, commitment, and satisfaction when using the BSC. Companies can advance managerial core competencies and minimize environmental uncertainty through R&D alliances (Yeh, Lin, Chang, Su, & Huang, 2017). Corporate partnerships and cooperation set up with the BSC as a guiding theory to examine performance resulted in managers becoming satisfied with their achievements. Leaders of the Institute of Electrical and Electronics Engineers (2017) found that a competent project manager is undoubtedly the most important factor to a software project's success and, consequently, company leaders should maximize the project manager's knowledge and experience. However, company leaders must evaluate the work of project managers fairly (Institute of Electrical and Electronics Engineers, 2017).

Innovation and Strategic Initiatives

Several methods for linking knowledge management to strategic thinking exist. The BSC practitioners' perspectives offer valuable insights regarding the manner in which organizational leaders can use knowledge management to enhance strategic thinking. Organizational leaders could use performance management tools, such as the BSC, to translate the executive leaders' strategy into operational terms, making it easily understood throughout the organization (Kaplan & Norton, 1996). The BSC practitioners create an effective process that not only integrates the management of both strategy and tactics (Kaplan & Norton, 1996), but also provides comprehensive feedback on strategy implementation processes (Lawrie, Abdullah, Bragg & Varlet, 2016). According to

Kaplan and Norton, communication and education represent one way to align employees to the organization's strategy. Employees use knowledge management to communicate each business unit's BSC, thereby improving cross-function communication and coordination. The implementers of knowledge management store the information of the business units' BSC, enabling organizational leaders to view their strategic alignment and implementation in terms of past experiences, successes, and failures. Having this BSC capability allows managers to assist the organization in maintaining alignment of projects with the organization's vision and mission. Additionally, organizational leaders would present endeavors that entail ongoing strategic initiatives, status, and future initiatives, which would include environmental scanning to spot trends. In turn, the use of knowledge management could lead to adjustments to the internal attention dedicated to R&D. Outcomes from up-to-date strategic thinking would then lead to further organizational adjustments or innovations. If properly deployed, this process would contribute to improved organizational alignment (Self et al., 2015).

Companies with success in launching innovation as the basic prerequisite for their economic survival and sustainability are the long-term winners of business competitions. Zizlavsky (2016) revealed that the BSC as a conceptual framework needs an augmentation factor of innovation with a balance of short-term and long-term operation and strategic targets. There are five phases of innovation to be part of the scorecard with BSC, which are (a) innovation strategy definition, (b) strategic goal setting, (c) strategy mapping for cause and effect analysis, (d) metrics selection, and (e) target items valuation (Zizlavsky, 2016). Other scholars (Chopra, Gupta & Chhabra, 2017; Humphreys, Gary, &

Trotman, 2016) supported Zizlavsky's findings, as these scholars conclusively declared that many companies began to implement the BSC, but added that there is a need for implementers to include causal linkages and time delays in presenting the strategic objectives of the organization. Humphreys et al. emphasized that, for the BSC to become a tool for innovation, it is important to draw a strategy map showing the cause and effect of striving to perform the action plans without delay. In the Ukraine, Firsova (2017) found that managers had technical foundations of the BSC that produced the concept of the BSC as a powerful, command-and-control management system. Firsova further explained that in post-Soviet countries in general, such as Ukraine, the management philosophy and culture need a different approach to implement the BSC. Managers tend to micromanage, restrict, and sanction to innovate and motivate, resulting in a greater accountability, precision, responsibility, trust, and autonomy among employees. Several researchers (Molina, Florencio, González, & González, 2016) conducted a study with the participation of employees of a retail business firm, using 400 questionnaires in 2009 and 2010, and found that BSC implementation improved job dedication and commitment. The study outcomes proved BSC is an innovation towards human resources management, as it enhanced employee morale, motivation, and behavior.

Leaders use the innovative benefits of the BSC to overcome an outdated culture of undefined, unmonitored, and uncontrolled strategies. de Barros and de Araujo Wanderley (2016) conducted a study on an oil company in Brazil that consulted with an outside firm. The consulting firm recommended the BSC as a tool for strategic planning's definition, monitoring, and control. The innovative benefits of the BSC helped managers

overcome an outdated culture of undefined, unmonitored, and uncontrolled strategies. The leaders relied on the premise that they had outstanding business intelligence acquired over the years in the company and, therefore, they did not need to be evaluated. With the BSC, everything tends to be assessed, measured, documented, to trigger managers to realize their behavior needs to change in relation to the planning process and the oil company's strategy assessment (de Barros & de Araujo Wanderley, 2016). The results were also consistent with the findings of Quesado, Guzman, and Rodrigues' (2018) study, as they concluded that the BSC is more than a simple performance evaluation system. The BSC is a true strategic management tool for a business network able to clarify and transform the goal and organizational approach, making communication, alignment, and learning possible (Aureli, Cardoni, Del Baldo, & Lombardi, 2018; de Barros & de Araujo Wanderley, 2016; Quesado et al., 2018).

For the BSC to become a tool leaders' use for innovation, leaders have to consider the risk factors in achieving KPIs and pay attention to the stakeholders of the PMS project. Yahanpath and Islam (2016) argued that in order for the BSC to be a tool for innovation, the implementers have to consider the risk factors in achieving KPIs as well as paying attention to the stakeholders of the PMS project. BSC practitioners get a competitive advantage in managing the performance of various organizations with sustainable and innovative outcomes (Yahanpath & Islam, 2016). Company executives are aware of the economic development and rising competition in the business globally and it will be innovative to plan, execute, and measure company performance using indicators (Manica, Manica, de Souza, & da Silva, 2017). In this context, BSC is a great

tool in the midst of a demanding market environment with a project manager and team members' involvement, which brings to the company a framework for expansion plans and innovation (Manica et al., 2017).

The BSC is the tactical tool of choice for evaluating managers' performance in obtaining different corporate social responsibility (CSR) goals. Bento, Mertins, and White (2017) conducted two studies with a commercial bank to determine the manner in which managers could infuse their bias into the BSC regarding financial rewards to employees, as BSC relates to making performance evaluations for bonus decisions. In the most recent twenty-first century global survey, the BSC is the tactical tool of choice for evaluating managers' performance in attaining different CSR goals (Bento et al., 2017). Bento et al. concluded that CSR, perceptions of the role of ethics and social responsibility, and shareholder value maximization (SVM) ideology minimize the risk of bias in performance evaluations using BSC (Bento et al., 2017).

Researchers conceptualized data envelopment analysis (DEA) and the BSC as techniques used to support leaders deciding which project is efficient. Junior and Alberto (2018) conceptualized DEA and the BSC as techniques and tools to support companies' leaders when deciding which project is efficient. Asgari, Haeri, and Jafari (2017) conducted a BSC study with six Iranian banks and recommended the integration of BSC theory with a three-stage DEA model based on three input factors, which were (a) staff efficiency, (b) high speed services, and (c) customer attraction rate. Asgari et al. posited that after recognition of these appropriate inputs, it is the company managers' duty to collect, communicate, and obey innovative steps to process these measures. Additionally,

these measures can increase staff collaboration, although various industries can have propriety of measures that could be applied to each organization's operational activities, customers' needs, and environmental changes (Asgari et al., 2017). Lin (2015) found that knowledge sharing among employees is the most powerful indicator of internal process performance and that knowledge acquisition is crucial in increasing customer satisfaction. Lin (2015) and Yancy (2017) found that non-financial performance measures, such as learning and growth, internal process, and customer satisfaction, directly and indirectly influence financial performance by means of cause-and-effect relationships.

Transition

In Section 1, I presented the background of the study, problem statement, purpose statement, and the nature of the study. I identified the main research question of this study and included open-ended interview questions. I articulated the conceptual framework, operational definitions, and included assumptions, limitations, and delimitations. I provided the significance of the study and concluded with a review of the academic and professional literature.

In Section 2, I will present a detailed description of the role of the researcher, participants, and the research method and design. I will discuss the population and sampling, ethical research, data collection instruments and techniques. Finally, I will conclude with a discussion of data analysis and the reliability and validity of the study.

In Section 3, I will present the findings, discuss the application to professional practice and provide an overview of the implications for social change. I will also include recommendations for action and further study, reflections, and concluding statements.

Section 2: The Project

In this section, I present a detailed description of the role of the researcher and the research method and design. I also discuss the population and sampling, ethical research, data collection instrument, data organization, and data collection technique. Finally, I conclude with a discussion on data analysis and data reliability and validity.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies supervisors of business project managers use to effectively evaluate the work of project managers. The target population consisted of three project manager supervisors, located in the Rocky Mountain area of the United States, with successful experience in evaluating the work of project managers. The implications for positive social change include the potential to provide business leaders with successful strategies used to evaluate the work of project managers to improve project performance and decrease project failures. Business projects cover many areas that involve positive social change, including water, transportation, electricity, sewage, energy, nutrition, health, education, and social and urban development (Ika & Donnelly, 2017). Improving project performance and reducing project failures could translate into improvements to local communities in which project managers operate.

Role of the Researcher

As a social scientist, the researcher must have the skills and values to efficiently perform the role as the key research instrument of the study (Marshall & Rossman, 2016). The role of the researcher in the data collection process includes gaining access to study

participants, developing rapport, organizing the research process, executing the research, collecting the data, analyzing the results, and reporting findings (Yin, 2018). Researchers conducting case study research need to collect a variety of data using interviews, observations, and document analysis (Yin, 2018). Researchers collect qualitative data by conducting interviews with participants to understand the way participants perceive a given phenomenon (Watkins, 2017). Karakas and Sarigollu (2017) recommended that the researcher pays particular attention to the spoken words participants use when describing a phenomenon under study to provide a contextually appropriate account of the underlying meaning. As the primary research instrument, I controlled all phases of the study. I gained access to study participants, developed rapport with participants, organized the research process, executed the research, collected data from conducting semistructured interviews and reviewing organizational documents, analyzed the results, and reported study findings.

My professional career has a strong correlation with the topic. I have worked in various industries for the past 35 years in the Philippines, Saudi Arabia, and in the United States in the fields of engineering, information technology, and business management. My prior work engagements enhanced my expertise to elicit requirements in the early part of my assigned projects. Since 2001, my experience as a Senior Business Analyst, involves gathering and analyzing data and report findings to provide an objective recommendation to the project sponsor.

Researchers must clearly state and understand their research assumptions to prove the ethicality, competency, and veracity of the research (Rwegoshora, 2016; Yin, 2018).

Rubin and Rubin (2012) suggested that researchers must abide by the regulations, codes, guidelines, and all ethical considerations that professional committees and review boards require. I clearly stated my assumptions to ensure the ethicality of the research study and abided by the ethical guidelines established by review boards and professional committees. These research-governing authorities require researchers to conduct their study in an ethical manner (Marshall & Rossman, 2016), with strict stipulations provided by the *Belmont Report* protocol (U.S. Department of Health & Human Services, 1979).

Three basic ethical principles of research described in the *Belmont Report* are respect for persons, beneficence, and justice (U.S. Department of Health & Human Services, 1979). Researchers must practice the principle of respect for persons by acknowledging participants' self-determination and recognizing scenarios in which some participants may have diminished autonomy (U.S. Department of Health & Human Services, 1979). Under the beneficence principle, researchers must protect the participants and ensure that they are not harmed while maximizing benefits from the interaction (U.S. Department of Health & Human Services, 1979). Applying the justice principle requires researchers to guarantee participants' fair treatment in terms of anticipated benefits and inconveniences that the research may produce (U.S. Department of Health & Human Services, 1979). I conducted the research study following these three ethical principles. I also protected participants from harm during the research study and gave participants fair treatment regarding inconveniences and anticipated benefits of participation.

Informed consent requires researchers to disclose information, understand such information, and prove that the participants decided to participate in the research study voluntarily (U.S. Department of Health & Human Services, 1979). It was my responsibility to comply with (a) the ethical principles of the *Belmont Report* protocol, (b) any requirements of the Institutional Review Board (IRB), and (c) any additional ethical requirements of the participating business organizations. I obtained permission from the IRB before commencing the research study. I explained the principles of the informed consent to participants and obtained their signatures as evidence of their consent before conducting my research as a way of ensuring the ethicality of the research study. Additionally, I treated all participants fairly, emphasized that participation is voluntary, reminded participants of a provision to withdraw at any stage of the study if they desired, and maintained participants' information and responses as strictly confidential.

Avoiding bias in the research process is difficult (Moustakas, 1994) because researchers may be inclined to favor evidence supporting their underlying beliefs (Yin, 2018). Confirmation bias occurs when researchers favor such evidence over evidence contrary to their underlying beliefs (Yin, 2018). Marshall and Rossman (2016) warned other researchers to guard against introducing another form of bias in an attempt to eliminate a specific bias. To avoid bias, researchers can include member checking in their research design (Marshall & Rossman, 2016). In addition, Marshall and Rossman (2016) suggested that member checking is a useful way to share the researcher's interpretation of participants' responses with the participants to ensure validation. I provided participants

the opportunity to review and verify the accuracy of my interpretation of their responses to mitigate any biases that I may possess. Through the precise recording of the assumptions and limitations of this study, I planned to avoid biases.

An interview protocol includes information such as interview procedures, a script of the introduction and the conclusion, prompts for obtaining consent from participants, and interview questions and prompts (Yin, 2018). As recommended by Yin (2018), I used an interview protocol (see Appendix B) to assist and guide me through the interview process and to ensure that I consistently ask the same questions to all participants.

Participants

The identification and selection of study participants must be based on specific eligibility criteria (Yin, 2018). Palinkas et al. (2015) explained that study participants must be knowledgeable about, and well experienced in, the phenomenon under investigation. Bernard (2017) and Spradley (1979) recommended that study participants have the willingness and availability to participate in a study and must be able to communicate effectively to guarantee that these participants are able to provide comprehensive information to the researchers. To ensure sufficient data, Yin (2018) suggested having 3-5 participants for a single case study. Based on these criteria, I selected three supervisors of business project managers possessing at least 5 years of successful experience in evaluating the performance of their project managers.

Drew (2014) listed possible challenges regarding a researcher's access to participants considered organizational professional elites. Maramwidze-Merrison (2016) recommended the online social and professional group access strategy to resolve the

challenges associated with lack of access to participants. Gaining access to research study participants using the online social and professional group access strategy requires the following steps: (a) identify potential participants, (b) contact participants to inform them of the research objectives, and (c) get participants committed to participating in the research study (Maramwidze-Merrison, 2016). I used online social and professional groups to identify potential participants, contacted participants to provide them with the objectives of the research study, and secured commitment from participants.

Pelosi (2015) claimed that research participants are inherently cautious and should be expected to have reservations about engaging fully with the researcher due to mistrust, lack of rapport, and apprehension about privacy. The success of qualitative inquiry depends on the researcher's relationship-building activities with the participants, including trust and friendship that are prerequisites to collect valuable data during the interviews (Bromley, Mikesell, Jones, & Khodyakov, 2015). Researchers' collegial dealing with their study participants on a regular basis is one approach to win participants' trust and to build a connection and rapport (Wadel, 2015). I engaged with participants on a regular basis to gain their trust and acceptance, which helped me establish a working relationship with participants to collect rich data.

To ensure that participants' characteristics align with the overarching research question, Kumar (2014) recommended that participants' qualities should include being able to engage in the study and willing to provide supplementary information. Researchers select participants with knowledge of, and successful experience in, the phenomenon under investigation to obtain sufficient data from participants to help the

researchers answer the overarching research question for their study (Marshall & Rossman, 2016). I selected project manager supervisors possessing successful experience in evaluating the work performance of project managers to help me answer the overarching research question for the study.

Research Method and Design

Researchers use the nature of the overarching research question as the deciding factor in selecting the most appropriate research method and design (Mukhopadhyay & Gupta, 2014). Collis and Hussey (2014) termed this appropriateness of research method as methodological rigor. Three research methods are available to researchers: qualitative, quantitative, and mixed methods. Several research designs are available as well under each research method (Yin, 2018).

Research Method

I selected the qualitative research method for the study. A qualitative study is interpretive because there is a need to explore a phenomenon through subjectivity and socially constructed meanings (Saunders et al., 2015). Yin (2018) described qualitative research as a method to explore the *what, why,* and *how* of a phenomenon in its real-life setting. I used the qualitative research method because it is my intent to explore the *what, why,* and *how* of a phenomenon, which is evaluating the work of project managers effectively. Moreover, researchers conduct qualitative research studies to explore participants' rich and diverse experiences (Williamson, Leeming, Lyttle, & Johnson, 2015). Barrett et al. (2016) explored performance evaluation management in different workplace contexts, using the qualitative research method, allowing researchers to

explore project managers' performance evaluation in a real-world context rather than testing performance evaluation hypotheses. I used the qualitative research method to explore strategies supervisors of business project managers use to effectively evaluate the work of project managers. Nguyen, Mia, Winata, and Chong (2017) conducted quantitative research studies on business managers' performance evaluation, using frequency statistics, correlations, and cause-and-effect relationships because quantitative research is confirmatory in nature. I did not select the quantitative research method because I am not using statistics, correlations, and cause-and-effect relationships in the study. In a mixed-methods study, the researcher uses a combination of qualitative and quantitative methods (Yin, 2018). Researchers use the mixed-method research methodology to employ both inductive and deductive reasoning (Yin, 2018). Researchers using the mixed-methods research methodology focus on answering both exploratory (i.e., qualitative) and confirmatory (i.e., quantitative) overarching research questions (Bentahar & Cameron, 2015). The mixed methods research methodology was not suitable for the study because the quantitative design component would not support me in addressing the exploratory overarching research question.

Research Design

Several research designs are available to qualitative researchers, including case study, ethnography, and phenomenology (Williamson et al., 2015). When conducting a case study, researchers collect a variety of data from various sources and use triangulation to achieve convergence among the different sources (Henry & Foss, 2015). Data sources for case study research include interviews, observations, and document

analysis (Soltanifar & Ansari, 2016). Yin (2018) affirmed that a case study design is appropriate for answering *what*, *how*, and *why* questions about a phenomenon in its real-world context. I selected a case study research design for the study because I conducted an in-depth exploration of strategies supervisors of business project managers use to effectively evaluate the work of project managers. In ethnography, the researcher concentrates on shared behavioral models, beliefs, and language of cultural groups (Collis & Hussey, 2014; Yin, 2018). I did not select ethnography for the study because I do not intend to explore the shared cultural patterns of behavior, beliefs, and languages. In a phenomenological study, the researcher explores the comprehensive and fundamental meaning of the phenomenon under study by obtaining an understanding of the participants' lived experiences of the phenomenon (Refai, Klapper & Thompson, 2015). Moustakas (1994) emphasized that, through phenomenology, researchers focus on the narrative of experiences as opposed to the account or analysis of experiences. Phenomenology is an ideal research design for business studies where the researcher repeatedly works through the collected data to find the essence of the individuals' lived experiences and their meaning (Yin, 2018). Phenomenology was not appropriate for this study because I was not seeking to understand the lived experiences of study participants.

Researchers have not established clear data saturation guidelines for qualitative research studies (Tran, Porcher, Tran, & Ravaud, 2017). However, researchers reach data saturation by continuing to collect data until no new themes emerge from new data (Bernard, 2017). In the absence of a specific data saturation method for qualitative research, researchers frequently collect data past the saturation point to ensure

redundancy (Fusch & Ness, 2015). In addition, Fusch and Ness (2015) theorized that data saturation would trigger the stoppage of qualitative data gathering. I reached data saturation and continued to interview the same three participants until I reached the point of data replication or redundancy.

Population and Sampling

Researchers suggest that sampling method selection is an essential step in ensuring the trustworthiness of a research study (Maramwidze-Merrison, 2016; Pooe, Mafini, & Makhubele, 2015). I selected a sampling method to ensure the trustworthiness of the research study. Criterion sampling is valuable for filtering study participants ensuring that potential participants do meet the same established criteria and are able to provide rich data and substantive insights into a phenomenon (Cleary et al., 2014; Palinkas et al., 2015). Researchers use the criterion sampling to identify and select participants meeting the established criteria for a research study (Palinkas et al., 2015). Because researchers use criterion sampling to select study participants meeting established criteria to obtain rich data about a phenomenon, I used criterion sampling to select study participants based upon the criteria I established for the research study to obtain rich data about the phenomenon under investigation, which is the strategies used to effectively evaluate the work of project managers.

The determination of the appropriate participant sample size is challenging within a case study research (Gast & Ledford, 2014). Researchers establish sample size by considering the exploratory nature of the study, richness of the research study data (Kilgus, Riley-Tillman, & Kratochwill, 2016; Marshall, Cardon, Poddar, & Fontenot,

2013), and generalizability to a larger population (Gast & Ledford, 2014). Yin (2018) suggested that three to five participants are a sufficient number of participants for a case study and Palinkas et al. (2015) stated that study participants must possess knowledge of, and successful experience in, the phenomenon under investigation. I collected data from three project manager supervisors possessing successful experience in evaluating the work performance of their project managers.

Researchers reach data saturation when researchers are unable to secure any new information from the study participants (Bernard, 2017). Conducting 4-5 interviews (Williamson et al., 2015) and providing depth and breadth of information on a given topic (Tran et al., 2017) could allow researchers to reach data saturation. Researchers reach data saturation by continuing to collect data until no new themes emerge from new data (Yin, 2018). I conducted semistructured interviews, using open-ended questions, to collect rich data from study participants, contributing to data saturation. I reached data saturation with three participants. I continued to ask questions until no new themes emerged.

Buckwalter (2013) reminded researchers that the interview setting selected should be conducive to open dialogue. Providing convenience to participants helps minimize their anxiety (U.S. Department of Health & Human Services, 1979), and creates an atmosphere that fosters the development of rich dialogue for building open communication and rapport (Miller & Rollnick, 2012). However, researchers also suggest that interviews must not be public, loud, or cause the participant to feel uncomfortable (Buckwalter, 2013). I selected an interview setting conducive to rich and open dialogue. I

ensured that interview arrangements are convenient to study participants to help reduce their anxiety and develop an appropriate environment to build rapport and enhance communication with study participants. I reminded each study participant that the duration of the interview is 60 minutes.

Ethical Research

Yin (2018) stressed the specific ethical considerations for all research studies involving research study participants, following procedural steps to gain merit to the standards of ethical research based on integrity, justice, beneficence, and respect with an emphasis on a well administered informed consent, mitigating risks as vital component of any research study (Greenwood, 2016; Riordan et al., 2015). I followed the Belmont Report's ethical principles of respect for persons, beneficence, and justice, emphasizing the informed consent process. Members of the IRB at Walden University developed a standard template to ensure ethical compliance by doctoral students, requiring doctoral students to (a) ensure participants' privacy, (b) explain the presence or absence of compensation to participants, (c) answer questions participants may have about the study, (d) remind study participants that their participation is voluntary and (e) inform the participants they can withdraw at any time (Walden University, 2016).

Wallace and Sheldon (2015) and Yin (2018) argued that participants are always at risk and need constant protection throughout the research study. Based on participants' qualifications, I provided each participant with a copy of the informed consent form. I reviewed each item of the consent form in detail with each participant. Individualized consent form review is necessary because not every participant will read the entire

consent form that necessitates a privacy impact assessment in setting very clear expectations between the researcher and individual participants (Oetzel & Spiekermann, 2014). To mitigate the risks and set clear expectations of participants, I required research study participants to affix their signature in the informed consent form before participating in my doctoral study. I used the standard template of the informed consent form by identifying the nature of the study, communicating participants' expectations, diminishing possible risks, explaining the benefits of the research study, and providing my contact information in case participants have any questions.

Miltgen and Peyrat-Guillard (2014) recommended that researchers must respect participants' privacy and confidentiality in a research study. Arghode and Wang (2016) advocated that researchers inform participants that participation in a research study is voluntary and that they can withdraw from the study at any time without any negative consequences. I informed participants via email that their participation in the study is voluntary and that they can withdraw from the study at any time without any negative consequences.

Researchers must not offer extravagant compensation as an incentive to participants to minimize any moral hazards such as undue influence or coercion (Alammar & Pauleen, 2016; Cook & Hoas, 2015). I did not offer any amount of compensation to study participants for participating in the study; however, I promised to provide a copy of the summary of findings to each study participant. Kuyare, Marathe, Kuyare, and Thatte (2015) asserted that researchers must adhere to IRB ethical guidelines and start data collection upon IRB approval. I did not start the interview process until I

had received permission from Walden University's IRB. I adhered to Walden University's IRB guidelines and conducted every interview while maintaining participants' confidentiality, safety, and informed consent. The IRB approval number for this study is 03-07-19-0412424.

Researchers should conclude the research study successfully with ethical, trustworthy, and meaningful findings while ensuring protection of all the participants (Palinkas et al., 2015; Yin, 2018). Confidentiality, data retention period, and data protection are very important requirements for doctoral study research (Walden University, 2016). Researchers must follow strict data storage guidelines, such as 5-year retention, password protection, and concealment of participants' identities (Walden University, 2016). To ensure confidentiality, I did not use the actual names of study participants; instead, I used codes (S1, S2 and S3) for the participants and their employers. Additionally, I prevented actual discovery of study participants' identities and did not include any attributes that may lead to an inadvertent revelation of study participants' identities or organizations' real information. I collected and store all the research-related documents in file folders that were password-protected and kept flash drive backups. I will keep all printed documents and flash drives locked in a safe at a bank's safety deposit box together with my personal valuables for a period of 5 years. Finally, I will shred and will delete all research-related data permanently after 5 years, in compliance with Walden University's IRB guidelines.

Data Collection Instruments

The researcher is the primary data collection instrument for a qualitative research study (Sarma, 2015; Yin, 2018). By interacting with the study participants, producing research data, and creating additional knowledge, a qualitative researcher becomes the research instrument (Levitt, Motulsky, Wertz, Morrow, & Ponterotto, 2017). I was the primary data collection instrument and collected, organized, and analyzed research data. My goal was to interact with study participants to produce rich research data, and created new knowledge. I interviewed participants and collected data using semistructured interviews as an effective way of eliciting information (see Appendix A). I interviewed participants using predefined open-ended questions and probing further, as the participants respond, to produce rich data to obtain insights into the participants' experiences, perceptions, or opinions leading to a deeper understanding of the phenomenon under investigation. I obtained participants' consent to audio-record every interview session to ensure that I take notes accurately of their responses to the interview questions. I controlled the duration of each interview meeting to approximately 60 minutes.

Researchers use semistructured interviews to collect primary data and organizational documents, such as websites and annual reports, to collect secondary data to obtain additional perspectives (Ravasi & Canato, 2013). I reviewed annual job performance evaluation reports, company website, and other documents containing KPIs to collect secondary data. Many company documents exemplify quality and accuracy; however, researchers need to be attentive of limitations associated with company

documents (Sandelowski, 2014). In most cases, company documents are also readily accessible for study; however, analyzing company archived documents is not always trustworthy, as business leaders may be unwilling to share internal proprietary strategies (Sandelowski, 2014). Moreover, secondary data may not be in the standard structure and reviewing it may result in obtaining misleading data collection (Marshall & Rossman, 2016; Yin, 2018). I paid attention to the limitations regarding the trustworthiness and reliability of the contents of documents of the case organization.

Reliability and trust are two interrelated elements of a qualitative research study (Kerwin-Boudreau & Butler-Kisber, 2016; Silverman, 2016). Thomas (2017) and Smith and McGannon (2017) recommended ways to integrate credibility into research findings, including (a) member-checking, (b) peer examination, and (c) self-reflection. I used member checking in the study to ensure credibility. Verification of gathered information from interviews using the member checking method requires a researcher to interpret participants' responses, give this interpretation to study participants, and ask participants to validate their answers to interview questions (Hancock & Algozzine, 2016; Lockwood, Munn, & Porrit, 2015). Member checking serves as a quality control mechanism to ensure the accuracy, credibility, reliability, and validity of interviews (Thomas, 2017). While validity refers to the essential truthfulness of the collected data, reliability relates to researchers' claims regarding the accuracy of the collected data (Yin, 2018). Lincoln, Lynham, and Guba (2013) suggested member checking as a useful method to share researcher's interpretation of participants' responses to interview questions with participants for validation purposes. I shared with participants my interpretation of their

responses to interview questions and asked participants to verify their answers to enhance the validity and reliability of the data.

Data Collection Technique

Rowley (2012) and Yin (2018) considered interviewing as one of the most popular methods of data collection for a qualitative study. Researchers obtain in-depth data collection of participants' experiences when conducting interviews (Harvey, 2015; Silverman, 2016). I used interviews to collect rich data from project manager supervisors' experiences in evaluating the work performance of project managers. There are three types of interviews to gather data; structured, semistructured, and unstructured (Tucker & Lowe, 2014; Yin, 2018). The qualitative researcher must prepare open-ended interview questions to enable participants to engage in self-expression of their experiences about the overarching research question (Egbe, 2015; Yin, 2018). I used semistructured interviews to collect data, allowing participants to engage in self-expression of their experiences related to strategies to effectively evaluate the work of project managers.

In order to control the direction of the interview process and to elicit substantial data related to the phenomenon under investigation, researchers use the overarching research question and supporting questions (Tideman & Svensson, 2015; Yin 2018). Researchers ask predefined questions to manage the interview process and prompt participants to explain their perceptions, attitudes, and interpretation of the phenomenon (Yin, 2018). I used the overarching research question for the study to control the direction of the interview process to obtain rich data from participants by asking them to explain their perceptions and experiences with the effective evaluation of project managers. The

collection of rich and thick data is crucial, and researchers use semistructured interviews to gain more flexibility to adapt research questions accordingly (Egbe, 2015; Fusch & Ness, 2015). Researchers record and document participants' answers to interview questions to analyze collected data (Collier, Moffatt, & Perry, 2015). I used semistructured interviews with open-ended questions that will focus on the overarching research question to control the interview process. I ensured collection of rich and thick data from conducting semistructured interviews with study participants.

There are advantages of interviewing as a data collection method for both participants and researchers. The advantage of interviewing is that the participants' capability to answer the questions with elaborate and insightful explanations of their perceptions and attitudes (Zander, Eriksson, Christensson, & Müllersdorf, 2015). Researchers have the opportunity to ask follow-up questions to seek further clarification (Patton, Hong, Patel, & Kral, 2017). Moreover, researchers can develop a relationship with participants and answer questions participants may have about the study (Yanes et al., 2016). With the improved researcher-participant relationship, the researcher builds rapport with participants and gives an opportunity to participants to ask researchers clarifying questions (Egbe, 2015; Zander et al., 2015). Researchers are able to observe nonverbal communication cues and reactions from the participants while answering the interview questions (Trochim, Donnelly, & Aurora, 2016; Yin 2018). Before the start of the actual semistructured interviews, I first built rapport with the participants. I allowed the participants expound and elaborate their answers to provide insightful information to help me answer the overarching research question. I gave the paticipants the opportunity

to ask questions about the study. I observed and documented nonverbal communication cues and reactions from participants.

Interviewing has disadvantages as a data collection method that can affect the quality of the collected data (Alshenqeeti, 2014). A usual disadvantage of interviewing to collect data is that the participants could become nervous and uneasy about the researcher recording their responses to interview questions (DeFelice & Janesick, 2015; Yin 2018). The perception of participants that interviews are invasive and imposing is an additional disadvantage (DeFelice & Janesick, 2015). From the perspective of the novice researchers, a common disadvantage is that the lack of experience conducting interviews might result in the novice researchers struggling with the interview process (Castillo-Montoya, 2016; Harvey, 2015). Conducting interviews is a time-consuming method that researchers use to collect data (Irvine, Drew, & Sainsbury, 2013; Vogl, 2013). Moreover, in an attempt to please the researcher, the participants may attempt not to answer honestly about their experiences. This disadvantage can introduce bias in the study (Smith & Noble, 2014; Vrij, Hope, & Fisher, 2014). Participants are observant of the researcher's body language, which could influence their responses (Egbe, 2015; Yin, 2018). To address the disadvantages of semistructured interviews, I made the participants feel at ease and informed them that their recorded responses will be confidential to alleviate their possible feelings of nervousness and uneasiness. I was comfortable with the research process because my present job is that of an analyst. My analytical function of interviewing project stakeholders with my employer proves that I am not a novice interviewer. I emphasized to the participants that none of their responses would offend

me and, therefore, participants appeared to be honest in sharing their experiences when answering the interview questions.

Fusch and Ness (2015) recommended researchers to test their interview protocols by conducting pilot interviews and to get feedback about the overall structure of the sessions and experience of such simulated interviews. Researchers analyze the collected feedback for the refinement of the interview protocol and for the improvement of the quality of data collected (Fusch & Ness, 2015; Zander et al., 2015). Fusch and Ness (2015) and Harvey (2015) claimed that researchers need to conduct one interview with an eligible participant as a pilot test from the pool of eligible participants. After IRB approval, I did not conduct a pilot interview and did not make any necessary refinements to the interview protocol.

Researchers review their interview transcripts with the participants for correctness and accuracy during the member-checking process (Nichols, 2015; Wall, 2015). Participants have an opportunity during the member checking process to offer clarifying information (Simpson & Quigley, 2016; Thomas, 2017). Birt et al. (2016) and Thomas (2017) recommended that researchers should use member checking to ensure data credibility. Birt et al. (2016) and Simpson and Quigley (2016) recommended that researchers should be aware of the disadvantages of member checking and, consequently, should understand that not receiving any comments from participants does not mean consent because participants may have not had an opportunity to read the researcher's interpretation of their answers. Another disadvantage of member checking is that a researcher could fail to inform participants that they could disagree with the researcher's

interpretation of participants' answers and that participants do not have to accept such interpretation (Birt et al., 2016; Simpson & Quigley, 2016). I conducted semistructured interviews to collect data from participants. The interview protocol directly related to the overarching research question. To ensure the uniqueness of each participant interview, I used the interview protocol to serve as a guide. I provided participants an opportunity to participate in member checking to increase the trustworthiness of the results of the study. I recorded and documented all participants' answers and asked participants to review my interpretation of their responses to verify their answers and to prevent bias.

Aside from collecting data from interviews, researchers conduct document analysis as a secondary source of data. Several scholars (Barnes, Dang, Leavitt, Guarana, & Uhlmann, 2015; Yin, 2018) identified various research methods including document analysis researchers can use to collect data. There are textual, graphical, or pictorial format of documents in qualitative data (Mason et al., 2017). Researchers acquire a better understanding of the phenomenon under investigation using document analysis in conjunction with interviewing (Marshall & Rossman, 2016; Yazan, 2015). Researchers perform data triangulation to enhance the rigor of the study (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). I conducted semistructured interviews in conjunction with document analysis to triangulate the data collected to increase the rigor of this study. I analyzed important company documents with varying formats, including annual job performance evaluation reports, company website, and other documents containing KPIs to enhance my understanding of the strategies project manager supervisors used to effectively evaluate the work of the project managers.

Several scholars warned of challenges in collecting data through document analysis because the author of such documents may have a vested interest, jeopardizing the validity of the content of the documents (Cleary et al., 2014; Jamshed, 2014). The researcher has to consider the rationale organizational leaders use to create such documents (Jamshed, 2014; Ngulube, 2015). Another caution is that researchers should not assume that company documents represent an accurate recording of events because the author's personal perspective may be misleading. Moreover, access may be difficult to the relevant document as a source of data (Hancock & Algozzine, 2016; Yin, 2018). I was attentive to the warnings of the scholars by considering in my analysis the intent of the author in writing the company documents.

Advantages of using document analysis in case study research is the researchers' ability to triangulate other data collected through interviews or observations (Hancock & Algozzine, 2016; Yin, 2018). Another advantage is researchers' discovery of new themes or areas that need additional exploration and research by conducting document analysis helpful in spelling of names or details of events (Ngulube, 2015; Yin, 2018). I asked the organizational leaders for access to documents after IRB approved the study.

Data Organization Techniques

The creation of a system to organize data is a prerequisite task to conducting data analysis effectively and a rigorous research study, as suggested by several scholars (Lahat, Adali, & Jutten, 2015; Yin, 2018). Researchers as a standard practice can achieve rigor in qualitative research when they organize the collected data effectively and efficiently (Yin, 2018). There is considerable advantage when researchers compile

qualitative data in an efficient way, similar to researchers storing quantitative data in a database (Marshall & Rossman, 2016). The next step after a researcher arranges data in proper order is the establishment of a consistent data structure (Yin, 2018). Leech and Onwuegbuzie (2011) recommended the use of secret letter and number combination as coding scheme for identifying study participants to prevent the revelation of their identities and ensure confidentiality.

I organized the collected data from the interviews with study participants using open-ended questions (see Appendix A). I concealed participants' identities by assigning each participant a unique ID code to ensure confidentiality. I assigned ID codes to each participant consisting of the letter S, for supervisors, and a number between 1 and 3. I removed names and company identification from all documents to ensure participant confidentiality.

Saunders, Kitzinger, and Kitzinger (2014) and Urban, Burgermaster, Archibald, and Byrne (2014) advocated the alteration of participants' names, the names of other individuals mentioned by study participants, and the participants' revelation of the names of places to ensure anonymity.

Researchers use computer technology to reinforce the accuracy of data integration, evaluation, coding, sorting, and indexing (Gibson, Webb, & Lehn, 2014; Yin, 2018). Researchers have the opportunity to use software tools, such as NVivo, to take advantage of the software functionalities that are helpful in managing and organizing collected data (Sotiriadou, Brouwers, & Le, 2014). The use of software is suitable when researchers document and develop systematic folder configurations and file naming

standards (Margarian, 2014). I uploaded data to NVivo to (a) categorize data to identify themes, (b) display visuals, and (c) simplify summarization.

Gibson, Webb, and Lehn (2014) stated that researchers should use folders with label codes instead of participant names to ensure secrecy and to enhance privacy. I setup label-coded and password-protected folders and kept on an external electronic storage device, which was the device I used to save the transcripts, notes, and documentations. I assigned a document ID number for all documents obtained for review. To facilitate organizing document data and retrieval, I converted paper documents to electronic versions by scanning and saving them to a dedicated electronic file folder.

Karcher and Page (2017) and Woods, Macklin, and Lewis (2016) recommended the use computer-assisted qualitative data analysis software (CAQDAS) to enable researchers to organize and analyze data more efficiently. Goble et al. (2012) emphasized the importance of researcher's role to have a data organization plan and must not totally rely on the CAQDAS software functionality in handling collected data during the study and augment software automation with additional manual counterchecking process. From the electronically saved data files, I uploaded them to CAQDAS, such as NVivo, to improve data organization. DeDoose is a reasonably priced, cloud-based, password protected, easily accessible, and intuitively useful web application for case study research (www.dedoose.com). I used DeDoose application to import sound, text, and video data, save the files, and organize interview transcripts, documentary reviews, and any relevant annotations or messages. I kept all data in a central repository to enhance ease of identification and to facilitate data access and data analysis.

Demonstration of research process precision and clarity by documenting participants' comprehensive experiences and by increasing the understanding of participants' input is one of the roles of a researcher accomplished by maintaining a reflective journal (Lakshmi, 2014). The maintenance of a reflective journal during the research process enables the researcher to capture rich and thick descriptions, such as interviewees' reactions to their participation and to the interview settings (Al-karasneh, 2014; Nickson & Henriksen, 2014). Bernard (2017) posited the implementation of the bracketing method to determine any possible bias that could affect a researcher's study results and to proactively identify and be mindful of any bias. The principle of bracketing is that if researchers group similar actions of participants into categories, the investigation and generalization about how those categories of action relate is possible (Pentland, Pentland, & Calantone, 2017). I setup and maintained an electronic reflective journal by documenting participants input attributes, such as: (a) reactions to the interview process and setting, (b) thoughts and ideas during document review, (c) decisions about coding, and (d) decisions about theme identification to demonstrate precision and clarity of this case study. I used the bracketing technique to mitigate the risk of bias in the study.

Casteleyn, Dumez, Van Damme, and Anwar (2013) emphasized the importance of researchers not to have longer data retention than required and the necessity of information security. The laws regulating research data protection serve as a guide to researchers to adopt various best practices to safeguard the data during and after conducting the study (Casteleyn et al., 2013). The legislation's safeguards are the (a) identification of the purpose of collecting data, (b) acquisition of informed consent, (c)

collection of relevant data only for purposes of the research, (d) usage of the data only for the purposes of the research study, (e) retention of the data as long as required, and (f) security of information (Hiriscau, Stingelin-Giles, Stadler, Schmeck, & Reiter-Theil, 2014).

I stored all basic data on an external hard drive and kept hardcopies in a locked bank safety deposit bank and locked safe cabinet in my home for 5 years to restrict access. Several researchers suggested the same storage procedures to ensure data security throughout the research study (Nickson & Henriksen, 2014; West, Usher, Foster, & Stewart, 2014). Wahyuni (2012) claimed that researchers must consider ethical requirements, including the storage of hardcopies in a locked filing cabinet and the password protection of electronic copies on the researcher's computer.

Data Analysis

Researchers can use five sequential steps in the data analysis process that Yin (2018) suggested: compile, disassemble, reassemble, clarify, and conclude. I used Yin's five-step process to analyze data collected. I also used methodological triangulation for data analysis, using organizational documentation and artifacts. Researchers use methodological triangulation to extract rich data by conducting a comprehensive analysis of data that leads to reliable and valid results (Frels & Onwuegbuzie, 2013; Fusch & Ness, 2015). Researchers conduct data analysis to dissect and search patterns of case study evidence from multiple sources by following a standard process that involves interpreting, examinating, grouping, testing, and tabulating of data (Carter et al., 2014; Yin, 2018). Identifying and implementing a suitable data analysis strategy is critical for

acquiring the answers to research questions (Finfgeld-Connett, & Johnson, 2013). Case study researchers use one of the four types of triangulation for data analysis, which are (a) methodological, (b) investigator, (c) theory, and (d) data (Denzin, 2012; Flick, 2015). Interviews and document review are two means of data collection techniques researchers use to conduct methodological triangulation (Namukasa, 2013; Torrance, 2012). In contrast, investigator triangulation entails a second and third author to review the primary author's analysis to validate research conclusions (Coy, Lambert, & Miller, 2016). Theoretical triangulation involves researchers analyzing data from two separate theories (Beltramo, 2014). By adapting methodological triangulation researchers enhances the corraboration of data from one source to the other (Hoque, Covaleski, & Gooneratne, 2013). The fourth type, data triangulation, enables researchers the exploration of a phenomenon from various perspectives and stages such the analysis of data outcomes from interviews and from documentary review (Balzacq, 2014; Trepal, Stinchfield, & Haiyasoso, 2014). Collecting data from only one source might result in insufficient evidence to make a conclusion (Trepal et al., 2014).

Data collection and data analysis are parallel processes that researchers undertake in a repetitive cycle during a qualitative study (Lewis, 2015; Petty, Thomson, & Stew, 2012). I collected data and conducted data analysis in a parallel format in a repetitive cycle in the study. Researchers can select from various methods for qualitative data analysis, which are (a) thematic, (b) content, and (c) discourse analysis (Petty et al., 2012). Researchers using thematic analysis repeatedly read the interview transcripts to acquire a comprehensive interpretation of the text (Petty et al., 2012; Vaismoradi,

Turunen, & Bondas, 2013). Researchers use CAQDAS, such as NVivo, to automate classification, sorting, and data analysis (West et al., 2014; Woods, Paulus, Atkins, & Macklin, 2015). Researchers use CAQDAS to identify themes and the relationships between them (West et al., 2014; Woods et al., 2015). Several scholars recommended that researchers consider the use of NVivo software as an easy to use, flexible, and effective tool for deciphering themes acquired from participants' responses and for extracting their contextual content and connotations (Bush, 2016; Ward, Furber, Tierney, & Swallow, 2013). I used NVivo to automate classification, sorting, and data analysis to identify themes and the relationships between them. I followed the interview protocol (see Appendix B) by importing interview recordings and transcripts notes into NVivo.

Researchers concentrate on analyzing meaningful units of data rather than analyzing line-by-line or word-by-word of data to identify meaningful units regardless of length (Lewis, 2015). Researchers use labels to differentiate meaningful units of a transcript and apply or assign these labels to all transcriptions (Bell et al., 2018). Researchers may also keep a reflective journal when holding semistructured interviews to identify possible themes, background information, and context for further analysis (Al-Rawahi & Al-Balushi, 2015). I used Yin's (2018) five-step analysis to guide me in the data analysis process. Member checking and methodological triangulation were used to validate the study data. I applied the meaningful unit method for data analysis for all transcripts and notes to enhance the trustworthiness of the analysis process and obtain an audit trail of the changes I made during documentation. I took notes in addition to recording the interviews to acquire an accurate context and full understanding of the

responses of the participants. Researchers need to writing memos in order to keep track of reflections and thoughts while analyzing the transcripts (Petty et al., 2012). By grouping similar labels together from the transcripts, researchers are able to form themes from the data (Bedwell, McGowan, & Lavender, 2015; Klag & Langley, 2013).

Researchers use organizational documents as another source of data, which are collected from participating organizations to conduct document review data analysis to achieve triangulation (Kao & Salerno, 2014; Petty et al, 2012). Several data analysis methods exist for researchers to conduct document review data analysis, including thematic analysis and content analysis (Finfgeld-Connett, & Johnson, 2013; Vaismoradi, Turunen, & Bondas, 2013). I used content analysis to analyze organizational documents by classifying and identifying codes and themes. Researchers have also the option to use content analysis method that requires the classification and identification of codes and themes (Bernauer, 2015; St. Pierre & Jackson, 2014). Data analysis using the content analysis method entails three stages, which are preparation, organization, and reporting (Elo et al., 2014, Gläser, & Laudel, 2013). Baugh, McNallen, and Frazelle (2014) and O'Brien, Varga-Atkins, Umoquit, and Tso (2013) recommended that researchers use mind maps and concept mapping techniques to help researchers with data analysis and interpretation by obtaining a map that shows potential connections between concepts and themes. I used concept and mind mapping to identify key themes and present connections of themes with related literature and the conceptual framework supporting the study.

Reliability and Validity

I established validity and reliability in the study using dependability, credibility, transferability, and confirmability. Lincoln and Guba (1985) emphasized the importance of establishing validity and reliability during qualitative research using four criteria, which are (a) dependability, (b) credibility, (c) transferability, and (d) confirmability. Researchers regard these four criteria as trustworthiness (Elo et al., 2014; Yin, 2018). Qualitative researchers ensure the trustworthiness of a research study using these four criteria, which is equivalent to quantitative researchers ensuring reliability and validity using statistical procedures (Fan & Sun, 2014; Hays, Wood, Dahl, & Kirk-Jenkins, 2016).

Reliability

Case study researchers must use instruments and measurements to yield reliable study results; however, reliability continues to be a concern for qualitative researchers (Lakshmi & Mohideen, 2013; Yin, 2018). I used several sources of evidence, including semistructured interviews and organizational documentation and artifacts. A case study is a comprehensive inquiry in which the researcher attempts to capture rich information not only from a limited single source of data collection but from as many sources as possible (Burau & Andersen, 2014).

Bernard (2017) and Lishner (2015) stated that dependability refers to the consistency of results under similar conditions. To ensure the dependability of my case study, I used the same list of questions and follow-up questions to receive consistent and dependable responses from the participants during the interviews, as recommended by

Al-Yateem, (2012) and Yin (2018). Establishing clear steps in my research process may allow other researchers to replicate my study.

Researchers record the interview sessions to review and reflect upon study participants' answers, generating reliable transcripts and results (Fan & Sun, 2014; Mangioni & McKerchar, 2013). I recorded the interview sessions to review and reflect upon the study participants' answers to produce reliable results. Researchers ask study participants to explain their answers in sufficient detail to reduce the probability of adding researchers' biases (Yin, 2018). I asked study participants to clarify their answers to mitigate the risk of mixing my biases with the participants' answers to interview questions. Researchers use member checking to strengthen study results' dependability (Cope, 2014; Yin, 2018). Member checking is the process researchers use to give their interpretations of study participants' responses to interview questions back to the participants to verify the accuracy of participants' answers (Dasgupta, 2015; Yin, 2018). Member checking is an excellent method to enhance data dependability by preventing researcher's biases to influence the study results (Teusner, 2016). I used member checking to strengthen the study results' dependability by asking participants to verify that my interpretations of their answers to interview questions were accurate. To avoid influencing participants' perspectives, I did not divulge any details about the nature of the study before the start of the interview session, yielding more reliable results. I adhered to the interview protocol and did not ask any new questions to maintain consistency and increase reliability.

Validity

Validity refers to the extent to which a research study' findings accurately reflect the phenomenon under investigation (Tuesner, 2015). I reminded study participants to answer the questions truthfully and completely to achieve study validity. The research validation framework includes credibility, transferability, and confirmability (Cope, 2014; Smith & Noble, 2014).

Credibility. I began establishing credibility by using a process of selection, recruitment, identification, and description of study participants. I established creditability by collecting rich data that addressed the intended focus of the study. I thoroughly examined and analyzed interview transcripts to establish credibility. I conducted data analyses and interpretations accurately and honestly. I made accurate observations of participants' nonverbal cues when answering the interview questions, reflected on everything during the research process, and recorded the results. I also conducted member checking and aligned interview questions with the overarching research question to establish credibility. I asked participants to verify that my interpretations of their answers to interview questions were accurate. Establishing credibility begins with the process of selection, recruitment, identification, and description of study participants (Saunders et al., 2015). Credibility occurs when researchers' data address the intended focus and participants provide rich responses (Patton, 2015; Yin, 2018). The exhaustive examination and analysis of the interview transcripts is a means of establishing credibility (Lockwood, Munn, & Porritt, 2015; Saunders et al., 2015). Researchers establish the credibility of qualitative research by

conducting data analyses and interpretations accurately and honestly (Lincoln & Guba, 1985). To increase credibility, researchers invest much time with study participants during the research study, make accurate observations of participants' nonverbal cues when answering the interview questions, reflect on everything during the research process, and record the results of the reflection exercises (Lincoln & Guba, 1985). Researchers establish credibility by conducting member checking (Fusch & Ness, 2015). Member checking is the process researchers use to give their interpretations of study participants' responses to interview questions back to the participants to verify the accuracy of participants' answers (Dasgupta, 2015; Yin, 2018). In addition, researchers align interview questions with the overarching research question to establish credibility (Marshall & Rossman, 2016).

Transferability. Researchers achieve transferability when the results of the study are applicable from one study to another (Bernard, 2017; Marshall & Rossman, 2016). Researchers further explore alternative populations (i.e., transferability) to ensure internal and external validity, as suggested by several researchers (Cope, 2014; Dikko, 2016). To increase the transferability of the study, I provided high-quality results through the selection of suitable study participants, provided detail-oriented demographic information, conducted comprehensive data analysis, and presented results in a clear, intuitive format.

Confirmability. Researchers achieve confirmability after establishing dependability, credibility, and transferability (Katz, 2015; Morse, 2015). Confirmability refers to the researchers' accurate interpretation of study participants' responses,

eliminating researchers' bias (Noble & Smith, 2015; Teusner, 2015). I carefully listened to each participant and kept a note of my thoughts, insights, and biases. I concentrated on transcribing interviewees' answers accurately, connecting data with results, and used current literature review to increase the confirmability of the study's results.

Researchers use methodological triangulation to improve the validity of a case study (Elo et al., 2014; Marshall & Rossman, 2016). Methodological triangulation entails the use of multiple sources to attain confirmability of study findings (Munn, Porrit, Aromataris, & Pearson, 2014; Burau & Andersen, 2014). I used methodological triangulation to collect data from multiple sources, which were semistructured interviews and organizational documentation and artifacts. Burau and Andersen (2014), and Keutel, Michalik, and Richter (2014) suggested to collect data from multiple sources and use methodological triangulation of data sources to improve the validity of the study. I continued to collect and analyze data until I reached data saturation in the study. Data saturation is the point in the research process where additional data collection and analyses do not provide any new, meaningful information (Kasim & Al-Gahuri, 2015; Marshall & Rossman, 2016).

Transition and Summary

Section 2 of this research study was comprised of the restatement of the purpose statement, the detailed description of the role of the researcher, the information regarding the participants and sample size, the description of the research method and design, the techniques of data collection, the strategy of data organization and analysis, and the process to ensure the reliability and validity of the data collected. In Section 3, I report

the findings and present applications to professional practice, the implication for social change, my recommendation for action and further study, reflections, summary, and study conclusions.

Section 3: Application to Professional Practice and Implications for Change

In this section, I present an introduction to Section 3 and a discussion of the presentation of findings of the study. I also present the applications to professional practice, implication for social change, recommendation for action, and recommendation for further study. Finally, I provide my reflections, a summary, and study conclusions.

Introduction

The purpose of this qualitative, single case study was to explore strategies supervisors of business project managers use to effectively evaluate the work of project managers. I conducted individual face-to-face interviews with three supervisors of business project managers having at least 5 years of successful experience in evaluating performance of their project managers. Other sources of data included articles and press releases from the website of the case company for document analysis. Analysis of data generated four themes: (a) performance evaluation based on level of customer satisfaction, (b) performance evaluation based on compliance to regulations, (c) performance evaluation based on control of project cost and schedule, and (d) performance evaluation based on strength of work relationships.

I used other sources of data pertaining to the implementation of a comprehensive performance management system (CPM) from the website of the case company to conduct document analysis. I analyzed the following six organizational documents related to the CPM: the case company's performance management policies; KPIs; tools required to plan, manage, and measure performance; and key BSC methods. The supervisors of project managers used the CPM system to ensure clear accountability and

ability to grant appropriate rewards to their project managers. The case company had a proven CPM with proprietary, significant, and balanced methodology that project sponsors and other stakeholders appreciate.

Presentation of the Findings

The overarching research question for this qualitative, exploratory single case study was, what strategies do supervisors of business project managers use to effectively evaluate the work of project managers? To answer the overarching research question, I conducted semistructured interviews with supervisors of project managers in the case company and reviewed organizational documentation and artifacts. Following the coding and triangulation process, four themes emerged: (a) performance evaluation based on level of customer satisfaction, (b) performance evaluation based on compliance to regulations, (c) performance evaluation based on control of project cost and schedule, and (d) performance evaluation based on strength of work relationships.

Theme 1: Performance Evaluation Based on Level of Customer Satisfaction

The first theme that emerged from analyses of data collected is that participant supervisors are rating project manager performance based on the level of customer satisfaction. From analysis of interview data, I identified three prominent leader conditions associated with the project manager's ability to satisfy their customers. All three participants shared that three prominent conditions were used to evaluate their project managers' performance: (a) delivery of project requirements and expectations, (b) assurance of product or service quality, and (c) timeliness of actions to resolve project issues.

The case company published an organizational document on its website related to making connections to customers. From this document, I understood the significant correlation between the satisfaction of customers and participant leaders evaluating the performance of their subordinate project managers. Every part of the case company's project strategies aligned with the needs of all the company's customers. According company documents and public information, the organization is committed to meeting all customer requirements. Furthermore, the case company's leaders manage with the purpose of gaining loyalty, relevance, and consistency from its customers.

Delivery of project requirements and expectations. All three participants used the delivery of project requirements and expectations to evaluate the performance of their project managers. S1 explained that there is a need to review with the customer that the project manager is providing the complete product or service deliverables for each stage of the project up to completion in accordance to the contract provisions. S1 expressed,

> There is quite a bit of valuation on basic feedback from the customers in regards to the completeness of the items a project manager delivers. As a professional services firm, we know we face our external clients most of the time. So, understanding if the client is happy when the project manager submits what customer expects, then, generally that bodes well for whatever project they're working on.

S2 was committed to obtaining a complete view of the customer's level of satisfaction, as a result of the project manager's performance, by observing interactions between the customer and the project manager. S2 stated,

> I look for to rate you know is not just did we get the right technical solution but are we meeting the needs of the customer and being able to translate that to a business need or mission? One big thing for me is risk. Like, are we communicating risk timely and appropriately? So, I put that on project managers quite a bit of on how I believe they're performing and if they're able to identify risks early on and if they're able to succinctly communicate those to leadership or with our customers to make a risk based decision.

S3 asserted that setting clear expectations is the key to measuring the project manager's performance. S3 helped the project managers understand the goals and outcomes at the beginning of the project, having the confidence that they were hired with the required skills set to overcome project task roadblocks. S3 desired to enable the project managers to attain project success with customer satisfaction. S3 stated,

> The key to evaluate their [project managers] performance is to know how they performed with their customer. So, there's quite a bit of valuation on basic feedback from the customers.

Assurance of product or service quality. All three participants emphasized the importance of the assurance of quality of the product or service delivered to the customer. S2 articulated having reviewed periodically the deliverable documents and project materials that the project manager provided to ensure that documents and materials meet the quality standards that the customer expects. With such a process, S2 evaluated the quality performance aspect of project managers. S2 stated,

> I will periodically review materials that they're producing to make sure that they meet the quality standards that I expect. But, then, I'm getting feedback from the customers as well to make sure that what they're doing is meeting their expectations and that they're regularly talking as well.

S3 checked the quality of work of project managers, especially those with minimal experience with the team. S3 believed that getting people with suitable personalities to manage the project is the prerequisite to attain the quality standards for the project. S3 considered factors that could affect the project quality, such as personalities, attitudes, and lack of training. S3 stated that "they [project managers] have very different personalities, very different things that drive them, very different sort of expectations, and life requirements reflect how project managers perform with quality on a project."

S3 added that a barrier they experienced related to project quality was when another project manager took over a low-quality project. S3 did not rate the new project manager as low because the product quality from the supplier was not the project manager's shortcoming. S3's evaluation of the new project manager's efforts resulted in an above average rating during project completion and closure. S3 had regular quality checks with the project team. S3 stated,

> There are regular quality check points, weekly check points on where things are and then we have monthly status meetings. Depending on what the task is, there could be daily check-ins or even multiple times daily if we're sprinting towards an

> immediate deadline. Then there are other times when there might even be quarterly check-ins depending on projects that are longer term.

Timeliness of actions to resolve project issues. All three participants indicated that they met daily or weekly with their project managers to ensure the project managers resolved customers' issues or complaints on a timely manner. S3 emphasized that project managers must possess problem-solving skills to remedy when issues arose to define the problem, identify possible solutions, and select the best option to solve the problem. Once the project manager decided on the specific solution, the supervisor expected an immediate implementation. S3 monitors and engages the project managers regularly by way of checkpoints or assessments to ensure customer issues are resolved. S3 stated,

> There are regular check points, weekly check points on where things are and then we have monthly status meetings. Depending on the need [customer issues], there could be daily check ins or even multiple times daily if we are sprinting towards an immediate deadline. Then, there are other times when there might even be quarterly check ins depending on projects that are of longer term.
>
> S2 expects project managers to identify possible project issues and risks in advance.

S2 stated,

> If somebody is good at identifying risks, that means that they more times than not, will not be caught by surprise by a major issue. This doesn't make them better or worse than the project managers that are not good at identifying risks, it just makes them more effective. Because, to me, the main aspect of project

> management is risk and it is not just about making sure you know day to day the status of a project. It’s not like having a checklist, it's having the ability to think ahead and being two steps ahead of what's going on. It’s being able and to talk about those risk-based discussions and being prepared when they actually do happen.

S2 explained that one of the barriers to timeliness of action to resolve project issues may be a project manager’s family problems or illness. S2 considered such delays with project issue resolution to be excusable and did not give a demerit to the project manager’s performance. The timeliness of project issue resolution also depends on the inputs from project managers and specific project team members. S2 stated,

> I would expect that the project managers and the task leaders would be handling their own team. If there are performance issues, good or bad, then the expectation is that they are feeding that information to us. They may fill out snapshots periodically but, at any given time, I should know how anybody on the project is doing. If I need specifics, I would go to them directly.

S1 explained that communication is key for project managers and the project team to timely resolve issues. S1 stated,

> I'm glad to see and looking at what the client is feeding back to us but also looking at their communication because if you don't, as a manager of them, if you don't know what they're doing to resolve issues and they're not communicating with you on a regular basis then it's hard to evaluate them very well. So, you

generally give extra points for their communication skills and the timeliness of their communication.

Correlation to the literature. The findings noted in Theme 1, consisting of performance evaluation based on level of customer satisfaction, are in line with the findings of Chaharsooghi et al. (2016) in that customer perspectives are important for the organization when evaluating project managers' performance. The leaders will be interested in measuring the performance of individuals and teams that can contribute to the profitability of the business entity, with customer satisfaction as a KPI (Chaharsooghi et al., 2016). Although customer satisfaction can increase staff collaboration, leaders have different appropriate measures to ensure customers' needs are met (Asgari et al., 2017). Lin (2015) found that knowledge sharing among employees is the most powerful indicator of internal process performance and knowledge acquisition is crucial in increasing customer satisfaction. Lin and Yancy (2017) indicated that nonfinancial performance measures, with customer satisfaction among others, directly and indirectly influence financial performance of the company by means of cause-and-effect relationships.

Correlation to the conceptual framework. Theme 1, consisting of performance evaluation based on level of customer satisfaction, relates to Shannak's (2015) study in that, after implementing BSC with the ERP system as a framework, the company became more efficient and effective with enhanced resolution to problems, which led to better customer satisfaction and reputation in the market. The customer perspective of the BSC has its foundation in segments of business customers that are important for the

organization. When using the BSC method, Kaplan and Norton (1992, 1996) declared that organizational leaders use customer perspectives, finances, internal processes, and the drive to learn and grow to measure the performance of project managers. Tan, Zhang, and Khodaverdi (2017) affirmed that adopting the BSC framework that connects software development with the business strategy confirms the enhancement of productivity to reach high-level goals, leading to customer satisfaction.

Theme 2: Performance Evaluation Based on Compliance to Regulations

The second theme that emerged from analyses of data collected is that supervisors of project managers are rating project managers' performance based on the compliance of project managers to regulations, standards, and policies. S1 stated that project managers must have knowledge of governmental and corporate procedures and policies to ensure organizational compliance. S1 stated,

> There are also company regulations and standards and policies etcetera on how to conduct the program to keep track of financials to make sure they're creating deliverables for a client and, so, making sure that they're following that at the end of the project and that they are capturing all of those and, once the project is done, bringing back lessons to ensure that we can learn lessons from what they did and pass that onto future projects is also important in evaluating a project manager.

S2 expressed having high standards and expectations of project managers' professionalism regarding grammar and spelling accuracy during project presentations and reports. S2 mentioned examples of having high-standard expectations of project

managers' professionalism by strictly following grammatical rules and spelling accuracy during project presentations and reports. S2 stated,

> I will periodically review materials that they're producing their team is producing to make sure that they meet the quality standards that I expect. But then also look at getting feedback from the customers as well to make sure that what they're doing is meeting their expectations with the contract and that they're regularly talking as well.

S2 added that the expectation is that project managers take the time to understand the entire project and delegate project-related tasks using a detailed plan. S3 noted that project managers should identify project risks early, mitigate those risks, and discuss those risks with the client and project team. S3 expressed that the project manager must know how to administer the contract and seek legal advice, if needed, with clear terms and conditions that are agreed upon by the firm and the client. S3 stated, "I do a lot of upfront definition of the agreements and the regulations making sure first I know what we want and then making sure that gets communicated."

S3 also added that project managers have to be rated as they perform, including identification, analysis, prioritization, and development of project mitigation plans, including internal and external project-related issues. S3's standard is that project managers should be skilled, competent, and able to keep abreast of technological changes that will allow them to remove project roadblocks and perform well in new project assignments. The three project manager supervisors in this study measure the

performance of project managers based on their adherence to the regulations, procedures, and policies in managing the projects.

After a thorough review of the case company's press release, *The Sarbanes Oxley Corporate Ethical Compliance* (DOC2), I was able to gain an improved understanding of the rationale that project supervisors use to determine the way their project managers comply with ethical standards, regulations, and policies. The company documents were aligned with the three participants in terms of organizational compliance to regulations because their organizations serve more than 20 industry sectors to implement projects and systematically assists its customers in building a stronger business environment. Consequently, the three participants demonstrated commitment to ensure organizational compliance and reporting of any misconduct. Another document, entitled *Corporate Contract Review* (DOC3), is aligned with the practice of participant leaders to evaluate the project managers based on their compliance to legal and regulatory requirements. All three participants review and monitor project managers, as well as other personnel, for legal and regulatory compliance. Ensuring compliance to regulations and policy facilitates the enforcement of key contract provisions in a timely manner, allowing renegotiation, if needed, to identify the possible risks of lost revenue or unattended costs.

Correlation to the literature. Theme 2, consisting of performance evaluation based on compliance to regulations, aligns with the findings of Norrie and Walker (2004) in that projects completed successfully required a task-management focus and an appropriate emphasis on process as a method of tracking and reporting tasks usually in the form of a project plan based on a work breakdown structure. Furthermore, a clear

understanding of the project management process, its phases, and the appropriate methods to manage deliverables is clearly the emphasis of the early evolution of project management standards (Gallagher et al., 2015).

Correlation to the conceptual framework. Theme 2 is an aspect of the BSC framework, as validated by Álvarez et al. (2015), because leaders effectively obtaining software development projects for banks have always been at the forefront of innovation in management policies to improve their performance. Adherence to management policy is mandatory for project success. Skotnický (2015) attested that by the implementation of the BSC framework in government agencies during 1994-2014, managers set the standards of strategic thinking and compliance to regulations that resulted in increased organizational effectiveness. These public agencies included county and city departments where the managers facilitated transparency in the use of their funds and eliminated corruption in the work environment. Organizational leaders used the BSC framework by following internal business processes that led to improved strategic performance (Kaplan & Norton, 1992, 1996).

Theme 3: Performance Evaluation Based on Control of Project Cost and Schedule

The third theme that emerged from analyses of data collected is that supervisors of project managers are rating project managers' performance based on their control of project cost and schedule. S2 claimed that project managers should use project resources efficiently to affect the cost of the project. Project managers' decisions can affect the financial bottom line. S2 stated that project managers have to be knowledgeable of financial principles that affect the project at hand, by estimating the cost of the project

and controlling the budget. Project managers need to develop a contingency plan in the event of potential financial and project delay risks and propose possible solutions.

S2 emphasized the project managers' ability to control the project's activities and progress in a result-oriented manner. The project managers have to meet target deadlines efficiently and effectively for the clients or project sponsors. S3 articulated that there is a need to have clarity with project expectations and to manage the project in the midst of competing priorities. S3 stated,

> Yes. it depends on what I'm asking them to do, but it is usually some combination of cost and schedule and how closely they met my outcome or performance expectations. Depending on what the ask is, they may have a budget, which I need them to meet, and how closely did they align to the assigned requirements. There's also often a schedule requirement, so how closely did they align to whatever deadline or deadlines I gave them.

S2 considers the project manager's time management skills by monitoring a project to find out if the project is on track during its critical stages. I reviewed and learned from a published article on the case company's website, entitled *Costing and Scheduling of Capital Projects* (DOC4), that participant leaders' interests regarding the conduct of project managers in controlling cost and schedule. All three study participants advised clients on new techniques for analyzing, prioritization, and funding to drive cost improvements, meet schedule, and deliver quality products and services. All three participants claimed that the control of cost and schedule is critical in the measurement of the project managers' performance. I found that the case organization is able to (a)

identify and develop sources of significant benefits and funding that can be used to acquire and sustain an asset or service; (b) analyze procurement alternatives, including partnerships and project financing; (c) develop risks and responsibility allotments across the spectrum of deciding design-build-finance-operate-maintain-own sponsorship; and (d) perform complex financial and economic patterns to assist in procurement by project sponsors.

Correlation to the literature. Theme 3, consisting of performance evaluation based on control of project cost and schedule, aligns with the work of Norrie and Walker (2004) in that leaders using a project BSC improve their organization's competitive position. Leaders ensure that project managers pursue the on-strategy and on-quality aspects of project management with the same level of effort and vigor project managers have in controlling costs in the budget and scheduling concerns on time (Norrie & Walker, 2004).

Correlation to the conceptual framework. Theme 3, consisting of performance evaluation based on control of project cost and schedule, aligns with the financial perspective of the BSC framework for both project cost and schedule management. The BSC financial framework has its foundation in leaders monitoring the overall efficiency of a project and taking into account all possible risks and benefits (Chaharsooghi et al., 2016). The risks and benefits include reducing costs, using resources efficiently, expanding service offerings, and using assets more efficiently (Chaharsooghi et al., 2016).

Theme 4: Performance Evaluation Based on Strength of Work Relationships

The fourth theme that emerged from analyses of data collected is that supervisors of project managers are rating project managers' performance based on project managers' strength in work relationships. All three study participants gather feedback from the members of the project team and other stakeholders of the project. To illustrate this point, S1 stated,

> Getting some feedback from the people the project manager leads, the process of user having some sort of 360-degree review. And now the people above are evaluating the project manager should be able to talk to the people below them and make sure that they're being treated fairly and that they're also getting information that they need. The project manager shouldn't just look good up the chain, they should look good to everyone and be seen as fair and effective. So, the people that work for them as well.

S3 shared that project managers have to identify appropriate measures and prioritize and coordinate these measures to achieve the project goals. S2 requires project managers to provide professional leadership to the team and to motivate the team members to work collaboratively to achieve team goals and support each other within the team. S1 ensures project managers recognize and value project team members' strengths, interests, and weaknesses, demonstrating fairness when dealing with team members. S2 rates project managers based on feedback related to project managers able to balance their emotions, accept negative feedback, produce clear status reports, communicate

candidly and tactfully, inform stakeholders of any issues with the project, and listen carefully to others.

S2 added that project managers and project team member retention is important; therefore, project managers are expected to make fair decisions for project members, set achievable goals, maintain a positive outlook, and provide constructive feedback. S3's project managers have to delegate the project tasks to the right project members. S1 finds it necessary to evaluate the performance of project managers based on project managers' ability to understand working relationships in the team structure, ensuring that resources, data, and tools required for projects are easily accessible.

I conducted document analysis that enhanced my understanding of work relationships of project managers is a factor in rating project managers' performance according to company document titled, The Workforce in the Workplace (DOC6). The three participants are proactive and anticipate future changes in the human capital aspect of the documents also indicate a high importance for leaders to make work relationships more valuable and meaningful. After analyzing company document DOC6, I found that to make work relationships more valuable and meaningful, leaders of the participating organization (a) defined and leveraged an industry-specific strategy for changing the workforce collaboration to include value and significance; (b) analyzed and implemented work, workforce, and workplace options that utilize automation, talent sources, and cooperative workplaces; (c) unified the organization, leadership, and workforce development initiatives to access skills, experiences, and engage the workforce in mutually beneficial relationships of business project teams; and (d) implemented talent

management to invite, grow, and retain top talents. S3 mentioned project managers play a vital role based on qualification in strengthening work relationships for project success and in the attainment of the strategic objectives of an organization. S3 explained,

> By understanding the kind of skill set that is needed [in the project] and then bringing the qualified person to that task, takes a lot of work to find the right qualification of people to manage and be successful in the project.

Correlation to the literature. Theme 4, consisting of performance evaluation based on strength of work relationships, aligns with the findings of several research studies. For instance, Lane, Alino, and Schneider (2017) examined the effect of setting project goals, perceptions of fairness, rewarding subordinates, and response to feedback on project managers' behavior. Koufteros et al. (2014) and Llach et al. (2017) conjectured that different types of financial and nonfinancial KPIs determine the performance of project managers in organizations. Work relationships of project managers are considered part of the nonfinancial KPIs. Moreover, project managers' work relationships are influenced by their cognitive styles (Esa et al., 2014). For example, creating, planning, and knowing styles relates to perception, thoughts, experiences, and problem-solving abilities. These styles are significantly associated with the project manager's behavioral performance under various conditions (Esa et al., 2014). The strength of work relationships relates to the manner in which project managers organize and process information and resolve project team conflicts. Manica et al. (2017) asserted that leaders are aware of the economic development and rising competition in the business globally and, therefore, supervisors of project managers should be

innovative in planning, executing, and measuring the performance of project managers using indicators that project managers and team members agreed upon, which brings to the company a framework for expansion plans and innovation. S2 stated that the project manager has a strong influence on the team members to establish work relationships that build trust, motivate, collaborate, and continuously improve. S2 stated, "informally, I observe the project team what is going on and I give the project manager immediate feedback if needed or if there is conflict making sure that we're keeping in touch and having meetings with the team members."

Correlation to the conceptual framework. Theme 4, consisting of performance evaluation based on strength of work relationships, is embodied in the BSC framework. Chaharsooghi et al. (2016) defined learning and growth KPIs as: (a) employees' willingness to learn, (b) employee training, (c) employees' ability to collaborate, (d) efficiency of teamwork, (e) knowledge-sharing culture, (f) employee satisfaction, (g) application of market demands, (h) site development, (i) staff selection, (j) responses to customer feedback, (k) encouraging methods, (l) employees' productivity, (m) employees' retention, (n) employee stability, and (o) quality of labor. Kaplan and Norton (1992, 1996) conceived the BSC theory as a way of evaluating project managers' performance. The BSC theory is a management tool that supervisors of project managers use to present project managers with a comprehensive view of project performance in relation to the organization's strategic objectives (Kaplan & Norton, 1992, 1996). According to Kutsch et al. (2015), supervisors of business project managers may use the BSC theory to assess and communicate performance, in both financial and nonfinancial

terms, and use these results to address both short and long-term organizational objectives. S3 explained that the financial and nonfinancial terms as the basis to rate project manager's performance, "are tracked historically as part of lessons learned with positive outcomes for application to future projects otherwise the negative experiences to be avoided for future projects." S3 stated,

> There are also company regulations and standards and policies et cetera on how to conduct the program how to how to keep track of financials how to make sure they're creating deliverables for a client and so making sure that they're following that at the end of the project that they are capturing all of those and once the project is done bringing back lessons of making sure that we can learn lessons from what they did and pass that on to future projects is also important in evaluating a project manager.

Applications to Professional Practice

The objective of this subsection is to provide a detailed discussion on the applicability of the findings with respect to the professional practice of project management. I present the findings of this research and demonstrate their relevance to improve business project manager engagement and the profitability of the organization. The themes that emerged in this study from semistructured interviews with participants and review of company documents and artifacts may assist supervisors of business project managers in using guiding strategies to effectively evaluate the work of project managers.

This study may be relevant to current project managers' practices, as project managers continue to play a vital role in various industries, both in the private and public sectors. Rajablu et al. (2014) stated that project management is an organizational strategic component that leads to innovation, value creation, and the realization of corporate strategic mission and vision. The results of this study may represent adequate performance evaluation metrics to evaluate the performance of business project managers that could result in significant financial gains for the organization. The results of this research study include metric frameworks for supervisors of project managers to evaluate and rate the efficiency and effectiveness of project managers during and after the completion or closure of a given project.

The resulting strategies may provide the community of project managers with greater motivation for, and insight in, their projects and stakeholder management activities. Supervisors of project managers must rate their project managers' performance accurately and fairly (Yin et al., 2019). The accurate and fair measurement of performance improves loyalty and project manager retention, as project managers trust their superiors giving timely and honest feedback for continuous improvement from one project to the next with clear expectations (Yin et al., 2019).

Implications for Social Change

The results of this study have implications for positive social change by improving the sense of accountability and motivation for project managers. I found that when project managers have clear expectations of their accountability, project managers promote the values of continuous improvement in the organization. Supervisors of project

managers systematically evaluating the work of project managers enhance project managers' motivation to apply their skillsets more effectively, as they manage projects towards success. Supervisors of business project managers may use the results of the study as guidelines to produce value-added and competitive advantage for the company. Das et al. (2013) and Yin et al. (2019) stated that an organization, as a social enterprise with adequate performance evaluation strategies, may enable the project managers to have a sense of purpose on the job and feel valued in the organization, contributing to positive social change.

The results of this study may contribute to positive social change by identifying standard expectations of project manager supervisor's behavior, thereby improving the motivation and career satisfaction of project managers. Project managers become more satisfied with their jobs when their performance evaluations are fair, which affects project managers' quality of life, financial stability of their families, and social progress of their communities (Yin et al., 2019). Improving project performance and reducing project failures could save business organizations money and increase profits that could translate into a larger tax base for the community that may be used to make tangible improvements in the local community. High-performing project managers are accountable for business projects in many areas that involve positive social change, including water, energy, transportation, electricity, sewage, nutrition, health, education, and social and urban development (Ika & Donnelly, 2017).

Recommendations for Action

The findings from this study may assist supervisors of business project managers in using strategies to effectively evaluate the work of project managers. These strategies could be used as a benchmark to implement a clear and simple methodology for measurement and reporting effectiveness or shortcomings of project managers' performance. The themes that emerged from this qualitative single case study align with the BSC conceptual framework used in this study, KPIs, and published research studies. The indicators to measure performance are level of customer satisfaction, compliance to regulations, control of project cost and schedule, and strength of project managers' relationship to the project team members. I recommend that supervisors of business project managers establish clear expectations of factors used to evaluate the work of business project managers, including the how, why, and when business project managers' performance is measured in each project. Based upon the finding of this study, I offer the following four recommendations:

1. Supervisors of project managers should use the performance evaluation based on level of customer satisfaction as part of project manager's performance evaluation system. Supervisors of business project managers should use adequate performance evaluation strategies to evaluate the performance of business project managers to mitigate the risks of project failure that leads to significant financial losses for business organizations (Harrington & Frank, 2015). Success of the project is based on the feedback of customers. In addition, using adequate performance evaluation strategies to assess the work

of business project managers increase the probability of achieving project success, translating into increased profits (Robbins, 2019). I recommend the establishment of project manager performance evaluation based on level of customer satisfaction.

2. Supervisors of project managers should use performance evaluation based on compliance to regulations. Project managers adhering to organizational policy and regulations during the project's lifetime should receive a more favorable performance evaluation. Skotnický (2015) attested that by the application of the BSC framework in government agencies during the 1994-2014 period, managers set the standards of strategic thinking and compliance to regulations that resulted in increased organizational effectiveness.
3. Supervisors of project managers should use performance evaluation based on control of project cost and schedule. Project managers effectively controlling project costs and scheduled timeline during the project's lifetime should receive a more favorable performance evaluation. Leaders using a project BSC improve their organization's competitive position by ensuring that project managers pursue the on-strategy and on-quality aspects of project management with the same level of effort and vigor project managers pursue the on-budget and on-time concerns. The BSC financial framework has its foundation in leaders monitoring the overall efficiency of a project and taking into account all possible risks and benefits (Chaharsooghi et al., 2016). The risks and benefits include reducing costs, using resources efficiently,

expanding service offerings, and using assets more efficiently (Chaharsooghi et al., 2016). The control of project cost to ensure the efficient management of the budget contributes to the profitability of the organization. Supervisors of project managers should check the project manager's handling the procurement and utilization of materials and services in the project. For example, during several decades, leaders of banking institutions chose to outsource their software projects using software firms created by them for this purpose; however, the deadline for the delivery of the projects was more important than the efficiency with which they were developed (Álvarez et al., 2015). I recommend that the timeliness of the delivery of the project to the customer based on the agreed schedule serves as an important aspect when evaluating the performance of project managers.

4. Supervisors of project managers should use the performance evaluation based on the strength of project managers' relationship to the project team members. The strength of work relationships relates to the manner in which project managers organize and process information and resolve project team conflicts. Manica et al. (2017) asserted that leaders are aware of the economic development and rising competition in the business globally and, therefore, supervisors of project managers should be innovative in planning, executing, and measuring the performance of project managers using indicators that project managers and team members agreed upon, which brings to the company a framework for expansion plans and innovation.

I will present the findings from this study to chapters of PMI. As an active member of PMI, I will disseminate this study's findings by delivering presentations to the various chapters of PMI. The officers of the chapters of PMI hold monthly meetings being attended by the members who are mostly supervisors of project managers and project managers themselves. These monthly meetings are opportunities to share the findings from this study. The presentations that I will conduct may be in person or by webcast.

I also plan to condense this study and submit it to a reputable journal for potential publication. After the approval and peer review of this study, I envision the findings from this study will be published for the benefit of the project management community worldwide. I will engage various journal publication entities to realize this recommendation. As part of my promise and commitment to the participant company, I will furnish each of the three participants in this study with a summary of the findings and recommendations. The three study participants deserve to know the outcome of their contribution towards the success of this research study. I will share with the study participants the value of the practice they shared and how the outcome of the study may be a positive social change.

Recommendations for Further Research

The findings of this study are conclusive and met the requirements of both the identified general and specific business problems. When using the BSC theory in organizations, leaders measure the performance using indicators having four perspectives, which are financial, customer, internal process, and learning and growth

(Kaplan & Norton, 1992, 1996). The findings of this qualitative single case study are aligned with these four perspectives; however, there are limitations that I identified and recommend further research to enhance the knowledge base of supervisors of business project managers for the assessment of the performance of project managers.

A limitation of this study is that only three supervisors of business project managers participated in this study. Another limitation is that the interpretations of factors used to effectively evaluate the work of project managers by supervisors in various organizations may differ. Furthermore, the time limit of interviews that I had in this study of about one hour was a constraint. Marshall and Rossman (2016) accepted limitations similar to this study's limitations as credible constraints of the study that are normally out of the researcher's control. I recommend that a future similar study be conducted as a qualitative multicase study to have more participants and samples of organizations engaged in various industries. I also recommend a study with project managers themselves as respondents to get their perspectives to effectively and efficiently evaluate their job performances. Conducting a quantitative or mixed-methods study is another recommendation for future research.

My additional recommendations are to conduct a similar research study to determine the way project managers should be rewarded for extraordinary job performance and organizational leaders should recognize the project managers' achievements. Finally, I recommend that researchers conduct studies to identify the necessary competencies that business project managers must possess.

Reflections

I had enlightening experiences in the DBA program with a concentration in project management at Walden University. I learned that the goal of graduating as a Doctor of Business Administration is a monumental project in itself. I am very fortunate to have had a robust syllabus that required near perfection regarding adherence to the rubric. I learned to increase the quality of my study deliverables over the past 7 years of this doctoral study. I still admit that I have much room for improvement when it comes to adhering to the highest scholarly writing standards held by Walden University. There were times in which I struggled but the support from my doctoral study committee team and doctoral program colleagues kept me strong to continue in my quest for excellence.

I realized that, to achieve success in my study, I had to adhere to the highest level of ethical conduct and had to follow the policies and regulations mandated by the IRB regarding the protection of human subjects. I learned that communication is key for setting expectations before, during, and after the interviews while ensuring the confidentiality and integrity of participants and the data gathering process. I conducted the interviews according to the protocol, built mutual trust with the participants, and completed with a sense of professionalism and integrity.

By conducting this study, I gained a wealth of knowledge related to strategies supervisors of business project managers use to effectively evaluate the work of project managers. Before the start of the data collection, I believed that project managers were evaluated only on whether the project was completed on time, within budget, and according to the scope. After completing this research study, I learned that there are other

criteria to consider and that project manager's performance evaluation has to be conducted as a continuous process from initiation and as frequently as possible until the closure of the project.

Conclusion

The findings of this research study may be relevant to current supervisors of business project managers and the business project managers themselves, as project managers continue to play a vital role in various industries, both in the private and public sectors (Yin et al., 2019). Rajablu et al. (2014) argued that project management is an organizational strategic component that leads to innovation, value creation, and the realization of corporate strategic mission and vision. In this study, I found strategies for supervisors of project managers to evaluate and rate the efficiency and effectiveness of project managers during and after the completion or closure of a given project. The resulting themes may provide the community of project managers with greater motivation for, and insight to their business projects and stakeholder management activities. Supervisors of project managers should rate their project managers' performance accurately and fairly (Hanna et al., 2014; Yin et al., 2019).

The three supervisors of business project managers participating in this study were located in the Rocky Mountains area of the United States. The three participants responded to the interview questions, which allowed me to explore strategies they used to evaluate the performance of their business project managers. I analyzed the data gathered from conducting semistructured interviews and reviewing organizational documentation and artifacts to identify performance metrics. I conducted member checking and I

practiced discipline with my interview protocol to give credibility to the results of this research study.

Millhollan and Kaarst-Brown (2016) perceived project managers differently from regular managers because project managers require different skills. Millhollan and Kaarst-Brown explained that project managers are often the scapegoats when projects fail, which may explain the need to emphasize the use of effective evaluation criteria to assess the work of business project managers. Finally, this study's finding align with current literature and the BSC theory. BSC practitioners offered valuable insights regarding the manner in which organizational leaders can use knowledge management to enhance strategic thinking. Organizational leaders could use performance management tools, such as the BSC, to translate the executive leaders' strategy into operational terms, making it easier to understand throughout the organization (Kaplan & Norton, 1996). Business projects cover many areas that involve positive social change, including water, transportation, electricity, sewage, energy, nutrition, health, education, and social and urban development (Ika & Donnelly, 2017).

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Appendix A: Interview Questions

1. What strategies did you use to effectively evaluate the work of your project managers?
2. How did your project managers respond to those strategies?
3. How did you assess the performance metrics used to evaluate the work of project managers?
4. What modifications did you apply to any strategy to improve its effectiveness in evaluating the work of your project managers?
5. What barriers did you encounter when implementing strategies to effectively evaluate the work of your project managers?
6. What else would you like to add about strategies to effectively evaluate the work of project managers?

Appendix B: Interview Protocol

Interview Protocol

Strategies for Performance Evaluation Criteria for Project Managers

The purpose of the study is to explore strategies supervisors of business project managers use to effectively evaluate the work of project managers.

Interviewee: _____ Location: _____

Date: _____ Time: _____

Notes:

1. Greet interviewee and introduce myself.
2. Provide overview of the study and indicate the usefulness of the outcome.
3. Obtain signed Consent Form in duplicate, I will keep the first copy and give one copy to the participant.
4. Offer to answer any questions that interviewee may have.
5. Remind interviewee about their volunteer efforts to participate in the study.
6. Remind interviewee about recording the interview.
7. Start the recorder.
8. Start the interview by recording interviewee's pre-assigned coded name, date, time and location.
9. Restate the overarching research question.
10. Start asking interview questions. Allow enough time to answer those questions.
11. Listen carefully to interviewee. Ask probing and follow-up questions, if needed.

12. At the end of the interview set up member check and company document review appointments and thank interviewee for their participation and time.
13. Provide participant your contact information if they have any questions.