2021

Strategies for Improving Performance of Project Managers in Ghana to Reduce Delays

Degraft Gyan Kwafo
Walden University

Walden University

College of Management and Technology

This is to certify that the doctoral dissertation by

Degraft Gyan Kwafo

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

Review Committee
Dr. Kimberly Anthony, Committee Chairperson, Management Faculty
Dr. David Bouvin, Committee Member, Management Faculty
Dr. William Shriner, University Reviewer, Management Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2021

Abstract

Strategies for Improving Performance of Project Managers in Ghana to Reduce Delays

by

Degraft Gyan Kwafo

MPhil, Walden University, 2019

MSc, University of Phoenix, 2010

BS, University of Cape Coast, 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

July 2021

Abstract

Compelling evidence signified persistent challenges of project managers regarding project failures in Ghana. Lack of proper alignment of business strategies largely contributed to project failures. A major concern of project managers in Ghana was that the nonalignment of business strategies and project management processes leads to project delays and cost overruns. The purpose of this qualitative exploratory multiple-case study was to identify strategies project managers of government-funded projects in Ghana used to align business strategies with project management processes to improve performance. This study was framed by the Hoshin Kanri process. The study aimed to understand how aligning business strategies and project management processes could improve performance. The research gap and problem were addressed using data collected from 10 project manager participants, field notes, data entries for reflexivity, and insight from subject matter experts. Critical analysis of the textual data and the cross-case synthesis analysis yielded three conceptual themes. The themes were (a) cultivate staff, (b) make a plan, and (c) monitor progress. Furthermore, eight subthemes emerged, including (1) consider staff welfare, (2) provide training, (3) provide incentives and consequences, (4) good project management, (5) ensure funding, (6) inspecting sites, (7) involve the community, and (8) use of technology. Implications for social change include the need for better project management approaches, including the use of technology for remote site inspection and providing benefits and incentives to project managers and workers beyond what is common today.

Strategies for Improving Performance of Project Managers in Ghana to Reduce Delays

by

Degraft Gyan Kwafo

MPhil, Walden University, 2019

MSc, University of Phoenix, 2010

BS, University of Cape Coast, 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

July 2021

Dedication

I give all glory to God for giving me perseverance, security, and the strength to lean on Him to embark on and complete this doctoral study. I dedicate this study to my dear wife, Akua Kunadu Kwafo, for her love and support throughout this journey by providing a conducive environment for me to study to achieve this great milestone. I also dedicate this research to my children, Prince Kwafo, David Kwafo, Michelle Kwafo, Heather Kwafo, and Lisa Kwafo, for their support, prayers, and motivating me to achieve this milestone.

Acknowledgments

I want to thank the entire Walden community for their support during this doctoral study. My special gratitude goes to my chair, Dr. Kim Anthony, who provided me with incredible guidance, encouragement, and support whenever needed during my research study. I also thank Dr. David Bouvin (my committee member and methodologist) and Dr. Bill G. Shriner (my university research reviewer) for their extraordinary support during my dissertation. To all faculty, academic advisors, and colleagues, I say thank you for sharing your knowledge and enhancing my ability to complete this research. I also want to thank my beautiful wife, Akua Kunadu Kwafo and my sons and daughters for supporting me in prayers and encouraging me during difficult times. I want to thank my mother, Comfort Asieduwaa, and my extended family members for their support and prayers. Finally, I want to say a big thank you to my friends for their encouragement throughout this journey.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Ghana's construction industry is among the most significant economic sectors contributing to employment and gross domestic product (GDP). According to Famiyeh et al. (2017), as of 2018, the average share of Ghana's GDP attributable to the construction sector was approximately 14.34%. A study by the Social Security and National Insurance Trust (2020) suggested that between 2014 and 2018, more than 4,000 government construction projects were either stalled or abandoned by the contractors. However, there was limited literature regarding project delays in Ghana's construction projects (Mpofu et al., 2017). I aimed for this study to identify strategies project managers of government-funded projects in Ghana used to align project management strategies with business processes.

A clear description of the strategies would help develop recommendations on how to drive social change. Ultimately, with this study I sought to contribute towards Ghana's economic development by providing guidance that would promote projects within budget, on schedule, and with quality constraints (see Shah, 2016). Coffee et al. (2019) contended that completion of projects within the stipulated time constraints should facilitate timely service delivery to citizens and reduce the economic burden on citizens by lowering construction costs. With this research I aimed to describe how project managers in Ghana's construction sector aligned their project management strategies with the business process. Chapter 1 discusses the problem statement, purpose statement,

research question, conceptual framework, the study's significance, assumptions, nature of the study, definition of contextual terms, limitations, scope, and delimitations.

Background of the Study

Compelling evidence illustrated the cost overruns and delays in the Ghana construction sector (Amoatey & Ankrah, 2017; Shah, 2016). Generally, recent studies have indicated a gradual increase in the failure of government construction projects in Ghana (Shah, 2016). Coffie et al. (2019) argued that approximately 47% of government construction projects are likely to delay due to cost, time, and quality constraints. Additionally, many existing studies have attempted to explore the foundational causes of the gradual rise in project failures within the Ghana construction sector. Studies have indicated that most projects fail due to project management inefficiencies, especially project managers' inability to align strategies with business processes. According to a study by Coffie et al. (2019), a 12% increase in project delays and a 5.5% increase in cost overruns are attributed to the misalignment between project management strategies and business processes. Moreover, Famiyeh et al. (2017) found that 70% of Ghana's road construction projects experience significant delays, while 52% experience cost overruns. In the public and private sectors**,** 10% of the construction projects in the private and public sectors underperform due to an increased capital expenditure of 33% and delays of 31% respectively (Coffie et al., 2019). Notwithstanding the advancement in technology for project management of large construction projects, Coffie et al., (2019) argued that project performance and success have significantly improved**.** According to Shah (2016),

practical completion of projects has several benefits, including a flexible schedule to consider other projects. Similarly, Confonto et al. (2019) explained that different project management practices, including budgetary control (Coffie et al., 2019), quality assurance (Amoatey & Ankrah, 2017), workforce scheduling, and resource management are some of the critical considerations that projects managers have to take into account in meeting client needs.

According to Damoah and Kumi (2018), most project managers describe project success as a predictable endeavor that ensures projects are delivered successfully. Inaccurate description of project scope, noninvolvement by stakeholders, and misunderstanding among the project teams are likely to influence projects' success, resulting in cost overruns. Coffie et al. (2019) reported that compromised quality and reduced efficiency are likely to occur without effective strategies to manage construction projects. Confonto et al. (2019) and Agyekum-Mensah and Knight (2017) recommended the need for additional research to investigate strategies that project managers can use to enhance their performance and projects' success. This study provides an improved understanding of factors promoting the success of different construction projects in Ghana. This study was focused on the strategies that project managers in Ghana used to improve their performance and reduce cost overruns.

Problem Statement

While the construction sector contributes substantially to Ghana's economic growth, the industry has gradually increased project stalls, delays, and cost overruns for

various construction projects (Gbahabo & Ajuwon, 2017; Oyewobi et al., 2016). Existing studies, such as by Amoatey and Ankrah (2017), illustrated that more than 70% of Ghana's road construction projects experienced delays. Amoatey and Ankrah (2017) reported that at least 52% of road construction projects experience cost overruns. Although some project managers' inability to align their project management strategies with business processes is among the primary causes of project failure, there is a scarcity of literature that explicitly addresses this area from a solution-oriented perspective.

The general problem is that a cost overrun and schedule delay in Ghana infrastructure projects have damaging effects on the national economy by way of claims and litigation, contractual disputes, further delay on dependent tasks, and project abandonment (Gbahabo & Ajuwon, 2017; Oyewobi et al., 2016). In particular, most existing studies acknowledge project management inefficiencies, including project managers' inability to align their strategies with business processes (Amoatey & Ankrah, 2017). Unfortunately, Ghana's project managers focus on the adverse effects of the inefficiencies on Ghana's construction sector in terms of delays and overruns and the economy through a rise in unemployment and a decrease in GDP. The specific problem is that many project managers in Ghana assigned to lead infrastructure projects may be failing to align business management strategies with management practices to mitigate project schedule delay and cost overrun (Azali & Tomba, 2018; Kangwa & Ebohon, 2019). There is a lack of multiple studies that explicitly focus on describing how project managers in Ghana's construction sector align their strategies with business processes.

Purpose of the Study

The purpose of this qualitative multiple case study was to explore the key strategies that project managers use to improve the performance of different projects to reduce cost overruns, especially regarding the publicly funded projects in Ghana. While emerging countries such as Ghana expect to grow two times faster than developed countries, such as the United States, a recent report shows that the main contributor to this enormous growth is the quadrupled number of large public projects in these countries (Famiyeh et al., 2017). Although project management in Ghana has shown a permanent improvement in recent years, public project managers still adopt widespread inefficient management practices that negatively affect the economy (Amoatey & Ankrah, 2017). This study included 10 project managers sources from a list of 800 people working in three construction companies in Ghana. The implication for positive social change from this study resulting from increasing success rates of construction projects is improved human capacity development and infrastructural growth, which can spur economic growth. To achieve this purpose, I adopted a qualitative case study approach (see Merriam & Tisdell, 2015; Yin, 2017). The data collection method was through semistructured interviews as well as secondary sources.

Research Question

The overall research question was:

RQ: What were the strategies project managers of government-funded projects in Ghana used to align business strategies with project management processes to lessen project schedule delay and cost overruns?

Conceptual Framework

Scholars have noted a primary concern facing the Ghanaian community and the government regarding project delays and cost overruns (Amoatey & Ankrah, 2017; Damoah & Akwei, 2017). In an era in which the government intends to establish infrastructure projects in every district, project delay can be a significant setback. However, few studies have examined how project managers overseeing urban planning projects can align business strategies with the project management process. I adopted the Hoshin Kanri (HK) policy development theory for the present study to explore the current phenomenon. According to Akao (1991), HK is a systematic approach to integrating organizations' daily activities with strategic goals. Nicholas (2016) noted that HK used a systematic vertical and horizontal communication process to connect managers and employees, aligning them with set goals and vision. Mok et al. (2018) identified four HK components:

- Stakeholder involvement
- The use of improvement and planning tools
- Appropriate selection of organization priorities
- Adoption of an effective review process

The four components identified by HK may provide an elegant way for project managers to align business practices to project management strategies to performance in various ways:

1. The alignment involves ensuring that everyone in the organization is well-informed about the organizational set goals and how to achieve them.
2. There are three critical terms corporate leaders may focus on based on the long-term strategies and the organizational vision.
3. Senior management can adopt a strategic review process and periodically track project milestones throughout the implementation period.

Given the above benefits, the HK is useful to explore the approaches that project managers use to align project objectives with organizational goals to enhance project efficiency and performance.

Project delays and cost overruns are more prevalent among large projects in the infrastructure sector in Ghana. Studies have shown that project managers have primarily focused on traditional controls (Eriksson et al., 2017). On the other hand, recent studies have suggested using flexible strategies to manage projects that align with various business strategies and processes (Azzali & Tomba, 2018; Nicholas, 2016). Project managers overseeing large projects in Ghana frequently downplay project requirements in terms of time and resources, a situation that has continuously led to the stalling of critical projects in the country (Azzarelli & Tomba, 2018). Proper alignment of the project management process with business strategies using the HK conceptual framework

can help project managers to meet the set goal and avoid project delays and cost overruns.

Nature of the Study

The study's nature was qualitative to ensure that the proposed method aligned with this study's purpose and provided adequate research questions. The present study's purpose required a clear understanding of how project managers of government-funded projects in Ghana aligned business strategies with project management processes in government-funded projects to reduce project schedule delay and cost overrun. Consequently, I employed a qualitative multiple case study to realize the research objective. Previous researchers have widely used a qualitative, multiple case study approach to explore individual experiences in a given context (Cooper & White, 2012; Yin, 2014). In this study, I used a qualitative, multiple case study approach to identify strategies for improving Ghana's project managers' performance to reduce project delays.

A qualitative strategy allows the researcher to conduct an in-depth exploration of the current topic using individuals who have practically supervised significant projects in the country with high success rates (Alotaibi et al., 2016; Harkiolakis, 2017; Kumar & Thakkar, 2017). In effect, a qualitative approach assists in describing the success strategies of managing projects in Ghana and avoiding the unnecessary delay that is too costly, both to the clients and contractors. Using this approach was consistent with the research problem of the lack of qualitative studies that examine strategies for improving project managers' performance in Ghana. The approach suited the study because

qualitative studies are beneficial in gaining deeper insights into individuals' thoughts, opinions, views, and perceptions of their natural situations, including the strategies that project managers in Ghana used to reduce project stalemates (Alotaibi et al., 2016; Harkiolakis, 2017).

Qualitative studies are not concerned with quantifying information; instead, they are predominately used to create new knowledge and explore its meaning. In this case, there had been no scholarly literature examining the strategies for improving the project manager's performance, particularly in Ghana. I chose this study's qualitative approach because the quantitative research method was not appropriate to address the study's purpose because a qualitative case study does not call for statistical relationship testing, operationalization, or experimental variable manipulation (Eisenhardt & Graebner, 2007; Fusch & Ness, 2015).

Regarding location and settings, the present study was in Ghana. I aimed for this study to identify strategies project managers in Ghana used to align business strategies with project management processes to improve Ghana's infrastructure project performance. I selected Ghana because it has a high proportion of stalled projects that substantially impact taxpayers. Bell et al. (2018) recommended purposeful criteria and network sampling to recruit participants for a study. I screened participants using the following criteria: (a) project managers with 3 years of experience, and (b) adults over 18 years of age. I conducted 10 in-depth face-to-face interviews with participants purposefully recruited for this study. Schram (2006) confirmed that participants' small

sample size is necessary for in-depth investigation in qualitative studies. I applied Yin's cross-case synthesis data analysis method to the data collected for this multiple case study (Yin, 2017). Furthermore, I triangulated interview data themes with data from the field.

Definitions

Alignment: Alignment in this study referred to the ability of all stakeholders in the organization to agree to work towards the same goals and objectives (Al Sudairi et al., 2013).

Business strategy: According to García-Melón et al. (2015), business strategy refers to a comprehensive plan indicating how the corporation will achieve its mission and objectives.

Cost overrun: Gunduz and Maki (2018) defined cost overrun as cost increase or budget overrun. In this paper, the term referred to an unexpected increase in cost due to project delays.

Economic growth: This term refers to an increase in the inflated-adjusted market value of resources created by an economy over a period often measured as a percentage increase in an economy’s gross domestic product (Hudson, 2015).

Ethnic culture: This term refers to the original, heritage, or traditional culture of a multicultural or bicultural population (Shah, 2016).

Global organization: This term refers to an organization that operates across geographically dispersed and culturally diverse zones (Haas & Cummings, 2015; Lisak & Erez, 2015).

Hoshin Kanri: HK refers to a systematic approach integrating the daily activities within an organization with the strategic goals (Nicholas, 2016).

Project management: Project management is the activities, skills, tools, techniques, and application of knowledge to project activities to meet project needs and goals (Project Management Institute [PMI], 2013).

Project management process: The project management process refers to the regular activities and undertakings performed to produce a prespecified product, service, or result (PMI, 2013).

Project success: Project success is a strategic management concept in which project managers align short-term goals with long-term goals (Kumar, & Thakkar, 2017).

Project claim: This term, also referred to as construction claims in the document, refers to an additional request in terms of time or cost between parties to a construction contract arising as a result of various issues not limited to delays, unforeseen circumstances, changes to project, and conflict (Dastyar et al., 2018).

Project delay: This term sometimes refers to the difference between the actual progress of a construction project and the planned schedule of the project (Rao et al., 2016).

Project failure: This term, as used in this document, refers to the inability of a project to meet the expected/proposed deliverables (Dastyar et al., 2018). Often, this is summarized in the triple project constraint of time, quality, and cost (PMI, 2013).

Project manager: This term refers to the person assigned to lead the overall planning and execution of a project (Alvarenga et al., 2019).

Assumptions

Armstrong and Kepler (2018) defined assumptions as the beliefs a researcher considers accurate that are often beyond the researcher's control. Firstly, I assumed that the study participants would provide truthful, detailed, and honest responses during the interview questions. Another foundational assumption was that the selected participants would be reflective enough to remember their past project management strategies and accurately describe them. Secondly, I assumed that the qualitative case study selected would be suitable for this study in helping to meet the goal. Thirdly, I assumed that daily interactions and social demands would significantly influence participants' responses, particularly effective project management strategies. Fourthly, I assumed the study participants would have first-hand stories and experiences of critical strategies that could help with overseeing the timely implementation of public projects at the time of the study. Each of the above assumptions was key for understanding the sample strategies that managers in the public sector used to improve their performance and reduce project delays. The assumptions also helped me limit the study to its scope and gain an in-depth understanding of the critical strategies that project managers in Ghana used to ensure

projects were completed within the scheduled time frame, especially for projects funded by the government.

Scope and Delimitations

In the present study I sought to explore the strategies used by project managers in Ghana to improve their performance. The study was focused on approaches and methods that the project managers used to promote the effectiveness and completion of projects within the set deadlines, particularly in the public sector. The topic was worth investigating because taxes fund most Ghanian projects, and their incompletion has damaging effects on the economy. The present study was limited to the perceptions, views, and opinions of the sampled project managers in Ghana regarding scope and delimitations.

Project managers who did not oversee government-funded projects were not part of this study. The second delamination was that this study is limited to a convenience sample of participants that meets specific recruitment criteria. In this case, the study only used a selection of project managers in the Ghanaian public sector. Thirdly, I limited data collection, analysis, and interpretation to participants' ability to recall and reflect on their experiences while overseeing project implementation in Ghana. A sample of 10 project managers in the Ghanaian public sector participated in this study because there were not enough time and resources to interview all project managers in Ghana.

Limitations

Research limitations define the design characteristics or methodology and impact or influence the interpretation of research findings (Merriam & Tisdell, 2015; Yin, 2017). The study's first limitation was using a highly homogenous sample because I recruited study participants from the same location and industry. In particular, the interviews were only focused on project managers overseeing government-funded projects in Ghana while ignoring the views of project managers in the private sector. Subsequently, their personal opinions and ideas relating to the alignment of various projects with business processes and goals may not have reflected all project managers' overall views in the country. Another limitation related to the contrasting views of what constitutes an effective alignment of the projects' demands with organizational processes, goals, and objectives as managers' opinions overseeing public projects may differ from the underlying motivations in the private sector.

A third limitation related to the scheduling variability, such as time and unforeseen social demands that were likely to limit practical analysis of all interviews conducted. A fourth limitation included the use of a limited sample size. According to Schram (2006), although five to 10 participants were needed to run an associated investigation of this topic, a maximum of 12 participants were considered for this study. Notwithstanding the latter, I used a sample size limited to the research. The maximum number of participants considered for this research may limit the chances of obtaining more research participants. Nevertheless, the participants in this study aligned with the 10

recommended by Schram (2006) and the eight to 10 participants recommended by Boddy (2016), which are adequate to provide enough units for a case study.

Significance of the Study

Scholars and practitioners have repeatedly reported the detrimental consequences of project delays and cost overruns in Ghana (Amoatey & Ankrah, 2017; Shah, 2016). Recent studies have investigated the causes of project delay and cost overruns among project managers in Ghana (Amoatey & Ankrah, 2017; Damoah & Akwei, 2017). However, no specific study has evaluated how nonalignment of business strategies and project management processes can affect project delay and cost overrun. The present study holds significance because the findings may address the current gap in how the nonalignment of business strategies and project management processes can affect project delay and cost overrun in Ghana.

Significance to Practice

The findings may significantly contribute to existing theoretical literature in project management regarding aligning business strategies and project management processes for infrastructure project management. By addressing this area, the study may subsequently offer recommendations on how to increase the project success rate in Ghana. This study's outcome may also advance Ghana project managers' understanding of the need to align business strategies with management processes to improve performance (Adam et al., 2017). The findings derived from the present study may also help project managers in the Ghanaian public sector be more productive and achieve the

planned project results with the set deadlines. By emboldening project managers in Ghana to nurture a project management culture that suits various projects, the present findings may support them in their understanding of the importance of integrating project management culture in implementing multiple projects. The knowledge may be critical in promoting the benefits of aligning project management strategies with the prevailing organizational culture.

Significance to Theory

Zidane and Andersen (2018) indicated that an in-depth study must be conducted on a country-by-country basis to extend project management theory on factors that generally contribute to project delays. Most construction projects fail worldwide due to diverse reasons (Zidane & Andersen, 2018). Unfortunately, the problem with delays continues, although modern technologies exist to assist the project manager in understanding management techniques (Mok et al., 2018). Over the last 40 years, scholar-practitioners and researchers have identified the possible causes of project delays. Studies have indicated that problems with project delays differ among countries, including factors such as working cultures, environment, stakeholders, management style, the government policy, methods of construction, economic situation, availability of resources, constitutional provisions, and diverse standpoints of researchers (Akhund et al., 2018; Shahhosseini et al., 2018).

While studies exist regarding factors leading to project cost overruns from diverse academic scholars and researchers (Adam et al., 2017; Gbahabo & Ajuwon, 2017), none

of them have addressed why project managers and practitioners in Ghana cannot effectively align business strategies with project management processes to improve performance (Famiyeh et al., 2017). There was a literature gap regarding aligning management processes with business strategies for improving performance (Amoatey & Ankrah, 2017). The knowledge gain in this study may promote an active management culture aimed at enhancing Ghana infrastructure projects. The urgent need to improve Ghana's infrastructure projects has resulted in project delays over the years.

Significance to Social Change

Agyekum-Mensah and Knight (2017) posited that infrastructure projects in the construction industry are how countries and societies accomplish their economic development goals. Shah (2016) mentioned that completing projects within the scheduled time would contribute to economic growth and development and increase the economy's standard of living. The Ghanaian government has launched the national development program, One District One Factory (Mensah et al., 2020*).* This initiative was intended to spur the building of factories in all 260 districts in Ghana to provide employment.

The project manager's ability to accurately align business strategies with management processes may prevent project delays, lower cost overruns, and offer employment opportunities for Ghana's citizens. Completing planned infrastructure investment may generate wealth for society, leading to improved living standards for residents (Djukic et al., 2016). Agyekum-Mensah and Knight (2017) revealed that enhancing a country's infrastructure index by 10% can bring about a 5%, 3.7%, and 7.8%

reduction in child mortality rate, infant mortality rate, and maternal mortality rate, respectively. Social change and a positive outlook are hopeful in Ghana should project managers engaged in Ghana infrastructure projects drive project success by properly aligning business strategies with project management processes to improve performance (Famiyeh et al., 2017). Gbahabo and Ajuwon (2017) indicated that most projects fail due to a lack of management skills and the complexity of some projects. Kumar and Thakkar (2017) showed that schedule delays and cost overruns often lead to various adverse effects on economic growth and substantial financial losses in most cases.

Summary and Transition

Chapter 1 of the study provided an introduction and background for developing a conceptual framework and, subsequently, the research question. While researchers have found the main factors leading to project cost overruns, there is a literature gap on how aligning business strategies with project management processes can reduce project delays and improve performance (Amoatey & Ankrah, 2017; Shah, 2016). Scholars and practitioners have repeatedly reported the detrimental consequences of project delays and cost overruns in Ghana (Amoatey & Ankrah, 2017; Shah, 2016). Previous researchers have often evaluated and investigated the causes of delay in various project types and possible mitigation for the identified delay.

Three major business management concepts informed this study: policy management, organizational citizenship, and performance evaluation, all of which are well suited to be examined through the lens of the HK policy development theory (Chau

& Witcher, 2005). Chau and Witcher (2005) built a FAIR strategic framework using four major business management concepts of Focus. However, this unique study categorizes most delay events under the umbrella of nonalignment of business strategies with project management processes driving most cost overruns. In Chapter 2, the critical literature review shows the trend in project delay and cost overrun, including but not limited to its causes, its impact on project stakeholders, and its effect on project success. This review evaluates various approaches to align business practices with project management processes and how their implementation can improve the project success rate.

Chapter 2: Literature Review

Although construction projects contribute to the Ghanian economy's growth (Famiyeh et al., 2017), studies have indicated that many projects are often delayed (Al Sudairi et al., 2013; Amoatey & Ankrah, 2017; Shah, 2016). Studies have indicated that misalignment of the project managers' strategies with a business process can result in cost overruns, reduced business profit, lower productivity, loss of market share, and increased management workforce turnover (Confonto et al., 2019). The purpose of this qualitative exploratory multiple case study was to identify managers' perceptions regarding strategies project managers in Ghana used to align business strategies with project management processes to improve performance. Shah (2016) indicated that completion of projects within the scheduled time can contribute to economic growth and development and increase the standard of living of a country's citizens. Chapter 2 includes a critical analysis of the literature that I used to ground the study.

Literature Search Strategy

My objective for the literature review was to examine existing academic and professional literature on the global challenge of project schedule delay and project cost overrun and their damaging effect on project stakeholders and society at large alongside academic literature on project managers' roles in project delays. The literature review discussed a detailed perspective of project cost overruns and schedule delays from diverse research. According to Alotaibi et al. (2016), the strength of a literature review analysis is contingent on selecting and assessing the foundational references that build a

knowledge base to justify and validate the study purpose. Similarly, Pedrini and Ferri (2019) noted that conducting a literature review should be an exhaustive process in which the researcher analyzes the study topic's literature. I reviewed several kinds of literature to locate the required sources for the literature review.

I used several databases for this critical academic and professional literature review: Business Sources, ProQuest, Science Direct, Walden University Library, Research Gate, SAGE Premier, Emerald Management Journals, EBSCOhost Scholar, and Google. Primary search keywords involving multiple combinations of words used for retrieving relevant articles, previous dissertations, and professional journals related to the research problem and conceptual framework. The search terms were *business strategy, project leadership, project management, project performance, overruns, project delays, alignment of project management with business strategies, project critical success factors,* and *project management strategy.* I used the search results generated using different topics and keywords to identify the following areas relevant to the present study: communication, stakeholder engagement, motivation, and performance management. The sources used in the study were intended to ensure accuracy. I used resources that were published within the last 5 years as required by Walden University. I relied on current resources because up-to-date resources help develop a broader perspective of the topic and to overcome the longitudinal effects of older sources. I did not use older articles related to the topic of the present study.

My goal for the literature review was to review the literature relating to business strategy alignment with management processes in public infrastructure projects to mitigate the risk of schedule delay and cost overrun. Coffee et al. (2019) suggested that there is limited data about how project managers in Ghana's construction sector align their strategies with business processes. My goal was to reveal the increasing trend in schedule delay and cost overruns leading to increased project failure to ground the general management problem. I also sought to identify any gaps in the literature. During the literature review, I found no peer-reviewed papers, journals, or professional papers exploring how project managers in Ghana's construction sector align their strategies with business processes. I used a search filter to comply with Walden University's minimum requirement of ensuring 85% of total resources being from peer-reviewed journals published within 5 years from the expected year of dissertation program completion in 2021, including a minimum of 60 peer-reviewed sources.

Conceptual Framework

In this study, I used HK, or the policy development theory, to identify how project managers in Ghana align project management processes with business strategies. HK, which translates from the original Japanese as "shining metal," and literally from the Kenji as "management or control," is a strategic management tool needed to achieve convergence by planning and executing organizational annual strategic goals while maintaining the long-term perspective or focus. HK originated in Japan in 1950 during a Quality Control exhibition sponsored by the Association of Science and Technology

(Akao, 1961**)**. Due to its appropriateness, HK was immediately sponsored and used as the foundational criterion in assessing and evaluating annual Deming prizes (Melander et al., 2016). Akao (1961) initially introduced the model in 1961 to give top managers the power and explicit authority regarding correctional management and aligning business strategies and operational goals, thereby facilitating the business's success (Giordani da Silveira et al., 2017**).** The practices of planning and deployment are the most critical elements of the HK model, including generating targets and developing processes to realize the targets (Nicholas, 2016).

The present literature showed that, at first, most Japanese companies used the HK technique in an ad-hoc manner by primarily developing systems or policies related to management practices only. A few years later, the Tire Company developed HK as an invaluable component of total quality control in 1962. The HK model is a companywide holistic and long-term management strategy for policy control. In the late 1970s, the HK model was widely recognized and accepted by most companies in Japan, and its philosophy began to spread to the Western countries in the early 1980s (Nicholas, 2016). Introducing the HK model in Ghana marked the initial attempt in business breakthrough activities without including process breakthroughs that could improve companies' desired outcomes or results (Nicholas, 2016).

The model has three alignment processes. The first is aligning all people in the organization with the set goals. This coordination and alignment of people create a sense of urgency among the people. The conceptualization of a shared goal helps employees in

businesses, including project managers, focus on strategically essential activities (Nicholas, 2016). The second alignment process includes aligning all jobs and tasks, whether routine or nonroutine, by focusing or coordinating critical resources to accomplish critical goals (Tortorella et al., 2019). The third alignment process includes aligning the firm's strategies with the societal or environmental changes that may impact the company's implementation of critical projects (Nicholas, 2016). The HK offered these three business alignment approaches to concentrate on improving a firm's performance and productivity, aligning personal goals with the firm objectives, involving employees in policy formulation process rather than total adherence to superiors' directions, emphasizing the periodic review of all process in the business at a given interval instead annually to ensure they align with business needs, and recommending the use a structured approach to solving problems in the organization (Melander et al., 2016; Tortorella et al., 2019).

I used the HK theory because project management entails breaking down long-term visions and goals into short-term actionable milestones toward various projects' ultimate success (Nicholas, 2016). I selected the model because it seamlessly harmonizes with the day-to-day operations in organizations, including practices that impact project implementation (Nicholas, 2016). The HK model plays a significant role in policy formulation at the corporate level. The HK model has had an indelible impact on aligning project objectives with company goals, including integrating all stakeholders (Nicholas, 2016). At this level, project managers can influence policies geared toward high

performance project improvements or suggest critical changes compatible with business processes and practices (Tortorella et al., 2019). The HK model can be used to help stakeholders understand the extent to which corporate-level policies impact project success.

Business managers tend to focus only on critical medium-term priorities or breakthrough objectives regarding the firm's vision. By concentrating on a limited number of objectives, project managers can use HK and develop a realistic approach to facilitate project success in different phases (Tortorella et al., 2019). However, overemphasis on long-term needs may cause deviations in project success when implementing various projects (Nicholas, 2016). In this context, project schedule overruns in Ghana may be responsible for the gap between short-term and long-term priorities. Project managers have used the HK model to understand how to align their day-to-day operational objectives with the firm's long-term strategies. I also selected the HK model because it may help managers align individuals' goals with the project's priorities from the initial phase to its completion stage through actionable and measurable plans (Nicholas, 2016).

Literature Review

Despite construction projects' contribution to the Ghanian economy's growth (Famiyeh et al., 2017), studies have indicated that projects do not complete as scheduled (Agyekum-Mensah & Knight, 2017). Studies have suggested that misalignment of the project managers' strategies with a business process can result in cost overruns, reduced

business profit, lower productivity, loss of market share, and increased management workforce turnover (Alvarenga et al., 2019). The purpose of this qualitative exploratory multiple case study was to identify how project managers of government-funded projects in Ghana align project management processes with business strategies to improve performance.

The Role of the Project Manager in the Construction Sector

Waheed (2016) mentioned that the role of project managers in the construction business could apprehend from a clear understanding of project management in totality. The global regulatory body for project management practice, PMI, defined project management as planning and controlling resources deployed to a project and during a project life cycle (Abyad, 2018). Significantly, project management is the process of using a methodological approach to attain a pre-identified goal within a predefined budget, time, and quality. Project management plays a vital role in the construction industry despite its existence in the construction and engineering industry (Zuo, Zhao, Nguyen, Ma, & Gao, 2018). As outlined by the PMI, project management comprises five processes: initiation, planning, execution, monitoring and controlling, and finally, project closure (PMI, 2013).

Qualitative research completed on 109 project managers in the Vietnamese construction industry on project management concluded that project management on its own is a form of skill and knowledge that can be acquired to ensure its effective practice (Zuo et al., 2018). Another exploratory qualitative study by Gbahabo and Ajuwon (2017),

based on extensive secondary data, including peer-reviewed journals and study reports, found inadequate project management skills detrimental to project success. This understanding aligns with PMI's project management knowledge, which draws on ten areas: integration, scope, time, cost, quality, procurement, human resources, communications, risk management, and stakeholder management (Alotaibi et al., 2016). As a practice, project management is often deployed in organizations to effect an organization's changes (Kerzner, 2014). The heterogeneous nature of projects requires modern techniques to achieve project goals; hence, there is a need for heterogeneous and dynamic team members (Larsson, Eriksson, & Pesamaa, 2018).

Following critical literature review and analysis of quantitative data from 73 project managers in the context of relationship management from the United Kingdom Meng, Boyd (2017) concluded that the role of the project manager in the construction sector can be likened to that of a facilitator and is grounded in the understanding of project management process and knowledge area. The project manager is responsible for handling and managing the overall construction project from the initiation down to project closure (Damoah & Kumi, 2018). The empirical evidence presented by Jovanović and Jovanović (2018), in their qualitative investigation of traditional project managers' roles, found that beyond the project itself, the project manager's role extends to management of internal and external stakeholders, including client and organization's expectations. The project manager's role in the construction sector comprises six main categories indicated by Dziekoński, 2017; Jovanović and Jovanović (2018) as staff

management, creating a benchmark, communication, planning, resource distribution, and budget management.

Project Cost Overruns and Schedule Delays

From a general perspective, the construction sector is highly dynamic, complex, and multifaceted (Abusafiya & Suliman, 2017; Gbahabo & Ajuwon, 2017). Though risks are pervasive in all the economic sectors, the construction industry stands out as the most vulnerable to critical challenges to cost overruns, schedule delays, and compromised quality of final deliverables. Alexander, Mazzuchi, and Sarkani (2017) reiterated that budget and schedule overruns are the most common challenges that project managers struggle with within the new construction sector, regardless of modern technological tools designed to ease complex projects. Cole (2017) indicated that project managers are indispensable in the construction sector to complete projects within the schedule while integrating quality concerns and budget constraints (Gbahabo & Samuel, 2017; Habibi, Kermanshachi, & Safapour, 2018).

A survey conducted by Heravi and Mohammadian (2017) found that project managers' greatest fears include timely completion of projects, the quality of the final deliverables, and the possibility of project failure due to budget overruns. While the point mentioned above may be right, project failure cases are still rampant in the new construction sector despite the increased awareness that project managers have concerning the detrimental impacts of project overruns on their financial position and reputation (Pall, Bridge, Skitmore, & Gray, 2016). For instance, a recent study indicates

that at least 55% of Malaysia's construction projects have relatively higher cost overruns than projects in other sectors (Al-Hazim, Salem, & Ahmad, 2017; Taofeeq, Adeleke, & Hassan, 2019). The study findings show that cost overruns positively correlate with the project's size (Al-Hazim et al., 2017). Heravi and Mohammadian (2017) contend that estimating the budget and schedule for more significant projects is more complicated than doing the same for smaller projects to account for such findings. Due to the frequent variations in project size and requirements, project managers make wrong estimates and forecasts when handling big projects. This argument is incomplete as it does not account for the much lower budget and schedule overruns of significant projects in other sectors apart from the construction industry. In essence, if project complexity is the core reason for budget and schedule overruns in the construction sector, then the same should apply to big projects, both in private and public sectors (Safapour, Kermanshachi, & Taneja, 2019).

Previously, studies did not provide practical recommendations on how project managers can prevent budget and schedule overruns when handling public sector projects. According to Taofeeq et al. (2019), past literature did not include practical recommendations for managing public projects that can contribute to over-reliance on exploratory and descriptive methodologies. Usually, but not uniquely, descriptive studies mainly identify the main characteristics of project management or attributes of project managers within the construction sector while ignoring an analysis of the factors that can promote the performance and success of projects in the public sector (Coffee et al.,

2019). Adam et al. (2017) conducted a systematic literature review approach, which is fundamentally explorative on project management issues in the public sector. The study revealed three key issues that often derail effective management of different projects: ineffective site management, poor project planning, and procurement issues (Adam et al., 2017). Notably, 25% of studies conducted by Amandin and Kule (2016) had no recommendations on how project managers can overcome cost and budget overruns.

Most importantly, Amandin and Kule (2016) did not consider the possible implications of geographical factors likely to affect project success. In the majority of cases, the studies conducted in different geographical locations may not yield similar results. Perhaps many studies that Amandin and Kule (2016) explored had been conducted in the exact geographical location. However, the content of this study did not indicate how homogenous the study sample was. The main aim of the study by Amandin and Kule (2016) was to discover how many studies provided recommendations on overcoming budget and schedule overruns rampant in the public sector.

Existing literature also presents studies that attempted to quantify budget and schedule overruns. Ullah, Abdullah, Nagapan, Suhoo, and Khan (2017) found that large projects had schedule overruns exceeding four weeks. On the contrary, more minor to medium projects had an average schedule overrun of slightly more than three weeks (Ullah et al., 2017). These findings confirm the hypothesis by Cole (2017) that a project's size determines the extent of schedule and budget risks. An additional study by Amandin

and Kule (2016) has also confirmed that higher schedule overruns are more prevalent in larger projects than smaller or medium ones.

Heravi and Mohammadian (2017) found that approximately 58% of all public projects in Singapore had schedule overruns, with defects and required rework being the main factors. Cole (2017) also attempted to quantify budget overruns for construction projects. In his analysis, Cole (2017) used a sample of 276 construction projects and applied cumulative probabilities to estimate budget overruns. The study findings established that, on average, construction projects had budget overruns of 12.22%. By quantifying the average size of budget overruns, Cole (2017) provided a basis for project managers to make proper adjustments to their budgets during the planning phase to prevent projects in the public sector from stalling.

Studies that aim at quantifying project overruns are 'treating symptoms' rather than addressing the underlying issues. Ahady, Gupta, and Malik (2017) suggest that project overruns are the key derivatives of fundamental problems related to project management efficiency. Therefore, focusing on the 'symptoms' may not bring any substantive changes in project efficiency. Amandin and Kule (2016) indicated that prior researchers had not developed a standard and widely accepted solution for addressing project overruns common to mega projects in the public sector. While this may be true, a frequent change that applies to public projects may not be possible due to the differences in various projects' nature and complexities. Every project in the public sector is unique and requires a customized management strategy to overcome probable cost and schedule

overruns. According to Alexander et al. (2017), this calls for project managers to determine the specific underlying factors likely to cause project overruns. However, even though projects are different, Abusafiya and Suliman (2017) argued that there are possibly specific underlying causes of overruns common to most construction projects.

The argument that construction projects have specific similar underlying causes of overruns exists in the United Kingdom (UK), where contractors use common strategies for controlling time, cost, and quality (Hamid & Waterman, 2018). Contractors are likely to adopt similar approaches may fail to be effective, and project managers may fail to integrate the suggested control measures during the project execution process (Heravi & Mohammadian, 2017). The project manager's inability to follow project plans can lead to project delays and overruns.

Al-Hazim et al. (2017) suggested that the tested strategies may be incongruent with many projects due to differences in environmental and legal, and economic changes. Common errors associated with the contractor may include an inaccurate estimation of overall project cost, which has a far-reaching impact on a project's success. For instance, when a top-down budgeting approach is adopted, the project manager is confined to the initial value quoted for a given project. The project manager may not have any exclusive rights to adjust the costs of particular tasks or procurements. According to Safapour et al. (2019), there are two possible outcomes that project managers should expect when working under a constrained budget.

First, the project will significantly overrun when the project manager can no longer optimize costs for tasks and procurements. Therefore, in order to prevent the project from stalling, the project manager may request additional funding. Second, if the contractor and client fail to provide the extra funding necessary for completing the project, stalling is inevitable (Abusafiya & Suliman, 2017). Apart from failure on the contractor's part, the client may introduce changes that disrupt the defined initial budget and schedule. In such cases, the project manager can do little to complete the project within the defined budget and schedule. With this in mind, Alexander et al. (2017) argue that project managers are not responsible for project delays and failures. Instead, clients and contractors also contribute to their incompletion.

While the findings presented by Alexander et al. (2017) may be accurate, Alexander, Mazzuchi, and Sarkani (2017) argued that project managers' responsibility is to prevent reworks. Reworks are costly during the project execution phase compared to the planning phase. More specifically, no significant efforts to fund the project during the planning phase. The project's insufficient funding may not be accurate because the costs and effort required quadruple when the project proceeds to the execution phase (Adam et al., 2017). Foundationally, the extant literature consensus is that variations in projects significantly impact project success rate.

Increased variations, especially during the execution phase, translate into higher costs. In this regard, project managers need to avoid extreme variations that may result in budget and cost overruns. Studies have indicated that project variation does not always

hurt project success but how project managers handle projects (Adam et al., 2017). According to Alexander et al. (2017), project variations include negative and positive changes. Negative changes hurt project success. Undesirable variations may include high inflation that increases project costs and loss of critical human resources.

In turn, such variations induce delays in project execution as the recruitment managers take time to source qualified employees. On the other hand, positive changes may facilitate project success. Favorable variations may include negative inflation, which reduces procurement and labor costs, ultimately increasing the chances of completing the project with minimal overruns (Abusafiya & Suliman, 2017; Amandin & Kule, 2016). Important to emphasize, however, is that the existence of both favorable and unfavorable variations significantly influences the success of various projects in the public sector.

Leadership Strategies and Competencies in Project Management

Bernard Bass's theory of transformational leadership has established a robust bi-relational link between project success and leadership traits. Studies in the management field strongly suggest that project management leaders tend to influence their subordinates or followers in a given direction at all time, in this case, towards the attainment of specific milestones related to state-funded projects (Cleveland & Cleveland, 2020; Maqbool, Sudong, Manzoor, & Rashid, 2017; Podgórska & Pichlak, 2019; Zhao, Hwang, & Lee, 2016). Equally, Burrell (2019) noted that leaders or managers could transform their followers' thoughts, views, perceptions, and behavior towards achieving a specific goal. In doing so, leaders, particularly project managers,

may demonstrate, communicate, and do everything within their scope to ensure that the project team members align with the organization's goals (Cleveland & Cleveland, 2020; Zhao et al., 2016).

Project managers can adopt strategies that align with achieving specific milestones related to various projects in the corporation. Similar thoughts by Alvarenga et al. (2019) postulate that employees or followers go after their leaders due to their inherent qualities, honesty, and frequently admire to act in the same way their leaders do. In this case, the implication is that project managers with likable traits have the opportunity to mobilize their project team members and achieve specific targets. A good relationship between project management leaders and employees creates a strong sense of admiration that significantly impacts implementing different public sector projects (Cleveland & Cleveland, 2020; Maqbool et al., 2017; Zhao, Hwang, & Lee, 2016). Likewise, Burrell (2019) believed that an appropriate mix of transformational and transactional leadership traits could promptly influence stakeholders towards completing public projects. These components, which project managers can use to influence public projects' completion, include individual consideration, intellectual stimulation, inspiration, and idealized influence (Alvarenga et al., 2019; Maqbool et al., 2017).

Another landmark research to incorporate workplace safety elements in project leadership was (Ballesteros-Sánchez, Ortiz-Marcos, & Rodríguez-Rivero, 2019). The study provides an assessment of the key factors that project leaders must provide in the construction industry to warrant employee safety, which is critical in guaranteeing the

timely completion of various projects, both in the private and public sectors (Ballesteros-Sánchez et al., 2019). An evaluation of this conceptual study reveals two main categories into which the safety factors fall. The first category consists of standards and regulations developed and implemented at the management level (Maqbool et al., 2017). In contrast, the second category consists of guidelines and plans that apply at the project's functional level, particularly during the actual implementation of different projects (Maqbool et al., 2017; Zhao et al., 2016). Podgórska and Pichlak (2019) extended the scope by incorporating project management leadership in risk prevention through project design.

This concept entails continually reviewing the safety risks associated with particular projects and introducing corrective measures to minimize the potential risks. Early risk assessments and identification may prevent project delays, including overruns (Burrell, 2019). If the project leaders fail to identify threats initially before the project implementation, the chances are that addressing the threat may be far more than risk acceptance costs. Managers' inability to identity risk may cause project overruns and signify incompetence and unprofessionalism among the leaders, damaging their reputation (Tabassi, Argyropoulou, Roufechaei, & Argyropoulou, 2016; Zhao et al., 2016). Ultimately, employees' health and safety in a construction site primarily depend on whether the project leaders have identified and addressed safety issues in the initial stages (Alvarenga, Branco, Guedes, Soares, & Silver, 2019). In their conceptual study, Floris and Cuganesan (2019) further advanced the concept of project leadership safety through project design by proposing a framework for risk prevention in the construction

sector. The framework consists of three critical stages of risk anticipation that project leaders must consider, including project design, risk analysis, and planning of a preventive approach (Floris & Cuganesan, 2019).

Additionally, according to Ballesteros-Sánchez et al. (2019), project success should best be achieved through a guided leadership plan that focuses on critical stakeholders' needs rather than a standardized approach to oversee projects that have different requirements, purposes, and outcomes. Previous literature also highlights project managers' decisiveness in training stakeholders on handling various projects, including risk assessment resulting in overruns (Ahmed & Anantatmula, 2017; Alvarenga et al., 2019; Floris & Cuganesan, 2019). Leadership training in the construction industry, especially when implementing complex projects, is among the most explored subjects when executing a project (Maqbool et al., 2017).

Effective project leadership helps establish the foundational parameter in the realization of acceptable safety levels for different projects. However, given that numerous leadership styles exist, it is possible that leadership practices significantly influence project implementation in the public sector, including its ultimate success (Ahmed & Anantatmula, 2017; Cleveland & Cleveland, 2020; Zhao et al., 2016). Findings from recent studies have illustrated that transactional, transformational, and participatory leadership styles may predict different projects' success, whether in the public or private sector (Alvarenga et al., 2019; Ballesteros-Sánchez et al., 2019; Cleveland & Cleveland, 2020). Additional studies also demonstrate that transformational

and transactional methods are instrumental in establishing key management competencies that project leaders can use to enhance their performance in various projects (Ballesteros-Sánchez et al., 2019; Maqbool et al., 2017; Zhao et al., 2016).

Despite the above previous findings, there are still many unexplored areas in project management. For example, the role that strategic leadership has in prompting project success, particularly in Ghana. Previous studies have reported a strong correlation between project management competencies and project managers' overall obsessive passion for completing mega projects within the stipulated timeline (Ahmed & Anantatmula, 2017; Ballesteros-Sánchez et al., 2019; Floris & Cuganesan, 2019). In this regard, project managers need to consider their passion, competencies, skills, and performance to attain specific goals relating to individual projects.

There is a need for project managers to ensure that they undertake periodic training to gain the critical skills and competencies required to oversee public projects successfully (Tabassi et al., 2016; Zhao et al., 2016). When project team members are overly competent, there is a high tendency that project managers will lose the desire to encourage them to achieve specific goals (Ahmed & Anantatmula, 2017). As supported by Floris and Cuganesan (2019), such practices may lead to project delays and overruns, ending with frequent training and execution of relevant leadership strategies by the project managers. By focusing on regular training, project managers will be well-positioned to improve their competencies, skill base, capabilities, and performance, primarily when overseeing public projects in Ghana (Ahmed & Anantatmula, 2017).

Practical project management skills entail the leader's capability to communicate business strategy, business goals, take responsibility for various practices, improve project performance, and offer timely feedback. Besides, project management skills can help collective actions in technical and non-technical hitches (Ahmed & Anantatmula, 2017; Cleveland & Cleveland, 2020). A competent project manager must lead the entire project team to focus on the primary goals. Similarly, Ballesteros-Sánchez et al. (2019) contended that the project leaders must have the capacity to leverage on partnerships, strategic alliances, outsourcing, and show proficient management skills when overseeing complex projects for different clients, both in the public sector or private sector (Alvarenga et al., 2019; Zhao et al., 2016).

In another study, Ballesteros-Sánchez et al. (2019) portray a competent project leader who facilitates team building and growth, motivates the followers to achieve specific goals, and aligns organizational culture. The competent project manager facilitates vision and mission with the project objectives, amicably solves conflicts, and promotes good relations with key stakeholders interested in the project (Maqbool et al., 2017). Cleveland and Cleveland (2020) hold the same thoughts. They contend that effective project management leadership must be ready to challenge the overly familiar practices, views, ontologies, and behaviors that can have damaging effects on the successful completion of individual projects in the public sector.

Successful completion of public projects in Ghana needs project managers who are proficient in various areas. For instance, project leaders must be authentic, intuitive,

innovative, and creative enough to take initiatives determined by situational factors (Cleveland & Cleveland, 2020). In most cases, Ahmed and Anantatmula (2017) highlighted some strategies that project managers can use to enhance their performance in project management, including pursuing implementation perfection, stakeholder-centered paradigm challengers, and the capacity to prioritize project milestones systematically. With this in mind, Alvarenga et al. (2019) argued that project managers must demonstrate mastery of various stages linked to project lifecycle, persuasion, persistence, and ability to work under amorphous terms.

In the project management context, modern literature identifies training as a foundational strategy that project managers can use to improve their competency and performance (Cleveland & Cleveland, 2020; Zhao et al., 2016). Past studies have shown that project management training links improved skills and performance among project managers in different sectors (Ahmed & Anantatmula, 2017; Ballesteros-Sánchez et al., 2019). Strategic leadership in project management may influence or align a firm's commitment to various projects' success (Cleveland & Cleveland, 2020). Project managers can apply leadership as a primary strategic tool to improve stakeholders' commitment to creating a competitive advantage that can reduce overruns and delays in various projects (Tabassi, Argyropoulou, Roufechaei, & Argyropoulou, 2016).

Maqbool et al. (2017) also affirm that project leaders can realize a competitive advantage by reinforcing strategic leadership that seeks to integrate organizational culture, excellence, and top management support when implementing a project. Effective

leadership strategies and skills are invaluable for project managers when implementing various public sector projects (Alvarenga et al., 2019). On the other hand, it is likely to be difficult for managers to use their hard skills if a firm changes its value, policies, or strategies, leading to decreased project managers (Ahmed & Anantatmula, 2017; Ballesterz et al., 2019). In such cases, project managers' performance can only materialize when management skills changes precede the appraisal of a firm's strategic objectives.

Strategic Alignment of Business Strategies With Project Needs

Every organization's success depends on aligning the project's objectives, organizational goals, strategies, and long-term strategic focus (Gbangou & Rusu, 2016). Alignment denotes the extent to which a given project positively contributes to the business strategy's success (Rad & Rowzan, 2018). The relationship above directly influences project management's effectiveness regarding the execution of projects within a given scope. Whereas most project managers use a low-level approach to gauge various projects' success, some managers assume a broader and strategic approach (Nicholas, 2016). For great success and performance, project managers should align project demands with organizational strategy. Organizations should be ready to facilitate a project manager's role during the strategy formulation process to integrate the project's objectives with business needs (Philbin, 2016).

Given the role above, Ilmudeen, Bao, and Alharbi (2019) suggested a framework that project managers can use to align project management with business strategy. The model included four components: strategic planning, project prioritization and selection,

project management office, and emergent Project management approaches. Kopmann, Kock, Killen, and Gemünden (2017) reported that the misalignment between a project and business strategy had become the common cause of project failure in the public sector. Musawir, Serra, Zwikael, and Ali (2017) emphasized the potential benefits of aligning project management practices to the current business strategy. Additional benefits include how project managers can identify potential challenges that can inhibit the successful implementation of individual projects in the sector by ensuring alignment between project management and business strategy (Gbangou and Rusu, 2016). The alignment process will, in turn, generate ingenious strategies that can lead to competitive advantage, both by the organization and project leaders. As supported by Sirisomboonsuk, Gu, Cao, and Burns (2018), the alignment of project objectives with business strategy ensure that the project team members and other stakeholders work collaboratively to attain critical strategic goals.

Other literature presented by Anandarajan and Harrison (2019) showed that corporations that support the alignment of business strategy with project management practices have low rates of having a relatively lower tendency to experience project delays and overruns. On the other hand, Ko and Kim (2019) identified the consequences of misaligning project practices with business strategies include (a) reduced profitability, loss of market share, increased turnover, increased costs, and project delays. Misalignment of project management with organization strategy attributes to the prevalent project delays and overruns in Ghana. However, no study has examined the

extent to which the alignment of project management practices with business strategies can improve project managers' performance and reduce project delays in the public sector.

To achieve an organizational and individual competitive advantage, project managers should consider project management practices as a significant business process that ultimately impacts all organization practices. The understanding will help project managers to align project objectives with business strategy and implement it in line with the firm's long-term goals (Gomes & Romão, 2016; Montenegro & Barragán, 2018). Therefore, by supporting project management's alignment with business strategy, project managers in Ghana will likely improve their performance and achieve competitive advantage (Parry & Lind, 2016; Philbin, 2016). In addition to the alignment of business strategies to project management goals, project managers in Ghana can use stakeholder involvement, effective communication, strategic partnerships, resource sharing, and knowledge management as additional strategies to promote their performance and reduce prevalent project delays.

Integrating Project Management Office in Project Management

While corporations and governments are under increasing pressure from internal and external environmental factors, there is a need to support continuous innovation in project deliverables to achieve competitive advantage (Monteiro, Santos, & Varajão, 2016). To remain attractive, organizations are implementing different project management practices and techniques. The techniques entail applying skills and tools to

meet different projects' requirements by executing appropriate methodologies (Monteiro, 2017; Paton & Andrew, 2019). More recently, the concept of "manage by the project" has become common and widely used by project managers to implement various projects on a case-by-case basis. The technique is widely accepted because it permanently overcomes the inherent drawbacks of traditional functional approaches. Aligning the firm's structures with the cross-functional change, conceptualizing project resources from an international perspective, and enforcing accountability for the various projects are critical techniques to ensure project success (Van der Linde & Steyn, 2016).

With the unprecedented increase in project complexities, the need to centralize various projects' coordination has significantly increased and become an issue of concern for project managers concerned with the different projects' performance (Szalay, Kovács, & Sebestyén, 2017). Effective project governance in project management consists of value systems, accountability, process, and policies that scandalize organizational goals while integrating stakeholders' concerns (Wedekind & Philbin, 2018). Many corporations and governments are implementing projects that do not align with formal project management practices and, in turn, tend to adopt ad-hoc practices that are extremely weak to produce the required outcomes (Guimaraes & Wang, 2017; Szalay et al., 2017). Sandhu, Al Ameri, and Wikström (2019) have suggested measures to help organizations and project managers improve their performance and avoid project delays to mitigate the misalignment problem. One of these structures is the Project Management Office that

seeks to enhance the coordination and execution of various projects and minimize resource wastage.

Philbin (2016) defined a project management office as an organizational entity assigned various duties or responsibilities to manage and coordinate projects under its domain. Equally, Fernandes, Pinto, Araújo, and Machado (2018) viewed the project management office as a set of local structures close to project stakeholders or the project team members. Taylor (2016) adopted a holistic view and defined a Project Management Office as an organizational function responsible for providing an organization with the necessary support services or infrastructures. The aim is to ensure that the assigned project portfolios are adequately and competently directed, managed, and executed according to corporate goals. Subsequently, given the above definitions, it is evident that the Project Management Office has the primary duty of overseeing the implementation of various projects on behalf of the project managers. Regarding its main constituents, Otra-Aho, Iden, and Hallikas (2019) added that a Project Management Office comprises a program office, program management office, program support office, project office, project management office, or project support office.

A Project Management Office has responsibilities ranging from providing technical project management support functions and being accountable for the daily management of individual projects delegated to them by the project managers. Besides, Bredillet, Tywoniak, and Tootoonchi (2018) argued that a project management office could help project managers improve their performance by offering these services,

technical expertise, training, consultation, milestone alignment, and project management resources. Due to the stupendous decisiveness of a Project Management Office in aligning project management practices with business strategies. Majeed (2019) asserted that numerous models relating to the project management office's critical functions need critical attention.

As supported by Philbin (2016), Project Support Officers are critical to project managers' success and performance. Project Support Officers have experience and knowledge about informal project practices, methodology, and computer literacy. For example, MS Office Suite can learn new programs with ease, project planning with precession, work with IT or IS project programmers, and analyze and present critical information relating to project portfolios' performance in various phases. Over the past two decades, many corporations and governments have implemented different Project Management Offices forms as a broader part of effective organizational project management (Aydin & Dilan, 2017). The implementation of Project Management Offices has consequently been accredited with the increased complexities in operational duties, tactical, and strategic roles within the project manager's scope, particularly in public sectors where inefficiency in project management is typical (Mossalam & Arafa, 2017). According to Zwikael and Meredith (2018), Project Management Offices provide centralized support to individual project portfolios at the operational unit and ensure that competency and professionalism apply throughout the project's lifecycle. The primary

purpose is to warrant that executed projects conform to the organizational goals and strategies.

On the other hand, at the tactical or technical level, Project Management Offices increase project managers' performance by facilitating multi-project coordination, including the management of cross-project interdependencies. Moreover, according to Andersen (2016), this may comprise resource integration for various projects and ensure that project management best practices adhere to throughput. Equally, Drouin and Sankaran (2017) posited that Project Management Offices consist of duties that can enhance project managers' performance, including prioritizing projects using corporate strategies and advising project managers on the viability of different projects (Guimaraes, McGowan, VanNevel, & Wang, 2018). Even though there is no consensus regarding the services and benefits of Project Management Offices to a project manager's success and performance, the current literature search identifies different roles for project managers on how to implement different projects successfully. Such roles include: developing and maintaining project management standards and methods for various projects, maintaining project historical archives for future references, providing technical project administration support, assisting in human resource staffing, providing project management consulting, and provide training (Darling & Whitty, 2016; Hyväri, 2016; Nicholas & Steyn, 2017; Torres, Khemici, & Paré, 2017; Turner, 2017).

Furthermore, Project Management Offices can increase projects' success by providing support to individual portfolios on project management functions. For example,

planning, scheduling, auditing, monitoring, risk evaluation, and control. Darling and Whitty (2016) also noted that Project Management Offices act as a support unit to a business by prioritizing projects. Specifically, the prioritization of projects may entail cost-benefit goals, a logistical expansion for various projects, and IT management upgrades that can significantly improve project managers' performance and reduce project delays, particularly projects in the public sector.

Although a majority of project managers have increasingly realized the importance of Project Management Offices as a cardinal conduit to project success through practices, many of the project managers overseeing public projects in Ghana are yet to adopt this overly vital strategy to manage their projects (Guimaraes et al., 2018; Torres, Khemici, & Paré, 2017; Zwikael & Meredith, 2018). As a result, most Ghana project managers have failed to create value that meets the stakeholder demands, including a decline in their performance over the years (Bredillet et al., 2018). A salient explanation for the reduced performance among project managers and frequent delays in completing a public project in Ghana can be attributed to project managers' insensitivity to Project Management Offices in coordinating mega projects in the country (Darling & Whitty, 2016). Conversely, Philbin (2016) stated that project managers who are not ready to integrate Project Management offices in their practices are likely to compromise their competency and performance, which leads to project delays. In contrast, project managers in Ghana can increase their performance and proficiency and reduce project delays by integrating Project Management Offices in coordinating different projects.

Integrating Collaboration in Project Management

With increased project complexities and volatility in the external environment, project managers seek collaboration with different stakeholders to successfully implement various projects (Caniëls, Chiocchio, & van Loon, 2019). Integrating collaborative practices in the project lifecycle has become one of the critical strategies that project managers use to improve their competency and performance and reduce unnecessary delays in project completion. According to Pedrini and Ferri (2019), managing Collaboration in project management denotes the practice of ensuring that a conducive environment exists to facilitate teamwork across the spectrum. Effective collaboration in project management includes a culture that supports openness, free sharing of ideas, prompting creativity and innovations, motivating followers, and sufficient conflict resolution (Caniëls et al., 2019).

While most projects are locally focused and mainly impact local communities, some are large-scale global investments. The extended scope of the projects comes with increased complexities and responsibilities that pass through a cross-sectional collaboration. Whereas the basics of project management apply to most of the plans, the projects' size creates an infinite number of factors that can impact how project managers execute their duties (Kua, 2016). Subsequently, project managers are emboldened to continually improve their skills to reflect the project's scope under consideration. As Deep, Gajendran, and Jefferies (2020) posited, mega projects under development in various sectors rely on project leaders' capability to collaborate with different people,

firms, and industries to realize the desired outcomes. According to Caniëls et al. (2019), collaboration in project management helps the project manager maintain better relationships with stakeholders, improve communication with stakeholders, increase productivity, reduce project risks, create strategic partnerships, improve motivation, and boost productivity and profitability.

Deep et al. (2020) suggested that project managers must be ready to consider project management team objectives, create trust, initiate top management support and commitment, facilitate the free flow of information, and develop an effective way to solve a conflict in the workplace. Similarly, Pedrini and Ferri (2019) recommended a framework that project managers can use to stimulate a collaborative culture, including group formation, contractual framework, and adherence to teamwork practices. Whereas collaborative working practices and strategic partnerships are critical to project success, project managers in Ghana are yet to embrace this practice.

Integrating Stakeholder Involvement in Project Implementation

Due to the increase in project complexities and the need to enhance project success, project managers must allocate enough time and effort to identify the key stakeholders interested in individual projects and their subjective perception of constituent success (Sterling et al., 2017). Project managers should communicate business goals and ensure transparency in information flow (Banihashemi, Hosseini, Golizadeh, & Sankaran, 2017). Similarly, Kua (2016) emphasizes that stakeholder engagement is a foundational aspect of successful project implementation. Pedrini and

Ferri (2019) described stakeholders as parties or people directly affected or directly interested in an organization, product, or service. The ordinary shareholders that a project has include society, partners, customers, and employees (Kua, 2016). The stakeholders expect the project managers to satisfy their interests. At the same time, the firm expects stakeholders to act in a certain way to show their commitment to the company (Derakhshan, Turner, & Mancini, 2019).

According to Al-Fadhali et al. (2019), customers form a crucial segment of stakeholders; hence, project managers need to meet their needs. Some of the responsibilities that project managers have to customers include quality projects, affordable projects, and enhanced customer experience. Undeniably, project managers must continuously maintain positive relations with clients (Pedrini & Ferri, 2019). A study by Silvius and Schipper (2019) recommended six factors that project managers must know when interacting with and managing stakeholders. The six factors include identifying key stakeholders in various projects, assessing the level of influence the stakeholders have in the projects, and identifying various stages where their involvement is critical. The development of a framework involves stakeholders, scheduling meetings with stakeholders frequently, and identifying the extent to which stakeholders' input can positively contribute to various projects' success (Silvius & Schipper, 2019).

In most cases, if not all, when duties and responsibilities are unambiguous among the key stakeholders across a project's lifecycle, there exists minimum chances of miscommunication and misalignment of interest, which in turn can improve coordination

and completion of various projected within the schedules (Sterling et al., 2017). Project managers must have adequate information about various projects, make an accurate analysis of the information, and even develop a project outline structure that aligns stakeholders' interests with the business strategy (Yu, Liang, Shen, Shi, & Wang, 2019). Such practices tend to synchronize stakeholders' needs to the project and organizational goals, which improves the chance of success for many projects (Silvius & Schipper, 2019). In like manner, project managers can improve their performance and reduce project delay by aligning stakeholders' interests to a project strategy in various phases. Al-Fadhali et al. (2017) also supported that project managers play a role in controlling project delay and including stakeholders in different phases of project implementation, allowing managers to discover new strategies, competencies, or solutions that can increase the success of different projects. Pedrini and Ferri (2019) recommended using two-way communication between project managers and the stakeholders to effectively integrate stakeholders in project management practices and enhance management success. Effective communication involving the organization, project managers, and stakeholders can improve decision-making because each party will participate in any verdict. As a result, according to Yu et al. (2019), effective communication with stakeholders has become the main driver of project success and performance.

Summary and Conclusions

Chapter 2 provided critical concepts that relate to the current topic. The study commenced by discussing the literature search strategy used to access the needed

sources. The section followed a discussion of the theoretical model used to ground the current study. This particular study used the HK framework. Regarding themes, the study developed and discussed themes in line with the current topic. Examples of themes discussed in this chapter include project cost overruns and schedule delays, which provided an overview of project overruns in the construction industry. The second theme related to leadership strategies and competencies in project management sought to examine how leadership practices can enhance project managers' performance in mitigating project overruns in the public sector. Other themes discussed include strategic alignment of business strategies with project needs, integrating project management offices with project management practices, collaboration in project management, and the key stakeholders' involvement in implementing different projects.

The literature analysis shows that project management has attracted many scholars in the field of management. Among the common areas examined include the critical success of projects, leadership in project management, causes of project overruns, strategies to prevent project overruns, collaboration in project management, and organizational culture's impact on project success. Coffee et al. (2019) argued that there is little knowledge about the strategies that project managers can use to improve their competency and how the alignment of project needs with business strategy can reduce project overruns in Ghana, particularly in the public sector. Given Shah (2016), there is limited research exploring strategies that project managers can use to improve their

performance and reduce project overruns in Ghana, which presented a significant gap that this study sought to address.

The examined literature used qualitative multiple case study designs to address the gap about project delays in Ghana. This study will explore the strategies that project managers in Ghana can use to enhance their competency and performance and reduce project delays in the public sector. The study will also examine how the alignment of project needs with corporate strategy can promote various projects' success and mitigate the stalemate of public projects in Ghana. Chapter 3 examines the study purpose, research questions, research design and rationale, methodology, participant selection logic instrumentation, data collection instruments, recruitment, participation, and data collection procedures. Also, this chapter addresses the data analysis plan and ethical concerns related to the present study.

Chapter 3: Research Method

The purpose of this qualitative multiple case study was to explore the strategies that project managers of government-funded projects in Ghana used to align project managers' strategies and business management processes to reduce project delays and cost overruns. The aim was to promote the performance of project managers and reduce frequent cost overruns. I interviewed a sample of 10 project managers from a population of 800 project managers who have experience managing and overseeing projects in Ghana, particularly projects funded by the Ghanaian government. Merriam and Tidsdell (2015) indicated that the central theme could be identified with 10 to 12 qualitative research participants. Findings from the present study may support project managers in promoting their project management skills and subsequently improving project managers' performance on various projects. Project managers' competence, proficiency, and capabilities are invaluable to critical tasks in a country, particularly in the public sector. Studies have shown that different Ghana projects' success and performance remain unattractive (Famiyeh et al., 2017). In Chapter 3 I discuss the researcher's role, population and sampling, research methodology and design, ethical concerns, data collection instruments, data collection and organization techniques, data analysis, and reliability and validity.

Research Design and Rationale

Morgan et al. (2017) indicated that designing a practical research question allows the researcher to provide answers within the research context. The purpose of this

qualitative multiple case study was to explore the strategies that project managers of government-funded infrastructure projects in Ghana could use to align project manager's strategies and business management processes to reduce project delays and cost overruns. The following research question guided the study with the purpose in mind.:

RQ: What were the current strategies that project managers in Ghana used to align business strategies with project management processes in government-funded projects to lessen project schedule delay and cost overruns?

This study's research design was a multiple case study to explore and query participants' experiences about the research question (Lancaster (2017). In this study, I used an exploratory multiple case study approach (see Yin, 2018) and a constructivist paradigm employing well-structured interviews to explore project manager perspectives on project delays to identify new information based on their experiences. To create a more homogeneous group and uphold the research integrity of this qualitative study, I used the purposeful criterion and network sampling strategy recommended by Bell et al. (2018) to recruit participants for this research. I further screened the participants using the following inclusion criteria: (a) adult over the age of 18, and (b) 3 years continuous experience as a project manager in a Ghana infrastructure project.

A multiple case study approach was appropriate for this study. First, it provided a deeper understanding of strategies that project managers in Ghana used to align project managers' strategies and business management processes to reduce project delays and cost overruns in government-funded infrastructure projects (see Shah, 2016). I selected

participants with experience and expertise in the matter of interest. A social constructivist tends to challenge people to be more analytical in their understanding of themselves and their world (Lobo et al., 2017). Individual experiences with social groups and dominant culture could be known through the qualitative research approach with the constructivist paradigm (Lobo et al., 2017).

Secondly, using a multiple case study design does not limit the study to a set of assumptions and provides flexibility for an in-depth understanding of the research interest (Lancaster, 2017). I intended to capture the essence of sound practices that project managers have developed to implement projects successfully, particularly for publicly funded projects in Ghana. Thirdly, using a multiple case study design allowed me to gather detailed descriptions that captured the crux of strategies to support project success in Ghana and mitigate frequent project overruns. Using a qualitative method, I could explore the strategies that project managers used to implement projects successfully.

Based on the literature review, a qualitative approach best suited the present study. I deemed the quantitative approach unsuitable because I needed to explore participants' personal experiences in managing publicly funded projects in Ghana using open-ended questions rather than hypotheses to test the relationship between study variables (see Ruggiano & Perry, 2019). Thus, the quantitative methodology (and mixed methods) did not support the exploration of project managers' views, opinions, and perceptions about effective project management strategies to reduce cost overruns and improve performance.

Role of the Researcher

To gain a deeper understanding of their role, a researcher needs a topic formulation, problem identification, data collection, and final analysis to conduct a coherent study that may have broad implications for practice (Guion et al., 2011). A qualitative investigator acts as an instrument of the research to realize the study goals or objectives (Lancaster, 2017). Researchers are expected to identify assumptions, personal biases, barriers, and other experiences that can affect the study's authenticity (McGrath et al., 2019). There is a marginal difference between objectivity and subjectivity in the research process, mainly when conducting a qualitative multiple case study (Anandarajan & Harrison, 2019). To ensure that the findings from this study were informed by participants' experiencse and not my partial judgment, my identified biases were managed by disclosing the strategies adopted for data collection and analysis (see Ravitch & Carl, 2016).

Being subjective indicates the possibility of being insightful when interpreting the collected data (Ravitch & Carl, 2016). In this chapter I describe my role in conducting this study. One of a researcher's foundational roles is to mitigate bias on the study outcomes (Schram, 2006). Thus, I maintained a reflective journal to track and describe personal feelings, perceptions, and opinions about the present study while in the field. When analyzing the data, I used a dedicated, reflective journal to record assumptions and expectations to reduce bias that might influence the study outcomes (see Schram, 2006).

Secondly, as a research instrument, I collected data, examined relevant documents, interviewed participants, transcribed the interviews, and analyzed the transcriptions for meaningful insights. To effectively manage potential bias, I used bracketing, which helps a researcher to focus on the interview responses. I asked probing questions, used audio recordings, took notes, and asked follow-up questions. The data collection process was enriched by reviewing organizational project documents and ensuring that the interview responses aligned with the documentation.

Thirdly, I remained sensitive to participants' concerns, stayed neutral in phrasing the interview and research questions, created rapport, maintained respect, and promoted participants' privacy (see Barnes, 1989; Cassell, 2018). This role is directly linked to vital ethical concerns that are inescapable in any research. Such ethical issues included participants' privacy, confidentiality, motivation for participation, and voluntary participation. In this particular study, I addressed these ethical concerns by ensuring that (a) necessary steps existed to maintain research ethics, (b) participants were protected from harm, (c) participants' confidentiality and privacy were upheld by coding their names for anonymity (Barnes, 1989; Lancaster, 2017). I ensured that participation was voluntary by asking participants to sign a consent form.

Fourthly, I obtained an approval letter from the university Institutional Review Board (IRB) authorizing data collection from participants. I used Walden-approved communication channels to communicate with participants. In particular, I used Twitter, email, Skype, phone calls, and Facebook to communicate with participants and collect

data. The restriction of face-to-face meetings helps to avoid inconveniencing participants due to the Covid-19 pandemic. As such, I used email, Skype, and phone calls to conduct the interviews. Participation in this study was voluntary, and no incentives were offered in exchange for participation (see Grady, 2019). The goal was to obtain honest and truthful responses that were not influenced by motivation. In sum, I was the primary data collection and analysis instrument for the study. I explored the experiences of the participants regarding the research question.

Methodology

The social and behavioral interconnection of elements within a broader system of an organization make it necessary to examine the specific social setting's contextual complexities (Tsang, 2013). Qualitative research helps provide an understanding of relationship dynamics and helped answer why and how they exist (Tsang, 2013). The multiple case study follows a replication logic emphasizing context-bound details used to design data analysis to draw some theoretical conclusions (Merriam & Tidsdell, 2015; Yin, 2017). The possibility of achieving these involves using a qualitative method to thoroughly investigate and offer data from a source (Eisenhardt & Graebner, 2007).

Participant Selection Logic

This study aimed to explore the perception of a selected sample of 10 participants from a population of 800 project managers engaged in government construction projects in Ghana. This population's selection was appropriate because this population was directly affected by the general management problem and may be responsible for creating

the specific research problem. To create a more homogeneous group and uphold the high-quality research integrity of this qualitative study, I utilized the purposeful criterion and network sampling strategy recommended by Bell, Bryman, and Harley (2018) to recruit participants for this research. The participants were further screened using the following inclusion criteria: (a) adult over the age of 18, and (b) 3 years' continuous experience as a project manager in a Ghana infrastructure project and strategy with the business management process. Jarkas, Radosavljevic, and Wuyi (2014) indicated that such selected populations share similar experiences and problems despite each project's differences.

Given the government of Ghana infrastructure projects to improve the standard of living of Ghanaians by constructing one factory in every district in the country, it is essential to point out that the successful implementation and integration of one district one factory depends largely upon infrastructure project managers' knowledge and skills (Senouci, Ismail, & Eldin, 2016; Zarei et al., 2018). Furthermore, triangulation helped provide a comprehensive, in-depth inquiry of multiple data sources and covers the limitations and characteristics of other approaches, ensuring a more synergistic, credible, and rigorous research study was achieved (Wilson, 2012). The method of collecting data in this study involved multiple interviews, peer-reviewed journal articles, observations, and archival research. The designed research focused on carefully selecting purposeful participants to critically assess the research question (Evans, & Lewis, 2018).

Although the qualitative study provided rich information through intense investigation and provided real-life and field-related first-hand information (Yin, 2017), adopting a multiple case study approach offered a comprehensive and in-depth insight into how and why question constraints (Ravitch & Carl, 2016). The multiple case study allowed for in-depth, futuristic, and holistic investigation and provided industry-related data not anticipated by literature (Yin, 2017). Case synthesis in a multiple case study also enhanced the research findings' validity, dependability, and trustworthiness. Finally, this method helped enhance the research findings' reliability since the qualitative research method, and case study approach entail outlining the processes and participants involved in conducting the research (Yin, 2017).

Nguyen, Lobo, and Greenland (2017) examined and elucidated that the study's nature dictated the type and ideal number of participants needed. Cassell (2018) listed the necessary guidelines for recruiting participants for a study. To ensure conformity to standard research practices, the above factors were considered when selecting and recruiting participants for the present study. Regarding the above guidelines, participants who had adequate knowledge and experience in managing the construction of different Ghana projects were considered. The inclusion criteria demanded that the participants had at least three years of managing publicly funded projects in Ghana. A sample of 10 project managers in Ghana was selected for the present study. According to Moeyaert et al. (2015), a sample size ranging from 10 was sufficient for qualitative research relating to analyzing subjective data. Additionally, a small sample size deemed helpful since it

gave ample time to code and analyzed qualitative data based on experiences participants have concerning the concept being investigated.

A purposive sampling technique was used to sample, select, and recruit prospective participants to gain access to study participants (Klar & Leeper, 2019). A purposive sampling technique was necessary because the approach helped select participants who were knowledgeable about the topic. Moreover, purposive sampling was recommended because it helped purposefully recruit participants who were easily accessible and have shared experiences regarding a given concept of interest (Klar & Leeper, 2019). Purposive sampling, therefore, helped to avoid deviating from the research focus by including participants who are likely to be less knowledgeable about the topic of study (Ames, Glenton, & Lewin, 2019).

Before recruiting participants, I sought voluntary participation from organizations or project managers overseeing publicly funded projects in Ghana. The objective was to recruit participants who were willing to share their experiences and success strategies openly without the use of incentives (Cassell, 2018). Grady (2019) indicated that gathering honest and truthful responses for an informed analysis occurs when individuals participate voluntarily. Participants received a letter via email explaining the study's purpose, how participants' privacy and confidentiality would be implemented, and expected benefits from the research (Grady, 2019) upon written approval from Walden IRB. Participants were required to sign it electronically to allow the scheduling of

interviews. To be considered for the study, participants must have signed and responded to the email affirmatively (Grady, 2019).

In this study, I established a working relationship with all participants on an individual level. To build such links, I sent a letter to participants to provide them with comprehensive information about the study's purpose and objective, the interview protocol, and the level of confidentiality and privacy according to each of them (Grady, 2019). Moreover, the participants received honest and truthful responses to all concerns raised about the study since I sought to capitalize on a good relationship with participants to earn their trust during the research process. To uphold the high-quality research integrity of this qualitative study and create a more homogeneous group, I utilized the purposeful criterion and network sampling strategy recommended by Bell, Bryman, and Harley (2018) to recruit participants for this research. The participants were further screened using the following inclusion criteria: (a) adult over the age of 18, and (b) 3 years' continuous experience as a project manager in a Ghana infrastructure project. The main goal was to ensure that participants understood the aspect being investigated, are qualified and knowledgeable to respond to research questions appropriately. These criteria helped capture participants whose features align with the research question and the purpose of the study.

Instrumentation

This study's interview guide (see Appendix C) consisted of semi-structured questions on the research topic. With this in mind, various sources were used to collect

data (Cassell, 2018). A semi-structured interview was adopted for this study to help answer the research questions: What strategies did project managers in Ghana use to align business strategies with project management processes in government-funded projects to lessen project schedule delay and cost overrun to improve performance? Semistructured interviews helped gain a comprehensive understanding of the investigated aspect (Clark & Vealé, 2018). In this case, it was the exploration of strategies that project managers used to enhance Ghana's performance.

The interview protocol for this study comprised ten semistructured interview questions. I chose a semi-structured interview because the technique allowed gathering detailed information about the current topic to address the research question (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). Before actual interviews and data collection, measures were put in place to ensure that the participants deeply understood the informed consent form, including the nature of collaboration, the purpose of study, and ethical issues related to the research (Evans & Lewis, 2018). To avoid research bias, I adopted face-to-face interviews using skype and facetime phone calls to gather participants' responses to the interview questions (Mahat-Shamir, Neimeyer, & Pitcho-Prelorentzos, 2019).

Concerning the convenience on the actual day of data collection, interview sessions were scheduled based on participants' availability. The interview session lasted for 60 to 90 minutes. As a precaution to data loss, the interview was recorded using a smartphone to supplement written responses. As already mentioned before, the

investigator would promote the responses' accuracy during interviews through phone recordings, a field journal, and writing instruments (Cassell, 2018).

The audio recordings would supplement notes taken in the field journal. Upon completing each interview, the participants had the opportunity to share personal thoughts in the field journal to minimize any potential bias to the collected data. Recordings from the interview were stored using a secure password. I Transcribed the interviews promptly to prevent the possibility of data loss. Also, timely transcription of the interview and notes taken in the field will help record information accurately and reduce personal influence.

To warrant the reliability and validity of the data collection instrument, I used a member checking technique. Precisely, member checking with study participants was necessary to increase:

1. the accuracy of the data,
2. minimize inaccurate data used, and
3. promote the research's reliability and validity (Birt, Scott, Cavers, Campbell, & Walter, 2016).

The member checking process entailed the interpretation of findings and sharing of data with study participants. Studies strongly assert that member checking is a foundational technology used to validate interview recordings accurately. Member checking strengthens a study's reliability (Birt et al., 2016; Evans & Lewis, 2018). Therefore, the research instrument's accuracy and validity would be enhanced by sharing

preliminary results or interpretations of the participants' responses to ensure that the analysis captured their perceptions, opinions, and thoughts (Birt et al., 2016). Mahat-Shamir et al. (2019) support the validation method suggested above.

Procedures for Recruitment, Participation, and Data Collection

Whereas past studies have extensively explored challenges linked to project management, particularly in developed countries, none of the studies has documented the strategies that project managers in Ghana can use to improve performance and reduce unnecessary and costly delays. This study used a semi-structured face-to-face interview to collect in-depth data from project managers of government-funded projects in Ghana. The reason is to ensure that information collected on the respondent's experiences, observations, and opinions against structured, defined, and restructured questions formulated by the theoretical proposition are valid (Yin, 2017). I captured nonverbal and contemporary dispositions and analyzed them accurately (Cooper & White, 2012). Other significant activities needed to provide further insight into the study's phenomenon and strengthen its validity and reliability, such as observation, participant's recollection, journals, seminars, and previous research, were gathered (Yin, 2017).

To provide further insight into the study's phenomenon and answer the research question, I asked participants questions relating to the project they completed within the stipulated cost and time. Besides, I probed into strategic plans of project managers are implementing to ensure projects were completed as scheduled. I will merge varying data retrieved from diverse sources to ensure the findings provide a clear and unambiguous

understanding of the study phenomenon. At the same time, personal notes and observations will be electronically recorded, analyzed, and coded to develop concepts and themes (Baxter & Jack, 2008). The design will strengthen research validity and reliability and ensure consistency across the research (Yin, 2017).

Regarding IRB approval by Walden University, this research's data collection method was a face-to-face interview on skype or via telephone. More than 10 project managers of government-funded projects will be selected for this research through the LinkedIn professional network website using purposeful criterion and network sampling and meeting the inclusion and exclusion criteria for this study. This recruitment method is often condemned for salient ethical issues, respect for privacy, social media users' interest, and the interviewer's transparency (Gelinas, Pierce, Winkler, Cohen, Lynch, & Bierer, 2017). However, participant recruitment through social media broadens the population scope and provides access to a population that may be difficult to access (King, O'Rourke, & DeLongis, 2014). The LinkedIn platform is appropriate for recruiting participants for this research because it is mainly used for professional networking, and the nature of this research requires professional respondents (project managers) in Ghana.

The research purpose and recruitment letter were shared with candidates on the LinkedIn online professional platform who met the study's inclusion criteria. This Introductory letter would orient the candidates to the research purpose and design. Those indicating that they wished to participate in the study after reading the letter of introduction were considered. I sent the informed consent to these candidates. Informed

consent was a voluntary agreement to participate in research that describes the research process in detail. That way, the participants would understand the research and its risks (Merriam & Tisdell, 2015). Informed consent is essential before enrolling a participant. According to Walden University's IRB-approved standards, the researcher may inform the participants of their legal rights as study participants.

Once the initial recruitment of 10 sample participants was complete, a copy of the Informed Consent Form was sent to each participant. Once the form Informed Consent Form is signed and returned, a special arrangement will be made with participants to identify their preferred contact method to make an appointment for their interviews, marking the data collection process's initiation. The participants were engaged in a semi-structured interview process of 60-90 minutes and length. Once the 15 participants have completed the interview process, data analysis began, and interviews continued until reaching the point of data saturation. Thematic analysis characterizing the study's phenomenon entailed examining, pinpointing, and recording patterns within the case presented to readers (Yin, 2017). Further interviews were truncated when no further details emerge relevant to the study phenomenon (Yin, 2017).

Interviews were conducted through face-to-face interaction and Skype. The results were recorded electronically, documented, and coded using Microsoft Excel software. However, the Skype interview method has been criticized for the higher potential of interruption, internet connection issues, and response time limitation (Cheng, 2017). Skype promotes easy access to participants irrespective of the location and time.

Using skype for interviews allowed for screening remote candidates, assess communication skills, and effect less pressure on candidates (Seitz, 2016). I used Microsoft Excel sheets for organizing questions, collecting data, storing data, and coding/categorizing data thematically (Bree & Gallagher, 2016). Collected data were stored in a biometrically secured location with a private password exclusive to the researcher.

Good interview transcriptions ensured precise and explicit recording of the interviewee's responses to allow for thematic analysis (Yin, 2017). Handwritten notes assisted in capturing body language cues (Seitz, 2016). Research validity through triangulation is achieved when evidence from the notes and other data collection methods are drawn (Lub, 2015). Interview transcripts for each participant were shared with them for data source triangulation to confirm content and underlying social behavior accuracy (Yin, 2017). The dissertation Chairperson and other research partners also had open access to the established protocol to address respondents' distress. However, this research was not sensitive, and participants signed informed consent to confirm voluntary participants signed informed consent upon understanding the research, its purpose, and associated risk (Anderson, 2010). Confidentiality terms communicated to participants, which entailed protecting participants' information from being accessed by a third party or unauthorized parties, eradicating participant's attributable labels, and storing discernible information separately from data (Yin, 2017).

I used a safe and secured database to ensure the resources deployed for this study were available to replicate similar research in the future. A secured database such as peer-reviewed journals, seminars, history, and transcription review and analysis were used for this study (Yin, 2017). I informed participants that all collected data and information were strictly for research and that I will destroy all materials after seven years. This research's findings were also shared independently with participants and published for stakeholder's ease of access and benefit.

Data Analysis Plan

In this study, I used method triangulation, including interviews, member checking interviews (Birt et al., 2016), and field notes to ascertain strategies that project managers integrate to align project management practices with business strategies to improve project performance in Ghana. Empirical and detailed exploration of data were transparently conducted throughout the phases of this study towards reasonable and practicable data analysis framed by the conceptual proposition and consistent with the research phenomenon (Ravitch & Carl, 2016) and related how and why research questions revolved around the research phenomenon to provide further insight on the phenomenon of study (Yin, 2017). Semi-structured interviews with an open-ended question were deployed to collect data for this research towards achieving the aim of this study with data stored and organized using suitable techniques. The data collection process spanned four weeks, helped conduct an average of four interviews per week. A cross-case study was further conducted to develop emerging themes (Cooper & White,

2012), while data triangulation with related literature and evidence from research findings enhanced the findings' dependability and reliability (Ravitch & Carl, 2016).

The data analysis process entailed the transcription of interviews. I documented opinions, similar and common thoughts grounded in defining words to identify new ideas and themes (Merriam, & Tisdell, 2015; Yin, 2017). The content analysis started after organized ideas/concepts have been coded into identifying patterns. The data collection method, the collected data, the reviewed data, the process of data review went through a quality audit, and triangulation enhanced the reliability and validity of the research findings (Yin, 2017). The thematic analysis, which entailed searching for patterns or themes in the codes across different interviews, mainly depended on identifying, examining, and pinpointing similarities, relationships, and differences in the data (Ravitch & Carl, 2016).

The identified themes represented recognized patterns of the study; this core element helped determine whether repetitive and no repetitive insights were examined for both within-case and cross-case analysis (Yin, 2017). Several themes were classified using advanced coding analysis that recognized similar relationships within several cases with codes that connect data collections and combined themes across a few methodologies such as journals, interviews, and discussions (Ravitch & Carl, 2016). Triangulation of data collection sources improved the study quality and ensured a more thorough evaluation of the data collected (Yin, 2017). I recorded the signs in several ways to enhance context-based reports of unspoken characters (Ravitch & Carl, 2016).

Records of the electronically transcribed research participants' responses were shared individually with the respective participants to examine and verify the accuracy of interpretation and assess the researcher's reflexivity and perspective (Berger, 2015; Merriam & Tisdell, 2015).

The data collected analysis entailed inductive procedure, theme-based coding, note-taking, and theoretical sampling to reach a saturation point (Vaughn & Turner, 2016). Data analysis began immediately after the completion of the transcription process. In the qualitative analysis, the first data under analysis were the words collected during the interview process. I followed an appropriate management process to ensure confidentiality, integrity, and quality of the data collected. Data analysis consisted of data organization, representing the analyzed data in a discussion or report, and a coding system to identify emerging themes from the interview process.

I used the NVivo 12 and Microsoft word software to transcribe audio recordings. The main focus of the coding process was identifying critical themes from different interview transcripts. I utilized thematic analysis to determine the commonalities of the main strategies that project managers in Ghana used to align project management practices with business strategies to increase project performance. The investigator also correlated critical themes that emerged from interviews with the literature and the conceptual framework adopted to address the research question and realize the central purpose of the study (Ummel & Achille, 2016).

Lastly, the raw materials from interviews, flown notes, and other documents coded and labeled for the final analysis were secured. I retained electronic data in a categorized folder with the qualitative software used to analyze the data. To prevent third parties from accessing the study document, I used a unique password to encrypt the document. Interview responses and analysis output were backed on a USB drive and protected with a unique password for seven years before being destroyed. The trustworthiness of data was strengthened by using fact-based logical reasoning based on data homogenization, reduction, and clarification (Cooper & White, 2012; Yin, 2017)

Issues of Trustworthiness

Korstjens and Moser (2018) indicated that establishing a suitable and compatible methodology based on the research purpose is essential for establishing a conscientious research design and objectivity and reliability procedure. In qualitative research, trustworthiness defines the credibility, transferability, confirmability, and dependability of qualitative research findings, given that qualitative research does not use instruments with established metrics (Merriam & Tisdell, 2015).

Credibility

Credibility is defined as the extent to which participants believe in a study. (Hadi & Closs, 2016). In qualitative studies, the findings are considered credible if they represent the precise interpretation of the participants' experiences, responses, and thoughts (Grady, 2019). According to Nowell, Norris, White, and Moules (2017), credibility can be enhanced by lengthening the data collection process, using a

triangulation method to code the data, member checking, and promoting peer debriefing. Additionally, the credibility of a study can be strengthened by using member checking. (Birt et al., 2016). These methods were used to verify the accuracy of the interview responses.

Transferability

Transferability is another decisive criterion used to warrant the validity of the present study. Nowell et al. (2017) noted that the investigator must describe the study's fundamental assumptions and barriers to ensure the transferability of findings. Hadi and Closs (2016) mentioned that transferability is achieved when readers can interpret the finding easily. In this study, transferability was enhanced by clearly describing the study assumptions that are likely to influence the final analysis. The participants' emboldening to provide truthful and honest responses linked to project management practices and how to improve performance was critical in this study.

Dependability

Hopkins, Regehr, and Pratt (2017) indicated that a study should address the dependability issues to avoid providing untrue findings that may be misleading. Historically, the qualitative study uses member checking to promote the dependability of their results. The factors below helped to improve the dependability of the present findings: explain the strategy used in the research, explain participant's selection process, explain participant's selection process, document data collection process and its interpretation, explain participant's selection process, articulate the role of the researcher

in the present study, and explain participant's selection process. Birt et al. (2016) indicated that data collection processes and triangulation methods should be documented to enhance the study data analysis process's dependability.

Confirmability

Nowell et al. (2017) mentioned that confirmability refers to how the result of a study reflects the actual study. The reflectivity of a researcher is a primary source of bias (Birt et al., 2016). Clear documentation of personal feelings and any other insights that can influence data analysis and prejudices could help achieve conformability in this study.

Ethical Procedures

Since the adoption of regulation governing human research by the United States in the 1970s set off by varying scientific practices with severe ethical issues during World War II, ethics in research involving human subject have become a significant concern for governing and academic bodies up until now (Glenna, Hesse, Hinrichs, Chiles, & Sachs, 2019). Although most of the ethical debate has focused on clinical research related questions as in the case of Tuskegee Syphilis study, Nazi experience, and HIV research in developing nations as it pertains to risk management, randomization, reporting of adverse effect, research using vulnerable population, and informed consent, ethical issues remain a growing concern among researchers (Yin, 2017). The three primary ethical principles provided by *The Belmont Report: Ethical Principles and Guidelines for the Protection of*

Human Subjects of Research to govern scientific research and guide IRB deliberation and published in 1979 include autonomy, beneficence, and justice.

Autonomy often referred to as "respect for the person," is the first ethical principle that refers to the individual's fundamental right to choose what activity they will or will not be engaged in (Yin, 2017). Autonomy requires individuals to have a detailed understanding of what they are requested to be engaged in to allow them to make a reasonable judgment of its effect on them and subsequently make a non-coercive decision to participate or not (Roth & von Unger, 2018). Respect for a person in human research emphasizes individuals' natural ability to do what they so choose to do since not every individual has the intentional application of independence and control (Yin, 2017). Therefore, this calls for exercising care to ensure participants' responses are not influenced by coercion or external interference (Glenna et al., 2019).

Beneficence being the second ethical principle, refers to the researcher's obligation to maximize the benefit for participants and society while minimizing risk (Honig, Lampel, Siegel, & Drnevich, 2017). This ethical principle ensures participants' and society's well-being concerning the research study since the researcher is responsible for guiding participants against physical and psychological harm and ensuring the research benefit outweighs the anticipated risk (Glenna et al., 2019). Justice is the final ethical principle that demands an equitable selection of research participants (Roth & von Unger, 2018). Justice demands avoiding participants or populations whose participation might be unfairly coerced and demands that participants benefit from the research (Yin,

2017). In this study, in order to provide participants with full disclosure about the nature of the research, what their participation entails, the intended use of the study, associated benefit, and allowing participants to ask questions before confirming whether to participate or not, an informed consent process was strictly followed.

Although oral consents are acceptable in research (Glenna et al., 2019), this research's informed consent was obtained in writing after participants have been given adequate time to consider the risk and benefit associated with their participation (Yin, 2017). Participants' safety and confidentiality are essential to qualitative research (Roth & von Unger, 2018). This study used available information to identify and disclose potential risks to participants and avoid disclosing data or unauthorized data linked to the participant's identity.

Also, participants' feedback might reveal personal details that could hardly be screened due to the qualitative research approach, which obtained the interviewee's testimony through dialogue and direct engagement. Furthermore, the researcher was obliged to inform participants about the purpose of the research, the term of the agreement, participant-researcher data access, and ethical/legal responsibility guiding the research study. An approval from Walden University's IRB was pursued before data collection to minimize risk and meet the school’s qualitative research requirements. Furthermore, the researcher also ensured adequate actions to address ethical issues with compromising participant's privacy and trust (Honig, Lampel, Siegel, & Drnevich, 2017). The research design was designed to empower participants and encourage them to

express their experience and representation of responses towards a power balance (Yin, 2017).

All participants were informed about the study's confidentiality and privacy since no third parties gained access to their data without consent. Participants were allowed to terminate their collaboration during the study process (Grady, 2019). Responses from participants were stored on a USB drive and kept safe for at least five years before being destroyed. Meanwhile, the researcher ensured that available materials were well protected or encrypted to avoid inadvertent access by third parties. After completing the data analysis process, I erased relevant data from the personal computer to ensure participants' confidentiality (Grady, 2019).

Finally, in this research, I ensured aggregated data and reported over proper contextualization such that aggregation of individual voices contributed to the process (Ravitch & Carl, 2016). Also, the intrusion was prevented from streamlining the information gathered for this research by not engaging in the information that is disconnected from the phenomenon of study (Glenna et al., 2019), and research findings were evaluated to minimize risk and maximize the benefit to participants and society at large.

Summary

Chapter 3 provided a comprehensive portrayal description of the research methodology selected for the present study. The content justified that the most suitable strategy for this study was a multiple qualitative case research design. Additionally, I

discussed a researcher's role, ethical procedures, data analysis plan, participant selection criteria, recruitment, participation, and data collection procedures. Moreover, I discussed all strategies and necessary steps adopted to ensure reliability and validity. —chapter 4 discussed research findings, analysis, and discussion.

Chapter 4: Results

The purpose of this qualitative multiple case study was to explore the key strategies that project managers can use to improve the performance of different projects to reduce cost overruns, especially regarding publicly funded projects in Ghana. The main research question for this study was designed to elicit empirical data on the phenomenon of study. From the data collected and the answers received from the research questions, a clear understanding of how project managers of Ghana government-funded projects could improve different tasks' performance to reduce cost overruns was acquired. The central research question that guided the interview was:

RQ: What are the current strategies project managers in Ghana use to align business strategies with project management processes in government-funded projects to lessen project schedule delay and cost overruns?

The focus of this study was on individual project managers leading government-funded infrastructure projects in Ghana. As a result, the focus was not on an organization but rather individual managers from different organizations. In this chapter, I provide insights from recurring themes obtained from the interviews. Additionally, I provided the study results, including a description of the research settings, demographics of participants, and data collection and analysis methods. Further, I discuss the study's trustworthiness, including the credibility, transferability, dependability, and confirmability of the study. Finally, this chapter presents the findings of the research and ends with a summary.

Research Setting

Data for this study were collected using semistructured interviews with 10 project managers from Ghana government-funded infrastructural projects. Participants came from different organizations; there were no single personal or organizational conditions that influenced participants or their experience at the study time. Furthermore, no participant indicated that specific factors, private or corporate, influenced them at the time of the study. There were no personal factors that influenced the data collection or analysis. As an objective investigator, I remained faithful to all responses provided by the participants. One of the foundational roles of this study was to mitigate the effects of bias on the study outcomes (see Schram, 2006).

I maintained a reflective journal to track and describe personal feelings, perceptions, and opinions about the present study while in the field to reduce research bias in this study. I used a dedicated, reflective journal to record personal assumptions and expectations to reduce bias that may influence the study outcome when analyzing the data (see Schram, 2006). To effectively manage potential bias, I used bracketing, a technique that helps a researcher remain focused on interview responses. I asked probing questions, used audio recordings, took notes, and followed up with participants after the interviews through the member checking process. I achieved enrichment of the data collection process by reviewing organizational project documents to ensure that the final data analysis did not deviate from the collected data.

Demographics

A total of 10 construction project managers participated in this study. Participants in this study were male Ghanaian nationality. Male participants were not purposefully selected over female participants, but no eligible women participated in the study. Participants were between 38 and 64 years of age. Participants had between 6 and 14 years of experience working in the construction industry in Ghana and 10 years of experience working on government-funded construction projects. Examples of government construction projects the participants completed were roads, bridges, schools, affordable housing, police offices, and hospitals. See Table 1 for a summary of participant demographics.

Table 1

Participant Demographics

Participant	ge	Years working in construction	Type of projects	Years working on government funded projects
PA	49	10	Schools	4
PB	51	12	Roads	3
PC	38	7	Police, offices	5
PD	50	11	Schools	8
PE	50	10	Schools	6
PF	48	6	Hospitals	3
PG	47	7	Pedestrian, Bridges	4
PH	47	8	Affordable Housing	5
PI	44	10	Roads	7
PJ	64	14	Roads, bridges	10

Data Collection

Data collection for this qualitative multiple case study began on March 10, 2012, after receiving IRB approval on March 3, 2021 (IRB approval number is 03-03-21-

0664220). The data collection process concluded on March 19, 2021, and the data transcription process was finalized on March 21, 2021. After the ninth semistructured interview, data saturation was reached when notes and data analysis did suggest any new theme from PA to PI. The 10th interview conducted with PJ did not yield any new theme. As a result, I decided to end any further discussions.

I recruited a total of 10 project managers for participation in the study. A purposive sampling technique was used to sample, select, and recruit prospective participants to gain access to study participants for semi-structured interviews. The research purpose and recruitment letter were shared with candidates on LinkedIn (an online professional platform) who met the study's inclusion criteria. Data collection continued until data saturation was reached at the ninth participant.

This introductory letter oriented the candidates to the research purpose and design and how participants' privacy and confidentiality would be protected, along with expected benefits from the research (see Grady, 2019). Potential participants who indicated that they wished to participate in the study after reading the introduction and recruitment letter were sent the informed consent form. Participants were required to sign the informed consent form electronically before their interview was scheduled. Due to the COVID-19 pandemic, all interviews were conducted remotely, and audio was recorded via Zoom.

Each interview lasted between 30 and 45 minutes. The interview process lasted for 19 days. The interview date and time were scheduled after receiving official consent

from the participant. Zoom ID and passcode were given to participants making it easier to communicate with participants. Interviews were recorded using an iPod recorder with free recording software that captures audio recordings via Zoom. In addtion, recordings from the interview were downloaded through the Zoom website and stored on a computer using a secure password. Even though the interviews were done face to face via remote video conference, no videos were recorded because only the audio was relevant during the interview.

The audio recordings were supplemented by notes taken in the field journal. Reflective field notes were kept from the day of IRB approval to the end of the interviews. The notes contained a drafted field plan, recruitment process, a summary of participants' feedback, and any contextual information relevant to the study (see Merriam & Grenier, 2019). The interview transcription and the reflections on the field notes help identify themes during the data analysis process. Further, listening to the recorded audio continuously aided in formulating themes and patterns (Merriam & Grenier, 2019). Upon completing each interview, the participants had the opportunity to share personal thoughts in an electronic field journal hosted by Google Docs to minimize any potential bias to the collected data.

Transcriptions were completed using NVivo 12 software following each interview to prevent the possibility of data loss. Each participant was provided with a copy of their interview transcription so they could perform a member check. The member checking process helps improve the credibility and the accuracy of the study because it allows

participants to correct any unclear thoughts (Yin, 2017). I made a slight change from one interview to unify the understanding between the participant and me. No other participant requested changes to the transcripts based on their member check. The confirmed transcription was compiled in a secured file and stored following the data security plan described in Chapter 3.

Data Analysis

The analysis of data collected followed an inductive procedure consisting of theme-based coding, note taking, and theoretical sampling to reach a saturation point (see Vaughn & Turner, 2016). Data analysis began immediately after the completion of the transcription process. Once participants approved their interview transcripts via member check, the transcripts were uploaded to NVivo 12, a qualitative coding software, for analysis. The participants' field notes were also uploaded to NVivo 12 with the interview transcripts for each participant. I analyzed data in this study through thematic analysis. Thematic analysis entails searching for patterns or themes in the codes across different interviews and is dependent on identifying, examining, and pinpointing similarities, relationships, and differences in the data (Ravitch & Carl, 2016).

The themes identified in this study represented recognized patterns that appeared across interviews (see Yin, 2017). The themes were identified using advanced coding analysis that recognized similar relationships within several cases with codes connecting data collections and combining themes across the interviews and field notes (see Ravitch & Carl, 2016). Data were analyzed thematically, using the six-step procedure developed

by Braun and Clarke (2006). Thematic analysis was inductive and identified and labelled patterns that emerged from the data during repeated review and comparison. The thematic analysis procedures followed the steps laid out by Clarke & Braun:

1. Reading and rereading the data in total to gain familiarity
2. Identifying patterns of meaning in the data as initial codes
3. Grouping similar initial codes into themes
4. Reviewing and refining the themes
5. Naming and defining the themes to indicate their relevance as answers to the research questions
6. Creating a presentation of results

In phase one, reading and rereading the data in total to gain familiarity, I read and reread all the transcripts (Clarke & Braun, 2014). From this process, I became familiar with the data and generated some initial thoughts about it. In phase two, identifying patterns of meaning in the data as initial codes, I coded sections of the data relevant to the research questions into smaller chunks of importance (Clarke & Braun, 2014). The initial thoughts informed these codes I gleaned from step one. This phase of coding produced 18 preliminary codes. These codes included; considering the welfare of workers, dock pay, provide training, incentives, ensure funding, good project management, inspect sites, involve the community, use technology, corruption, funding issues, nepotism, reliable staff, break the project into phases, create staff buy-in, ease language barriers, have the right tools, management does not listen, performance reviews, reevaluate plans.

In phase three, similar initial codes were grouped into themes. Further, each of the initial principles was reviewed, considered how they related to one another, and combined into more prominent themes (Clarke & Braun, 2014). These themes captured something significant about the data and research questions. The initial codes identified in phase two were distilled into three main themes, which will be discussed in this study: Cultivate staff, make a plan, and monitor progress. That more prominent theme consisted of subthemes made up of the initial codes.

For example, the cultivate staff theme includes considering workers' welfare, providing training, and providing incentives and consequences. The make a planned theme has ensured funding and good project management. The monitor progress theme includes inspect sites, involve the community, and use technology. Some of the initial codes that only a few participants contributed to were dropped from the analysis. For example, only one participant indicated that they used performance reviews to motivate their staff. Therefore, performance reviews were not included in the cultivate staff theme as it was not a strategy that was generally used amongst the participants.

In phase four of the coding method, reviewing and refining the themes, I checked the developed themes and the chunks of text within each theme and refined the themes, combing themes when appropriate, splitting themes when they grew divergent, and removing themes that are not supported by the data (Clarke & Braun, 2014). In this analysis, several more minor codes were combined to make good project management, which included creating a planned theme. Further, the text within the principles and

organized coded chucks were reviewed to reflect how the theme had developed. For example, the use technology code used to be called site visits. However, throughout the coding process, the researcher realized that code was not about performing site visits using technology to monitor progress.

In stage five, naming and defining the themes to indicate their relevance as answers to the research questions, I attempted to capture the essence of each theme, consider what the theme meant, what subthemes existed within themes, and how those subthemes interacted with the central theme (Clarke & Braun, 2014). At this stage, the three final themes were named and organized. Each of the sub-codes involved was placed into the three main themes in NVivo and separated the codes that would not be included in the data presented. The final stage of coding was creating a presentation of the results and writing up the data's findings (Clarke & Braun, 2014). Data saturation at this project was reached after PG. Data saturation is reached when data analysis from the last two consecutive participants has yielded no new themes or insights (Clarke & Braun, 2014). No new codes were introduced in the coding of PH and PI transcripts.

Evidence of Trustworthiness

Korstjens and Moser (2018) indicate that establishing a suitable and compatible methodology based on the research purpose is essential for establishing a conscientious research design and objectivity and reliability procedure. In qualitative research, trustworthiness defines the credibility, transferability, confirmability, and dependability

of qualitative research findings, given that qualitative research does not use instruments with established metrics (Merriam & Tisdell, 2015).

Credibility

Data credibility is the extent to which the researcher is confident in the study findings and multiple strategies to implement and validate data trustworthiness (Merriam & Tisdell, 2015). Following the established and tested processes by seminal methodology scholars, I reached a tenacious conclusion for this study (Stake, 2013; Yin, 2017). In qualitative studies, the findings are considered credible if they represent the precise interpretation of the participants' experiences, responses, and thoughts (Grady, 2019). According to Nowell, Norris, White, and Moules (2017), credibility can be enhanced by lengthening the data collection process, using a triangulation method to code the data, member checking. Credibility for this study was further achieved using a member checking strategy to aid data trustworthiness as interview transcripts were reviewed and corrected by respective participants (Merriam & Tisdell, 2015). Each of these methods was utilized in the current study to increase the credibility of the findings.

Transferability

Transferability is another decisive criterion used to warrant the validity of the present study (Hadi & Closs, 2016). Nowell et al. (2017) noted that the investigator must describe the study's fundamental assumptions and barriers to ensure the transferability of findings. Hadi and Closs (2016) mentioned that transferability is achieved when readers can interpret the result quickly. In this study, transferability was enhanced by clearly

describing the study assumptions that are likely to influence the final analysis (see Chapter 1). The study's transferability was further increased by emboldening the participants to provide truthful and honest responses linked to project management practices and improve performance (Hadi & Closs, 2016). This was done by ensuring each participant understood the study's purpose by establishing rapport with the participants by allowing them to skip questions they did not feel comfortable answering and assuring each participant that their responses would be kept entirely confidential.

Dependability

According to Hopkins, Regehr, and Pratt (2017), the study should address dependability issues to avoid providing untrue findings that may be misleading. Historically, qualitative studies use member checking to promote their results' dependability (Hopkins et al., 2017). In keeping with this tradition, the current study used member checking to ensure that each interview transcript accurately reflects the research participants' statements. Furthermore, I reached the dependability of the research by explaining the strategy used in the study, explaining the participant selection process, documenting the data collection process and its interpretation, articulating the role of the researcher in the present study (see Chapter 3) (Hopkins et al., 2017). Birt et al. (2016) indicated that enhancing the study data analysis process requires dependability, data collection processes, and triangulation. This study closely followed the procedures described in this chapter and did not deviate in practice from the previous recordings.

Confirmability

Confirmability refers to the extent to which a study's results accurately reflect the data collected in the survey (Nowell et al., 2017). The reflectivity of a researcher is a primary source of bias (Birt et al., 2016). Clear documentation of personal feelings and any other insights that can influence data analysis and prejudices may help achieve the confirmability of the current study. As previously stated, there were no existing personal biases that may affect this study's results.

Study Results

This study attempted to answer the research question: What are the current strategies project managers in Ghana use to align business strategies with project management processes in government-funded projects to lessen project schedule delay and cost overruns? Three main themes were identified related to that research question. T hose themes were: cultivate staff, make a plan, and monitor progress.

Cultivate Staff

The cultivate staff theme consisted of three smaller subthemes. Those themes included consider staff welfare, provide training, and provide incentives and consequences. Between five and nine unique participants contributed to each subtheme that made up the larger cultivate staff theme. All 10 participants contributed to produce staff themes and indicated that cultivating staff was essential in lessening project schedule delays and cost overruns.

Consider Staff Welfare

PA, PC, PF, PH, PI, and PJ indicated that they carefully considered their staff's welfare, and by doing so, they were more capable of meeting their deadlines and reducing cost overruns. PA indicated that staff welfare was not something individuals in his field often considered and that by doing so reduced the number of delays his projects experienced. PA showed he cared about his staff by promptly paying them and not withholding their pay unless necessary. According to PA:

> In Ghana, many project managers do not think about the welfare of the workers. When the welfare of the workers is taking into consideration, it encourages them to work hard. In Ghana, some workers and leaders do not care. Sometimes leaders will hold funds unnecessarily. If the welfare of the employees is not well taken care of, they can go on a strike, which can delay projects.

PC validated the statements made by PA. PC said, "if the employees are not well paid, it can delay the project." However, PC also indicated that taking care of workers in case of injury was an important component in considering workers' welfare. PC said, "we provide a first aid center to take care of workers in case of injury." PJ echoed PC's thinking. PJ indicated that they also took care of workers in the case of injury. PJ said, "We take care of the hospital bills, and basically, they get paid until they recover." For PJ, this also meant preventing injury as well as treating it. PJ indicated that:

> Support for our workers, training, and safety is a huge problem we are facing here. For instance, several times, I have asked the boys to go home just because

> they are not wearing safety boots, but when they get down on the job, it becomes our responsibility.

For PH and PI, considering the welfare of workers meant making sure they had a good relationship with staff and that their staff felt like they could come to them with any problems they were having. PH indicated that doing this encouraged his workers to perform their duties better. PH described this by saying, “I often stay in touch with the workers to identify their needs and any support they may need. Once I know they need something, I make sure I give it to them because when they have it, it will help them to do their job better.”

PI validated PH’s approach. PI also believed that what the working staff did depended on the relationship they had with their employer. PI also believed that doing this allowed the freer sharing of ideas that increased the performance of everyone on the team. According to PI:

> It all boils down to your working relationship with the workers. We have a working relationship that creates some friendship among us, so we are free to share ideas. For that matter, we are not just even training them, but at times we also get some knowledge from these artisans. Most of these guys work with different construction companies, so some of them also have different experiences from different fields, and so they are also able to give us what they know, so we freely give them a chance to express themselves in that manner.

Provide Training

PA, PB, PC, PD, PE, PF, PH, PI, and PJ all indicated that they provided training for their staff. This training usually took the form of techniques on how to complete their work and training on the policies and safety measures implemented by the company. PE indicated that his company would organize workshops for the staff to teach them new and emerging techniques. PE also provided safety training. According to PE:

> Periodically we organize workshops and training for the staff. Many new technologies are coming up, so we also update our contractors from time to time. We also organize safety training. This is helpful because it keeps employees and contractors safe and healthy to complete the project.

Providing safety training PE reduced the likelihood that his workers would get hurt and cause delays to the project. Introducing his staff to new technology PE could ensure that his company utilized the latest techniques to complete the project well and on time.

Like PE, PH's training was two-fold: educating employees on new technologies and another to ensure they understood the company's safety procedures. Like PE, PF found that this combination increased the likelihood of a project finishing well and on time. PF said:

> Every morning, we have a safety meeting to update employees about the safety protocols and make sure everyone has every personal protective equipment. As far as policies and procedures are concerned, we constantly update employees on

> any changes. We also organize periodic training to upgrade their skills, especially when technology has introduced a better way of performing tasks. So, when we get any new technology or ways of performing a task, we train all the employees to that effect.

Other participants validated that they offered a combination of safety training and training on new technologies or techniques. PI indicted that the senior supervisors at his company often went to training to gain knowledge they could bring back and share with the rest of the staff. PC indicated that they have regular safety training about the company's procedures and demonstrations so that employees would understand the company's expectations.

Provide Incentives and Consequences

Ensuring accountability was important for participants. They stressed that without staff accountability, it was challenging to make deadlines and provide quality work. Participants had different methods of doing this, but many spoke of the necessity of offering incentives for good work and consequences for work or behavior that did not meet expectations. Incentives and results were discussed by PA, PB, PC, PD, PE, PF, PH, and PJ. Incentives usually took the form of increased pay. However, some participants also discussed other rewards such as prizes or public praise. PA described his incentive system in the following way:

> Every month we award the best worker and the best behavior by giving them a gift. We also added competency and reward a person with the higher competency.

> We reward those who follow safety procedures. Sometimes we give them chocolate, and other times we give them a monetary reward. Because of this, every worker worked hard since they know that they will get a reward at the end of the week or month.

PE and PF described similar reward systems as PA. PF said, "We also institute reward systems where high-performing employees or contractors are rewarded." PE said, "We encourage contractors by providing reword to contractors who can complete the project on time. This will motivate others to complete their project on time." Participants indicated that the consequences of not meeting expectations were dismissal, docked pay, or assigning the employee to shadow another worker with better performance. PA, PD, PF, PJ all indicated that they docked their employee's or contractors' compensation if deadlines were missed without cause. PF described this process in the following way:

> As far as accountability is concerned, we depend on the foreman or the supervisor to make sure projects are done on time and in a manner stipulated originally. Anything short of that, we blame the supervisor or the team. That could mean a reduction of pay, suspension, or redoing the entire project.

Like PF, PD indicated that he held his workers accountable by reducing their pay for work that was not completed within the specified deadline. PD described his review and discipline process in the following way:

> If there is a mistake from the contractor, the contractor will be invited by writing and giving him a written complaint and asking for an explanation. If the

> investigation reveals that the contractor was negligent, we deduct money from their payment. Sometimes we terminate their contract. We also ask them to buy insurance to cover their mistakes and accident.

Make a Plan

All 10 participants indicated that you needed to plan how the work would be completed to avoid delays and cost overruns. The theme includes the subthemes of good project management and ensures funding. This theme compromised a large section of each participants' interview, indicating the planning process's critical nature in reducing delays and cost overruns.

Good Project Management

All 10 participants indicated that good project management was critical to project success. Participants generally discussed the importance of project management at the beginning phases of the project when the project plan was created. However, project management also played a role throughout the life of the project. PB described the importance of project management in the following way:

> This has to do with basic fundamental principles of management. You have to plan to know what needs to be done at a certain time. What material do I need? What caliber of people do I hire and their qualifications? What capital do I need, and what equipment do I need to get the work done? You have to know the employees' education and skills expected. You have to know your action plan and

steps to follow. Planning will help you to know the quantity of materials and tools needed to do the job flow of funds to start a project.

PD described a similar planning process as PB. Like PB, the majority of this planning occurred at the start of the project. According to PD:

> Here when a project is awarded, it comes through competitive tendering. So, after getting the project, we plan and do preliminary research to identify the tools we need, the caliber of labor, and identify a reliable source of material supply. We write a report about the study and use the result to prepare to start the project. We have units or departments which comprised building sections, the electrical section, and so forth. We also have an internal inspection team to inspect the project periodically. But if the project is sponsored by a foreign organization, their team will send external inspectors to come and inspect the project.

PF described a similar planning process as PD and PB. The process described by these participants was very similar to other participants. According to PF:

> To get a project completed on time, we do what we call budgeting. In that process, we are able to determine how much capital we will need to acquire labor, materials, and tools for the project. Then we plan for the entire project to ensure that we have a reliable source of supply of materials, availability of funds and have determined what skills of labor are needed to complete the job. Having determined this and ensured their availability, we then commence the project.

Ensure Funding

While ensuring funding may be an aspect of good project management, it was frequently discussed in the interviews that it warranted a separate subtheme. In many ways, ensuring funding was a real struggle for construction project managers in Ghana. Participants described the difficulty of extracting money from the government and providing funds available to finish the project. To start the work promptly that would allow them to finish on time, many participants used their capital to begin the project and sought reimbursement. PC succinctly advised, "don't wait on government funds before you embark on the project [if you want to finish on time]." PD took a similar tact, indicated that "To be successful in completing work on time, you need to have enough capital to finance the project." PJ elaborated on the process PD and PC alluded to in the following way:

> Seriously speaking, you need to have funds. We have taken a loan from the bank and used our house as collateral, so when you run out of funds for the job to continue, you depend on that money. If you don't have the funds or creditors to trust you and give you products on credit, you can't do it. But, then when you have the funds, it's an A+ because then when you go to buy stuff, and you have your own funds, you can bargain, but when you don't have funds, and you are going for credit, that is a drain on your profit margin because whatever price you are given you have no choice but to take it because you need the product at that time. A typical example, just last week I ordered some electrical equipment from

> someone, and he gave it to me on credit, when the things came, I realized they were an imitation, and they mixed up few original. When you get like five of the power sockets, two of them are legit or somehow quality. The other three are not good. So, in situations like that, you may be forced to just hold on to it, but in certain situations, if you don't have money to pay him, and you also need to finish the job. Someone might not fix it because they don't have the money to go to the market and buy legit, whatever they give them, they just take it. Basically, it's a cash system over here, so when you don't have the cash to push the project, you can't complete it on time. Never.

Prefinance a project or using on-hand cash was a common strategy described by PC, PD, PE, PH, and PJ. However, even participants who did not use this pre-funding strategy discussed the difficulty of extracting government funds. PB, PC, PD, PE, PF, PH, PI, and PJ all indicated that the government's extracting funding is a barrier to completing projects on time. Participants' common issue was that multiple projects' financing might be shared by multiple projects, meaning there was insufficient funding to finish any one project. PD described this phenomenon in the following way:

> Sometimes the government embarks on many projects at one time without enough funds to support them. For instance, if the government has the funds to complete five hospitals, the government will assign ten hospital projects, although none are finished due to lack of funds.

Monitor Progress

Participants indicated that after you ensured your staff's competency and made a plan to complete the work, the next step to avoiding cost over-runs and delays was to monitor the progress of your projects. The monitor progress theme includes inspect sites, involve the community, and use technology.

Inspect Sites

Participants described the importance of project managers personally overseeing the work done on their job sites. This strategy was employed by PD, PE, PF, and PI. These participants believed that if they left their managers' work and did not personally inspect the sites periodically, it would cause delays and cost overruns. Like other participants, PD described a system of scheduled as well as surprise inspections. These kept workers on their toes and ensured that safety procedures were being followed. According to PD:

> For safety, we have monitoring team from the district and the internal to monitor how the workers are following safety guidelines. They also make sure then job is being done according to the standard set. Every week we set a goal and make sure that goal is achieved. To make the inspection effective, we visit them without informing them so we can see what is actually happening on the ground. Sometimes we inform the workers when the inspectors are coming.

PF described a similar process as PD. PI said, “Upper management also do unannounced inspections to make sure projects are progressing as expected.” PE

indicated that their monitoring visits were more to prevent corruption. However, like PD and PI, these visits were often unannounced. PE described this in the following way:

> But the problem is that, sometimes the foreman will connive with the contractor and collect money from him. When that happens, the foreman cannot properly supervise the contractor because he has collected money from him. What we do to ensure effective performance is periodic unannounced visitation on sites to inspect the projects. When we realize that work is not being done correctly, we will transfer the foreman and bring him to work from the office. This will let the foreman forfeit some allowance and it serve as a warning to others will be given the opportunity.

Involve the Community

Involving the community in the site inspection process was a strategy used by PD, PE, and PI. By applying the community, these participants indicated that the work was done on time and to a higher standard. This further benefited the participants by easing the burden of monitoring. If the community was monitoring workers and the project's progress, the participants did not have to hire staff. PJ described this technique by saying:

> If we involve the community in every project than this project is coming to you as a community. The community knows what the contractor is supposed to do at the end of the project, that this should be the outcome, and what their role is as a community. Thus, this is your channel of information to reach the contractor. If you allow the community to directly go to the contractor, it may also end up in

> chaos, but if the community has a channel of communication it can be a benefit. Normally on a project we have consultants where the community can also channel whatever they are seeing to the consultant to reach the contractor and also during such meetings the community reps are there to bring their view on whatever they have seen, it will help.

PE validated the technique described by PJ. Like PJ, PE worked with the community to ensure a project was completed well and on time. PE said:

> We also involve the community such as the chiefs the assemblyman and the unit committee and others to inspect the project. We also employ people from the community to be part of the project to provide a sense of belonging. The people from the community always help to make sure the project is done correctly. We however edge them not to attack the contractor but inform the engineer or the project manager if they see anything wrong.

PD closely echoed the experience of PJ and PE. PD also described using the community to monitor the behavior of employees and the success of the project. According to PD:

> Sometimes when we are commissioning a project, we involve the community so the community can also inspect the project. This way when they see any bad behavior of the contractor, they can report the management. There was a villager the contractor used a wrong sand, the community informed us, and we were able to change the sand and resolve the problem.

Use Technology

PA, PC, PF, PH, and PI all described using remote technology to virtually inspect job sites or stay in touch with employees. Using virtual technology, these participants could use more efficiently community or review sites that may take time to physically access. As these interviews were conducted during the COVID-19 pandemic, remote technology was used to reduce exposure to themselves and their employees. PI described how he used technology in the following way:

> These days' mobile phones are common in communication. It makes it easier to reach people by letters and emails, WhatsApp, and Facebook. I can also reach out to the people by video calls, and make conference meetings. So, it is through these means that we get the people. At times you need to meet them physically if not because of the present situation we have (covid-19) that is putting everybody on electronic meetings and what have you. So that is the various means of communicating between the various contractors and engineers.

WhatsApp, a free communication app, was mentioned by several participants, including PI, PC, PF, and PH. PA did not indicate that he used WhatsApp but did say that he used Zoom to communicate with site managers. PF and PH also indicated that they used Zoom to check on job sites. PA described this by saying:

> I make sure every morning, the site managers provide work progress for me to know what is going on. And I use video calls and zoom calls to make sure I can

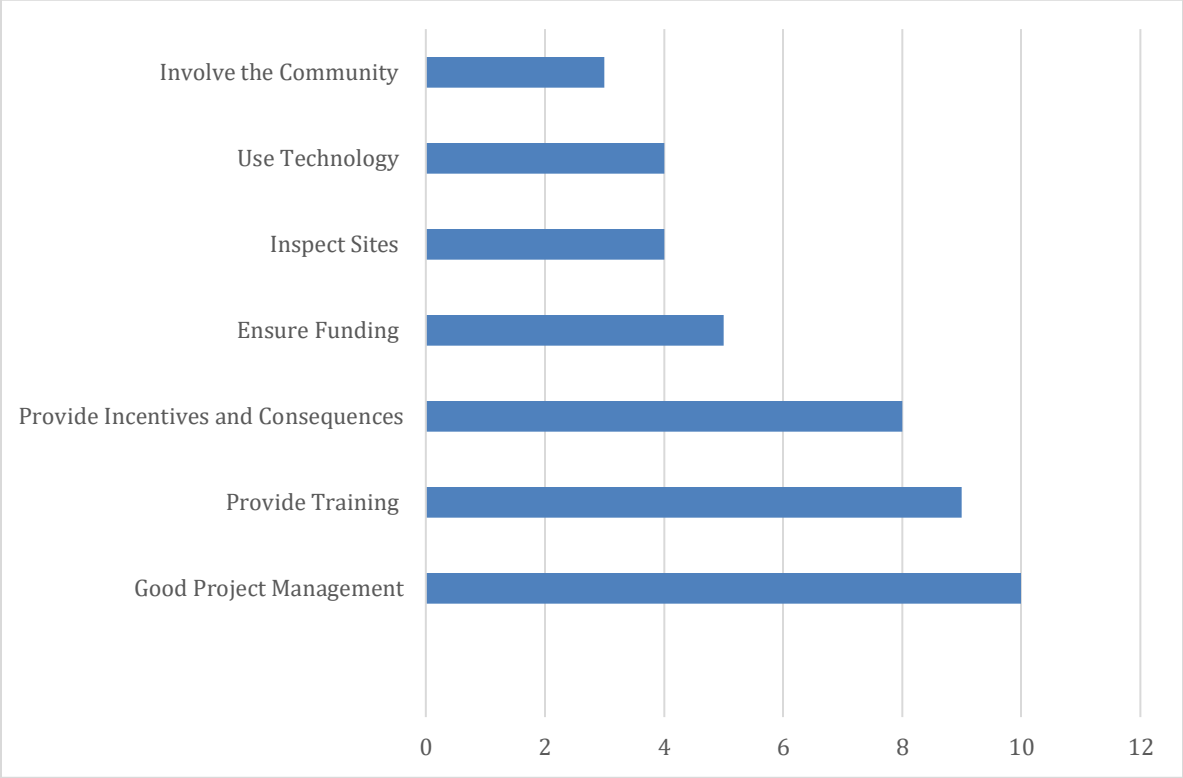
see what is going on thanks to technology. That how I make sure work is being done.

Cross-Case Synthesis and Analysis

Due to the difficulty and complexity of investigating the real-life experiences of project managers of government-funded projects in the Ghana construction industry, I used a cross-case synthesis as a data analysis technique. Yin (2017) indicated that investigation of real-life experiences could be controlled by carrying out a cross-case correlation that enhances the study's validity and generalization. Additionally, a cross-case synthesis technique helps get an organized analysis of the research data to the concepts of the study. Figures 1 and 2 show the frequency of themes occurrences by participants where thematic analysis from each case is combined. These figures provide a pictorial representation of the various themes deduced from the findings of the study.

Figure 1

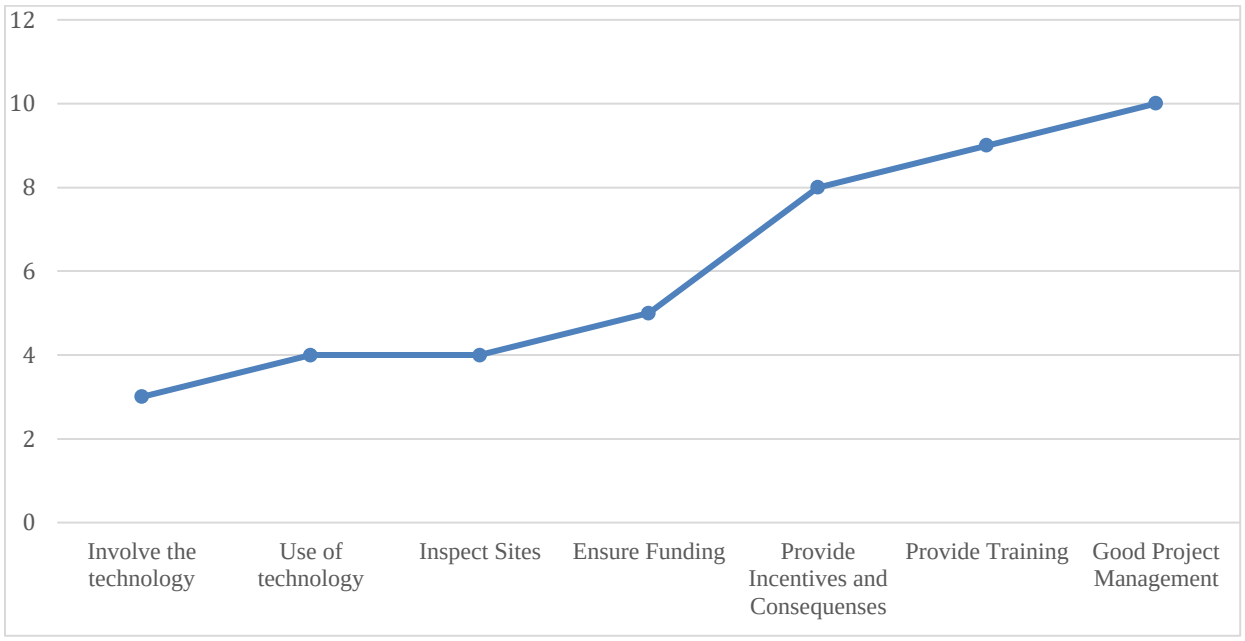
Multiple Case Analysis (Frequency of Theme Occurrence by Participants)



The cross-case analysis was done after analyzing each case. I identified the theme across the data that achieve the purpose of the study, exploring the key strategies that project managers can use to improve the performance of different projects to reduce cost overruns, especially about the publicly funded projects in Ghana.

Figure 2

Multiple Case Analysis (Frequency of Theme Occurrence by Participants)



The benefit of a good management theme to project completion was evident in this study. All participants mentioned planning, coordinating, and communication as key elements of project success. The study revealed if project managers cannot adequately plan their resources towards mitigating project delay and cost overrun because adequate funds and materials and professional personnel are not readily available for the project. Other important themes were training, providing incentives, ensuring funding, inspecting sites, using technology, and involving the technology.

Summary

The purpose of this qualitative multiple case study was to explore the key strategies that project managers can use to improve the performance of different projects

to reduce cost overruns, especially about the publicly funded projects in Ghana. To address this purpose, the following research question was asked: What are the current strategies project managers in Ghana use to align business strategies with project management processes in government-funded projects to reduce project schedule delay and cost overruns? A total of 10 construction project managers participated in this study. All the participants in this study were male, and all were of Ghanaian nationality. Male participants were not purposefully selected over female participants, but eligible women were not participating in the study.

Participants were between 38 and 64 years of age. Participants had between six and 14 years of experience working in the construction industry in Ghana. They had between three and ten years of experience working on government-funded construction projects. From an initial set of 18 codes, three primary themes were identified: cultivate staff, make a plan, and monitor progress. That more prominent theme consisted of subthemes made up of the initial codes. The cultivate staff theme included consider the welfare of workers, provide training, and incentives and consequences. The planned theme included; ensure funding and good project management. The monitor progress theme included inspect sites, involve the community, and use technology.

Chapter 5: Discussion, Conclusions, and Recommendations

This chapter presents the discussion, interpretation, implications, and recommendations based on the findings in the present study that explored Ghana's project managers' strategies to improve performance and reduce delays in project management processes. While Ghana's construction industry contributes significantly to the economic growth of the country, there has been an increase in the number of project delays, stalls, and cost overruns that have been recorded (Gbahabo & Ajuwon, 2017; Oyewobi et al., 2016). Previous research by Amoatey and Ankrah (2017) documented that 70% of road construction projects in Ghana often experience delays, and cost overruns characterized at least 52% of these projects. The problem under investigation for this research was that even though some project managers' inability to align different strategies for project management with business processes is among the reasons for project failures, there is a lack of literature that addressed this study area from a solution perspective. Most existing studies acknowledged the presence of various inefficiencies in project management processes, including project managers' inability to align their business strategies with management processes. Unfortunately, project managers in Ghana often focus on the adverse impacts of inefficiencies on the country's construction sector regarding overruns and delays and on the country’s economy through the rise in unemployment rates and a decreasing GDP. Furthermore, there is a lack of studies that mainly focused on describing how Ghana's project managers in the construction sector align their business strategies with the management process.

This qualitative multiple case study research was purposefully conducted to explore the essential strategies deployed by Ghana's project managers to improve various projects' performance to reduce cost overruns, more specifically nationally funded projects. Famiyeh et al. (2017) documented that while developing countries such as Ghana expect to grow faster than the projected growth of developed nations such as the United States, a recent survey report revealed that the primary contributor of such a massive economic growth was the quadrupled number of large projects in these nations. Amoatey and Ankrah (2017) also demonstrated that although project management in Ghana has shown consistent improvement in the last few years, public project managers are occasionally characterized by widespread inefficient practices that negatively impact the economy. The target population for this study included 20 project managers in three construction organizations in Ghana. A favorable social change implication resulting from an increased success rate of construction projects is improved human capacity development and infrastructural growth boosting economic growth. I employed a qualitative case study approach (see Merriam & Tisdell, 2015; Yin, 2017) with the data collection conducted through semistructured interviews and secondary data sources.

Interpretation of Findings

The findings of this study contribute to and extend the current knowledge on the strategies that Ghana's project managers deploy to improve performance and reduce delays in project management processes. Although Ghana's construction industry contributes a significant proportion to the economic growth of the country, there has been

an increase in the number of project delays, stalls, and cost overruns that have been recorded (Gbahabo & Ajuwon, 2017). The findings of this study were reviewed based on the conceptual themes derived from the data analysis. In addition, this study extends knowledge by offering new insight and theoretical direction (see Bonett, 2012).

Demographic Characteristics

A sample of 10 construction managers was involved in this study as participants of the research. I used the purposive sampling method to select prospective participants with eligible qualifications. All the study participants were male and of Ghanaian nationality. I did not choose to have male participants, but the potential female candidates were not eligible for this investigation. These participants were between the ages of 38 and 64 and worked in construction project management in Ghana with experience of between 6 and 14 years.

Furthermore, they had between 3 and 10 years of experience working on government-funded construction projects such as bridges, roads, hospitals, and affordable housing. In the sample used for this study, a construction project manager with the least years of experience was 6 years, while the most working experience recorded in the sample was 14 years. Regarding government-funded projects, the least working experience in these entities was 3 years, while the most experience recorded was 10 years.

Descriptive Statistics

I explored the key strategies that project managers can use to improve the performance of different projects to reduce cost overruns in Ghana by analyzing data collected as described in Chapter 4 and using NVivo 12 computer software. I analyzed data in this study through thematic analysis. I identified relevant themes in this research from patterns that appeared across the interview process. The themes were identified and recorded using advanced coding analysis that recognized similar relationships in several cases with codes that connected. The three main themes identified relevant to the research question were (a) cultivating staff, (b) making a plan, and (c) monitoring progress. The following research question was administered in the interview process to achieve the overall study objective.

Research Question

RQ: What are the current strategies project managers in Ghana use to align business strategies with project management processes in government-funded projects to lessen project schedule delay and cost overruns?

Theme 1: Cultivate Staff

This theme was analyzed using three key subthemes: (a) consider staff welfare, (b) provide training, and (c) provide incentives and consequences. Nine unique participants made their contributions to each subtheme that summed the larger cultivate staff theme. All the participants made their contributions regarding the cultivate staff theme and stressed that this theme was an imperative component in reducing delays in

project management schedules and cost overruns. This contribution was in line with the roles of project managers as stated by Dziekoński (2017) and Jovanović and Jovanović (2018), who listed the six critical responsibilities of project managers as follows: (a) staff management, (b) communication, (c) creating a benchmark, (d) planning, (e) budget management, and (f) resource distribution.

Subtheme 1: Consider Staff Welfare

In this subtheme, 6 participants (PA, PC, PF, PH, PI, and PJ) illustrated that they often considered the staff welfare, and by doing so, they were able to beat their project deadlines and reduce cost overruns. This finding aligns with findings from a study by Darling and Whitty (2016) and Torres et al. (2017), who indicated that the roles of modern project managers include the provision of technical project administration support, maintenance of project historical archives for future references, providing training, assisting in human resource staffing, and providing project management consulting. For instance, PA stated that:

> In Ghana, many project managers don't think about the welfare of the workers. When the welfare of the workers is taken into consideration, it encourages them to work hard. In Ghana, some workers and leaders don't care. Sometimes leaders will hold funds unnecessarily. If the employees' welfare is not well taken care of, they can go on a demonstration, and that can delay projects.

Participant PC also supported this sentiment by asserting that "if the employees are not paid well, it can delay the project; we provide first aid centers to take care of workers in case of injury."

Subtheme 2: Provide Training

In this subtheme, nine participants (PA, PB, PC, PD, PE, PF, PH, PI, and PJ) identified the need to provide training to their juniors and employees in their work environment. These participants mentioned that this training often took the form of techniques on how to complete their work successfully and training on the policies and safety measures adopted by the organization. This finding is in line with Maqbool et al. (2017), who asserted that training of leadership in the construction industry, particularly the complex project, is the most primary necessity when executing these projects. For example, participant PE opined,

> Periodically, we organize workshops and training for the staff. Many new technologies are coming up, so we also update our contractors from time to time. We also organize safety training. This is helpful because it keeps employees and contractors safe and healthy to complete the project.

A majority of these participants also alleged that they provided a combination of safety training and training on new technologies and existing techniques. They also mentioned that the senior management in their organizations participated in frequent training programs and brought back knowledge that other junior employees could use. This idea was supported by Zhao et al. (2016), who concluded a need for project

managers to ensure that they undertake regular training to acquire critical skills and competencies needed to oversee public projects successfully. Ahmed and Anantatmula (2017) added that project managers would improve their competencies, capabilities, skill base, and performance by focusing on regular training, primarily when executing public projects.

Subtheme 3: Provide Incentives and Consequences

All the participants believed that ensuring accountability was the key to managing successful projects. Participants PA, PB, PC, PD, PE, PF, PH, and PJ sensitized that without staff and junior employees' accountability, it was challenging to beat deadlines and provide quality work. This finding was in line with sentiments by Van der Linde and Steyn (2016). They stated that for a project to be completed successfully, the conceptualization of project resources from an international perspective, alignment of the firm's structures with cross-functional change, and enforcement of accountability for the various projects were imperative techniques. Wedekind and Philbin (2018) supported the accountability aspect by stating that project management's success consists of accountability, value systems, and policies that supported the realization of goals while integrating concerns of stakeholders. For example, Participant PA lamented that:

> Every month, we award the best worker and the best behavior by giving them a gift. We also added competency and reward a person with the higher competency. We reward those who follow safety procedures. Sometimes we give them certificate of recognition and other times we give the monetary reward. Because

> of this, every worker worked hard since they know at the end of the week or month, they will get a reward. We also suspend and even dismiss employees when they violate company policies.

Theme 2: Make a Plan

The make a plan theme included the subthemes *good project management* and *ensure funding*. This theme compromised a large section of every participant's interview, indicating the planning process's binding nature in reducing cost overruns and delays. All the participants agreed that to avoid cost overruns and project delays, they needed to formulate effective plans to accomplish every duty within the project duration.

Subtheme 4: Good Project Management

In this subtheme, all the participants illustrated that excellent project management was significant for project success. They sensitized the importance of project management at the project's beginning phases when the project plan was formulated. This finding was aligned with studies by Ko and Kim (2019), who stated that poor project management and misalignment of project management with organization strategy attributes to the prevalent project delays and overruns. They also identified the consequences of misaligning project practices with business strategies, including reduced profitability, increased turnover, loss of market share, increased costs, and project delays. For instance, when interviewed about good project management, PB mentioned that:

> Here, when a project is awarded, it comes through competitive tendering. After getting the project, we plan and do preliminary research to identify tools and the

caliber of labor needed to complete a project and find a reliable source of material supply. We write a report about the study and use the result to prepare to start the project. We have units or departments which comprised building sections, the electrical section, and others. We also have an internal inspection team to inspect the project periodically. However, if a foreign organization sponsors the project, their team will send external inspectors to come and inspect the project.

Ultimately, my study confirmed the importance of adequate alignment of the project management process with management practices to reduce delays and improve performance. Project managers must consider the resources available and the workforce needed to complete the project (Gill, 2015). This is consistent with the findings by Gunduz and AbuHassan (2016) which indicate that inconsistent long-term planning can delay project completion.

Subtheme 5: Ensure Funding

All the participants believed that ensuring funding was a big challenge for construction project managers in Ghana. The participants described the complex process by lamenting extracting money from the government and ensuring funds were available to finish the project. They added that to begin a project promptly, all the participants had to use their capital and later sought reimbursement. Research by Safapour et al. (2019) supported this sentiment by stating that two outcomes are often expected when working under constrained budgets; first, the project will experience overruns if the project manager can no longer optimize cost procurements and tasks. Therefore, in order to

prevent the project from stalling, the project manager may request additional funding. Secondly, if the contractor and client failed to provide the extra funding necessary for completing the project, stalling is inevitable. For instance, PC asserted that:

> We have taken a loan from the bank and used our house as collateral, so when you run out of funds for the job to continue, you depend on that money. If the contractor does have the funds, the contractor may not be able to complete the project.

In most cases, prefinancing a project or using on-hand cash was a common strategy described by all the participants.

Theme 3: Monitor progress

This theme was explored using three key subthemes. The participants mentioned that after they ensured their staff's competency and made a plan to complete the work, the next step was to avoid cost overruns and delays by monitoring their projects' progress.

Subtheme 6: Inspecting Sites

In this subtheme, participant's PD, PE, PF, and PI indicated that they often supervised projects by themselves and described this strategy as one of the most vital stages of project management. These participants believed that it would lead to delays and additional cost overruns if they left the supervisory duties to other employees. This finding was supported by Darling and Whitty (2016), who stated that project managers could increase the success of their projects by providing support to individual portfolios

such as ensuring planning, scheduling, auditing, monitoring, risk evaluation, and control. For instance, participant PD expressed that:

> Every week we set a goal and ensure that goal is achieved. To make the inspection effective, we visit them without informing them to see what is happening. Sometimes we inform the workers when the inspectors are coming.

Subtheme 7: Involve the Community

In this subtheme, community involvement was one of the strategies used by participant's PD, PE, and PI. In these participants' views, community involvement implied that duties would be undertaken in good time and with higher quality standards. This strategy benefited these participants by easing the burden of supervision and monitoring. If the community supervised and monitored workers and the project's progress, the participants did not have to hire staff to do so. A study by Caniëls et al. (2019) supported this sentiment by documenting that modern project managers seek collaboration with different stakeholders such as the local community to implement various projects successfully. Participant PE explained that:

> If we involve the community in a project by hiring workers from the community and allowing chiefs and other community leaders to inspect the projects, the projects can go as scheduled, and any unnecessary delays will be reported on time to the project manager. The community has interest in the project, and the leaders will ensure the jobs is completed correctly, especially if the community knows what the contractor is supposed to do.

Pedrini and Ferri (2019) also supported by stating that effective collaboration in project management would ensure that a conducive business environment facilitates teamwork across various stakeholders.

Subtheme 8: Use of Technology

In this subtheme, five out of 10 participants (PA, PC, PF, PH, and PI) stated that using remote technology to inspect job sites or stay in touch with employees virtually would help them efficiently communicate and inspect sites instead of physical inspection. This finding is in line with sentiments from Alexander et al. (2017). They believed that budget and schedule overruns are the most dominant challenges that project managers confront within the modern construction sector, regardless of modern technological tools designed to ease complex projects. This sentiment implied that technology was an imperative aspect in managing budget and schedule overruns. PI described how he uses mobile devices to inspect and communicate with workers in different project sites. WhatsApp was mentioned by the four participants, while PH indicated that he used Zoom to communicate with site managers.

Limitations of the Study

The first limitation of this research was related to deploying a highly homogenous sample since the investigator recruited the study participants from a single industry and location. The interview process only focused on project managers as participants who oversaw government-funded projects in Ghana while ignoring project managers' views in the private sector. Besides, their perspectives and opinions about the alignment of various

projects with business goals and processes did not reflect all project managers' overall views in Ghana. The second limitation was related to the contrasting views of what constituted an effective alignment of projects' demands with organizational goals, processes, and objectives. Their views of managers overseeing public projects differed from underlying motivations in the private sector.

The last limitation related to scheduling variables is unforeseen social demands and time-limited practical analysis of the interview process's responses. The fourth limitation included the use of a sample size that was limited. Schram (2006) explained that even though the number of participants needed is often between five to ten to conduct an in-depth investigation of a research topic, a maximum of twelve participants will be considered for this research. Notwithstanding the latter, sample size can be limited to research in that the maximum number of participants to be used for this study may limit the chances of obtaining more participants for the research. Nevertheless, the twelve participants exceeded the ten recommended (Schram, 2006), the eight to ten participants recommended would be adequate to provide enough units for a case study (Boddy, 2016).

Recommendations

Three imperative findings were retrieved from the research. The first finding was that project managers in Ghana often considered the staff welfare and were sensitized to provide training to their juniors and employees, and believed in accountability as the key to managing successful projects. The second outcome of the research was that good

project management strategies and assurance of project funding was vital to ensuring that projects are planned, implemented, and completed successfully. The third finding of this research was that for successful monitoring of projects by project managers, regular inspection of sites, active involvement of the community, and virtual remote technology had to be implemented. More specifically, remote technology to virtually inspect job sites or stay in touch with employees would aid them to communicate frequently and inspect sites that may take time to physically access. Based on these findings, the researcher recommends several actions adopted by professional project managers in Ghana.

Recommendations for Practice

The first recommendation for professional project managers is to offer benefits to support their staff's well-being to improve staff welfare. Various benefits relevant to project management may include cycle-to-work schemes, health insurance, or even the provision of personal shopping discounts. Besides, they may install dedicated well-being portals to access various related benefits and information and guidance on staff well-being and related topics. Project managers in Ghana are also encouraged to create a culture that values individual teams' members within project teams to inspect their social wellness. Employee recognition brings a considerable difference regarding social wellness. Encouraging effective leadership, managers, and co-workers to acknowledge project staff's efforts could positively impact employee motivation and aid workers to feel valued, thus satisfying their roles and responsibilities.

Regarding practical staff training, project managers in Ghana must sensitize skills training as the best training method. This type of training includes the proficiencies required to perform a particular task. In project management, skills training is required for an employee to know how to perform duties. Based on the second findings, the second recommendation for project managers in Ghana is to constantly review project dates, revise project estimates, create realistic budgets, review project benefits, and always plan to ensure continued government funding and sustainability. If project managers know that they will make applications for project funding next year, they are advised to ensure that they clear on the budget process timeline.

In most cases, the dates for planning cycles could change. Therefore, if a project manager knows that the project's timeline is not firm, the management team can correct it on time. Besides, project managers are advised to ensure that they have been through any external costs so that if any capital expenditures are required, they are not caught unaware. Most importantly, project managers should split their budget forecasts for the coming financial years. This enables them to submit the bigger picture to know the overall costs being requested and communicate the funding required shortly.

Furthermore, Ghana's project managers are advised to apply for funding in good time and then wait for the financiers' decision. This will allow enough time for financiers to make funds available for the project. In addition, project managers can receive funding on time to begin the project. Lastly, project managers should always take stern action to monitor and control projects, measure performance, and ensure the project's ultimate goal

is achieved. Project managers are advised to practice a regular physical inspection of sites to ensure that works within the project are undertaken as planned and align with the project's standards, requirements, and regulations.

Running a successful project requires the coordination of people, equipment, and materials; hence, regular inspections should be conducted to achieve the exercise's benefits. Project managers are also advised to involve various stakeholders such as communities by planning for long-term involvement, identifying the community's priorities, designing the project demands, and implementing other community development projects. The study recommended that project managers start with a transparent community selection process to share the project's results. Later, project managers can map the communities' priorities and identify their leaders by conducting a solid assessment. Most importantly, they can hold preliminary meetings with these leaders and enlist their support to mobilize these communities' participation. Regarding project inspection, the study recommended that project managers in Ghana embrace virtual technology to ease the assessment process to respond to defaults and challenges that may arise in the future.

Recommendations for Future Research

Although this research was conducted with a sample of only ten participants, limited information was provided regarding the strategies that Ghana's project managers deploy to improve performance and reduce delays in project management processes. The researcher recommends that future researchers deploy a more significant population

sample to represent the entire population so that more diverse strategies regarding the strategies that Ghana's project managers deploy to improve performance and reduce delays are obtained. Secondly, the scope of the study was limited to a single country, Ghana. Different projects are conducted differently in different countries, together with different factors that impact project success in different nations. The researcher recommends that future researchers conducting studies relating to the research topic include additional countries to record project managers' views and opinions in different countries. The researcher also recommends that future studies related to the research objective and topic be undertaken using mixed research methods and a quasi-experimental method to analyze data in qualitative and quantitative forms.

Implications

This research's outcomes are significant for social change at the research, individual, organizational, and policy levels. The knowledge retrieved from this study tends to fill the gap in the literature that aligns management processes with business strategies for improving performance. This knowledge will bring an active management culture that will improve Ghana infrastructure projects and eliminate project delays witnessed over the years. Furthermore, this research will bring about social change in project management for project managers in Ghana. According to Agyekum-Mensah and Knight (2017), infrastructure projects in the construction industry are the means through which countries and societies accomplish their economic development goals. Social change and a positive outlook are hopeful in Ghana should project managers engaged in

Ghana infrastructure projects boost project success by properly aligning business strategies with project management processes to improve performance (Famiyeh et al., 2017). Gbahabo and Ajuwon (2017) demonstrated that most of these projects fail due to unskilled management skills and megaprojects' complexity.

At the research level, the knowledge provided by this research will be used by future researchers to explore future research gaps that they may be willing to study or examine. Zidane and Andersen (2018) recommended that an in-depth study be conducted on a country-to-country basis to extended project management theories on interventions that contribute to project delays. Zidane and Andersen (2018) also added that several construction projects often failed globally due to diverse factors and reasons. Unfortunately, the challenge with delays continues, although modern technologies can aid project managers in understanding various management techniques (Mok et al., 2018). In the last four decades, researchers and scholar-practitioners have been identifying the possible causes of project delays. Previous studies (Akhund et al., 2018; Shahhosseini, Afshar, & Amiri, 2018) indicated that challenges dealing with project delays differ from one country to another. Some of the factors that lead to project delays include working cultures, management style, environment, stakeholders, construction methods, government policy, availability of resources, economic situation, constitutional provisions, and divers' standpoints of researchers.

At the individual level, this research's findings will enlighten practicing project managers in Ghana and other parts of the globe regarding the strategies they can deploy

to improve performance and reduce delays in project management processes. In essence, for project managers in Ghana to improve project performance and reduce delays and cost overruns, they should deploy strategies such as considering workers' welfare, emphasizing the need for training to their juniors and employees, and accountability. The findings will ensure that Ghana's project managers consider the staff's welfare, sensitize the need to provide training to their juniors and employees, and believe in accountability as the key to managing successful projects. The outcomes will also enlighten them to understand that good project management strategies and assurance of project funding was vital in ensuring that projects are planned, implemented, and completed successfully. Besides, the outcomes will compel project managers to effectively monitor projects through regular inspection of sites, active involvement of the community, and virtual remote monitoring technology to complete projects successfully. More so, the use of remote technology to virtually inspect job sites or stay in touch with employees would help project managers frequently communicate with site workers and inspect sites that may take time to physically access.

This research's outcomes will ensure that organizations complete projects resulting from project managers' research knowledge from this study at the organizational level. Through these outcomes, project managers will ensure that they deploy effective project management strategies to ensure timely project funding to avoid project delays in the future. Then, research outcomes will also help project managers ensure that they have effective inspection site strategies, involve the communities, and deploy technology to

aid project supervision. Modern organizations often seek to employ qualified and experienced project managers with years of experience to deliver projects within the schedule documented and allocated. Through the findings retrieved from this study, experienced project managers will be granted additional knowledge to equip them with skills for delivering projects within the scheduled timeframe and with the resources allocated to them by organizations. Moreover, by equipping project managers with additional knowledge, organizations will have the opportunity to save more resources from project delays, inadequate project plans, and poor budgeting that may lead to overruns.

This research is significant at the policy level in the field of project management. From the outcomes retrieved, policymakers in this field will get additional knowledge regarding the formulation of policies dealing with project funding, project success, stakeholder involvement, and employer-employee relations. In the project funding, policymakers responsible for formulating laws will be granted knowledge of some of the policies that affect project delivery and success through delayed funding resulting from some policies. These policymakers are made aware of the cost overruns that result when projects are delayed due to some detrimental laws formulated by them. The research outcomes will also help policymakers commission future laws that make it easier to obtain government funding. Within the organization, individuals responsible for policymaking can develop policies and regulations that ensure that every individual account for their duties so that the project is delivered within the scheduled time.

Furthermore, the research outcomes will compel policymakers within the organization to develop initiatives and programs to foster healthy relationships with the community and other stakeholders. As a result, the project may not encounter external pressures that may lead to delays and cost overruns. The insider-policymakers will be compelled to introduce rules and policies to ensure that every employee undertakes their duties and is in good relationships with their managers to a healthy working environment and successful project delivery.

Conclusions

This chapter presented the discussion, interpretation, implications, and recommendations based on these findings in the present study that explored Ghana's project managers' strategies to improve performance and reduce delays in project management processes. The purpose of this study was to examine the key strategies deployed by Ghana's project managers to improve the performance of various projects to reduce cost overruns, more specifically, national-funded projects. The researcher analyzed data collection in chapter 4 using NVivo 12 software analysis. A sample of ten construction managers was involved in this study as participants of the research. The purposive sampling method was used to select prospective participants with eligible qualifications. Initially, the target population for this study included 15 project managers in three construction organizations in Ghana. The NVivo software was used to analyze the data using themes and subthemes retrieved from patterns revealed in the data collected.

Various imperative findings were retrieved from the themes and subthemes used regarding the strategies used by project managers to improve performance and reduce delays in project management processes. First, project managers often considered the staff's welfare. They were sensitized to providing training to their juniors and employees and believed in accountability as the key to managing successful projects. The second finding retrieved from this investigation was that excellent project management strategies and assurance of project funding were vital in ensuring that projects are planned, implemented, and completed successfully. The last finding of this study was that for successful monitoring of projects by project managers, regular inspection of sites, active involvement of the community, and virtual remote technology had to be implemented. More specifically, remote technology to virtually inspect job sites or stay in touch with employees would aid them to communicate frequently and inspect sites that may take time to physically access.

References

Abusafiya, H. A., & Suliman, S. M. (2017). Causes and effects of cost overrun on construction project in Bahrain: Part I (Ranking of cost overrun factors and risk mapping). *Modern Applied Science*, *11*(7), 20-23. https://doi.org/10.5539/mas.v11n7p20

Abyad, A. (2018). Project management, motivation theories and process Management. *Middle East Journal of Business*, *13*(4), 18–22. https://doi.org/10.5742/MEJB.2018.93502

Adam, A., Josephson, P. B., & Lindahl, G. (2017). Aggregation of factors causing cost overruns and time delays in large public construction projects. *Engineering, Construction and Architectural Management, 24*(3), 393-406. https://doi.org/10.1108/ECAM-09-2015-0135

Agyekum-Mensah, G., & Knight, A. D. (2017). The professionals' perspective on the causes of project delay in the construction industry. *Engineering Construction and Architectural Management, 24*(5), 828-841. https://doi.org/10.1108/ECAM-03-2016-0085

Ahady, S., Gupta, S., & Malik, R. K. (2017). A critical review of the causes of cost overrun in construction industries in developing countries. *International Research Journal of Engineering and Technology*, *4*(03), 2550-2558. https://doi.org/10.9790/3021-04640107

Ahmed, R., & Anantatmula, V. S. (2017). Empirical study of project manager's leadership competence and project performance. *Engineering Management Journal*, *29*(3), 189-205. https://doi.org/10.1080/10429247.2017.1343005

Akao, Y. (1991). *Hoshin Kanri: Policy deployment for successful TQM.* Productivity Press.

Akhund, M. A., Imad, H. U., Memon, N. A., Siddiqui, F. H., Khoso, A. R., & Panhwar, A. A. (2018). Contributing factors of time overrun in public sector construction projects. *Engineering, Technology & Applied Science Research*, *8*(5), 3369-3372. https://doi.org/10.48084/etasr.2276

Alexander, K. D., Mazzuchi, T. A., & Sarkani, S. (2017). Knowledge Integration for Predicting Schedule Delays in Software Integration. *Engineering Management Journal*, *29*(4), 223-234. https://doi.org/10.1080/10429247.2017.1382306

Al-Fadhali, N., Zainal, R., Kasim, N., Dodo, M., Kim Soon, N., & Hasaballah, A. H. A. (2019). The desirability of Integrated Influential Factors (IIFs) Model of internal stakeholder as a panacea to project completion delay in Yemen. *International Journal of Construction Management*, *19*(2), 128-136. https://doi.org/10.1080/15623599.2017.1390720

Al-Hazim, N., Salem, Z. A., & Ahmad, H. (2017). Delay and cost overrun in infrastructure projects in Jordan. *Procedia Engineering*, *182*, 18-24. https://doi.org/10.1016/j.proeng.2017.03.105

Alotaibi, N. O., Sutrisna, M., & Chong, H. Y. (2016). Guidelines of using project management tools and techniques to mitigate factors causing delays in public construction projects in the Kingdom of Saudi Arabia. *Journal of Engineering, Project & Production Management, 6*(2), 90-103. https://doi.org/10.32738/jeppm.201607.0003

Al Sudairi, T., AL-Karaghouli, W., and Eldabi, T. (2013). Alignment of large project management process to business strategy: A review and conceptual framework. *Journal of Enterprise Information Management, 26(5), 596-615.* https://doi.org/10.1108/JEIM-07-2013-0050

Alvarenga, J., Branco, R., Guedes, A., Soares, C., & Silva, W. (2019). The project manager core competencies to project success. *International Journal of Managing Projects in Business*, *3*(8), 13-19. https://doi.org/10.1108/IJMPB-12-2018-0274

Amandin, M. M., & Kule, J. W. (2016). Project delays on cost overrun risks: A study of Gasabo district construction projects Kigali, Rwanda. *ABC Journal of Advanced Research*, *5*(1), 21-34. https://doi.org/10.18034/abcjar.v5i1.55

Ames, H., Glenton, C., & Lewin, S. (2019). Purposive sampling in a qualitative evidence synthesis: a worked example from a synthesis on parental perceptions of vaccination communication. *BMC Medical Research Methodology*, *19*(1), 26. https://doi.org/10.1186/s12874-019-0665-4

Amoatey, C. T., & Ankrah, A. N. O. (2017). Exploring critical road project delay factors in Ghana. *Journal of Facilities Management*, *15*(2), 110–127. https://doi.org/10.1108/JFM-09-2016-0036

Anandarajan, M., & Harrison, T. D. (2019). Aligning business strategies and analytics: bridging between theory and practice. In *Aligning business strategies and analytics* (pp. 1-7). Springer. https://doi.org/10.1007/978-3-319-93299-6_1

Andersen, E. S. (2016). Do project managers have different perspectives on project management? *International Journal of Project Management*, *34*(1), 58-65. https://doi.org/10.1016/j.ijproman.2015.09.007

Anderson, C. (2010). Presenting and evaluating qualitative research. *American Journal of Pharmaceutical Education*, *74*(8), 1-7. https://doi.org/10.5688/aj7408141

Armstrong, C. S., & Kepler, J. D. (2018). Theory, research design assumptions, and causal inferences. *Journal of Accounting & Economics*, *66*(2–3), 366–373. https://doi.org/10.1016/j.jacceco.2018.08.012

Aydin, M. N., & Dilan, E. (2017). Project management method adoption: A service industry case study. *International Journal of Information Technology Project Management*, *8*(2), 17-33. https://doi.org/10.4018/IJITPM.2017040102

Azzali, S., & Tomba, M. (2018). Middle East insights. Retrieved from https://mei.nus.edu.sg/wp-content/uploads/2018/03/Qatar-construction-1.pdf

Ballesteros-Sánchez, L., Ortiz-Marcos, I., & Rodríguez-Rivero, R. (2019). The Impact of Executive Coaching on Project Managers' Personal Competencies. *Project*

Management Journal, 50(3), 306-321. https://doi.org/10.1177/8756972819832191

Barnes, J. A. (1989). Privacy, ethics and social science research. In I. L. Horowitz (Ed.), *Persuasions and Prejudices* (pp. 447-450). Routledge. https://doi.org/10.4324/9781315126302

Banihashemi, S., Hosseini, M. R., Golizadeh, H., & Sankaran, S. (2017). Critical success factors (CSFs) for integration of sustainability into construction project management practices in developing countries. *International Journal of Project Management, 35*(6), 1103-1119. https://doi.org/10.1016/j.ijproman.2017.01.014

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *Qualitative Report, 13*(4), 544–559. https://doi.org/10.46743/2160-3715/2008.1573

Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods.* Oxford University Press.

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research, 15*(2), 219–234. https://doi.org/10.1177/1468794112468475

Boddy, C. R. (2016), Sample size for qualitative research. *Qualitative Market Research*,19(4) 426-432. https://doi.org/10.1108/QMR-06-2016-0053

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, *26*(13), 1802-1811. https://doi.org/10.1177/1049732316654870

Bonett, D. G. (2012). Replication-extension studies. Current Directions in Psychological Science, 21(6), 409-412. doi:10.1177/0963721412459512

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org.ezp.waldenulibrary.org/10.1191/1478088706qp063oa

Bredillet, C., Tywoniak, S., & Tootoonchy, M. (2018). Exploring the dynamics of project management office and portfolio management co-evolution: A routine lens. *International Journal of Project Management*, *36*(1), 27-42. https://doi.org/10.1016/j.ijproman.2017.04.017

Bree, R. T., & Gallagher, G. (2016). Using Microsoft Excel to code and thematically analyse qualitative data: a simple, cost-effective approach. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education*, *8*(2).

Burrell, D. N. (2019). Assessing the Value of Executive Leadership Coaches for Cybersecurity Project Managers. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, *10*(2), 20-32. https://doi.org/10.4018/IJHCITP.2019040102

Caniëls, M. C., Chiocchio, F., & van Loon, N. P. (2019). Collaboration in project teams: The role of mastery and performance climates. *International Journal of Project Management, 37*(1), 1-13. https://doi.org/10.1016/j.ijproman.2018.09.006

Cassell, C. (2018). "Pushed beyond my comfort zone:" MBA student experiences of conducting qualitative research. *Academy of Management Learning & Education, 17*(2), 119-136. https://doi.org/10.5465/amle.2015.0016

Cheng, F. K. (2017). *Using Email and Skype Interviews with Marginalized Participants*. SAGE Publications Ltd.

Clark, K. R., & Vealé, B. L. (2018). Strategies to enhance data collection and analysis inqualitative research. *Radiologic Technology, 89*(5), 482CT-485CT.

Cleveland, S., & Cleveland, M. (2020). Leadership Competencies for Sustained Project Success. *International Journal of Applied Management Theory and Research (IJAMTR), 2*(1), 35-47. https://doi.org/10.4018/IJAMTR.2020010103

Cole, C. (2017). Project management evolution to improve economic success of infrastructure projects. In E. Tome, G. Neumann, & V. Knežević (Eds.), *Proceedings of the International Conference Theory and Applications in the Knowledge Economy, Zagreb, Croatia* (pp. 483-497). Verlag.

Coffie, G.H., Aigbavboa, C.O. & Thwala, W.D. Modelling construction completion cost in Ghana public sector building projects. *Asian J Civ Eng* **20,** 1063–1070 (2019). https://doi.org/10.1007/s42107-019-00165-7

Cooper, K., & White, R. E. (2012). *Qualitative research in the postmodern era: Contexts of qualitative research.* Springer.

Deep, S., Gajendran, T., & Jefferies, M. (2020). Factors Influencing Power and Dependence for Collaboration among Construction Project Participants. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, *12*(2), 65-67. https://doi.org/0.1061/(asce)la.1943-4170.0000362

Damoah, I. S., & Akwei, C. (2017). Government project failure in Ghana: A multidimensional approach. *International Journal of Managing Projects in Business*, *10*(1), 32–59. https://doi.org/10.1108/ijmpb-02-2016-0017

Damoah, I. S., & Kumi, D. K. (2018). Causes of government construction projects failure in an emerging economy. *International Journal of Managing Projects in Business, 11*(3), 558. https://doi.org/10.1108/IJMPB-04-2017-0042

Dastyar, B., Esfahani, A. F., Askarifard, M., & MonirAbbasi, A., (2018). Identification, Prioritization and Management of Construction Project Claims. *Journal of Engineering, Project, and Production Management, 8(*2*),* 90-96. https://doi.org/10.32738/jeppm.201807.0004

Davis, B., & Ozanne, J. L. (2018). Risky research? How relational engagement in research can mitigate harm and enhance benefits. *Journal of the Association for Consumer Research*, *3*(1), 7-15. https://doi.org/10.1086/695669

Darling, E. J., & Whitty, S. J. (2016). The project management office: It's just not what it used to be. *International Journal of Managing Projects in Business*, *9*(2), 282-308. https://doi.org/10.1108/IJMPB-08-2015-0083

Derakhshan, R., Turner, R., & Mancini, M. (2019). Project governance and stakeholders: a literature review. *International Journal of Project Management*, *37*(1), 98-116. https://doi.org/10.1016/j.ijproman.2018.10.007

Djukic, M., Jovanoski, I., Ivanovic, O. M., Lazic, M., & Bodroza, D. (2016). Cost-benefit analysis of an infrastructure project and a cost-reflective tariff: A case study for investment in wastewater treatment plants in Serbia. *Renewable and Sustainable Energy Reviews*, *59*, 1419-1425. https://doi.org/10.1016/j.rser.2016.01.050

Drouin, N., & Sankaran, S. (2017). Project teams and their role in organizational project management. In S. Sankaran, R. Müller, & N. Drouin (Eds.), *Cambridge handbook of organizational project management*. Cambridge University Press.

Dziekoński, K. (2017). Project managers' competencies model for construction industry in Poland. *Procedia Engineering*, *182*, 174–181. https://doi.org/10.1016/j.proeng.2017.03.157

Eisenhardt, K., & Graebner, M. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, *50*(1), 25-32. https://doi.org/10.5465/amj.2007.24160888

Eriksson, P. E., Larsson, J., & Pesämaa, O. (2017). Managing complex projects in the infrastructure sector: A structural equation model for flexibility-focused project

management. *International Journal of Project Management, 35,* 1512–1523. https://doi.org/10.1016/j.ijproman.2017.08.015

Evans, C., & Lewis, J. (2018). *Analysing semi-structured interviews using thematic analysis: exploring voluntary civic participation among adults*. SAGE Publications.

Famiyeh, S., Amoatey, C. T., Adaku, E., & Agbenohevi, C. S. (2017). Major causes of construction time and cost overruns: A case of selected educational sector projects in Ghana. *Journal of Engineering, Design and Technology*, *15*(2), 181-198. https://doi.org/10.1108/JEDT-11-2015-0075

Fernandes, G., Pinto, E. B., Araújo, M., & Machado, R. J. (2018). The roles of a Programme and Project Management Office to support collaborative universities–industry R&D. *Total Quality Management & Business Excellence*, *2*(7), 1-26. https://doi.org/10.1080/14783363.2018.1436963

Floris, M., & Cuganesan, S. (2019). Project leaders in transition: Manifestations of cognitive and emotional capacity. *International Journal of Project Management*, *37*(3), 517-532. https://doi.org/10.1016/j.ijproman.2019.02.003

Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report, 20*(9), 1408–1416. https://doi.org/10.1177/1468794107085301

García-Melón, M., Poveda-Bautista, R., & Del Valle M., J. L. (2015). Using the strategic relative alignment index for the selection of portfolio projects application to a

public Venezuelan Power Corporation. *International Journal of Production Economics*, *170*(Part A), 54–66. https://doi-org.ezp.waldenulibrary.org/10.1016/j.ijpe.2015.08.023

Gbangou, L. P. D., & Rusu, L. (2016). Factors Hindering Business-IT Alignment in the Banking Sector of a Developing Country. *Procedia Computer Science*, *100*, 280-288. https://doi.org/10.1016/j.procs.2016.09.156

Gbahabo, P., & Samuel, A. O. (2017, January). Effects of Infrastructure Project Cost Overruns and Schedule Delays in Sub-Saharan Africa. In *The 11th International Conference on Social Sciences, Helsinki, Finland* (pp. 20-21).

Gbahabo, P. T., & Ajuwon, O. S. (2017). Effects of project cost overruns and schedule delays in Sub-Saharan Africa. *European Journal of Interdisciplinary Studies, 7*(2), 46-59. https://doi.org/10.26417/ejis.v7i2

Gelinas, L., Pierce, R., Winkler, S., Cohen, I. G., Lynch, H. F., & Bierer, B. E. (2017). Using social media as a research recruitment tool: Ethical issues and recommendations. *The American Journal of Bioethics*, *17*(3), 3-14. https://doi.org/10.1080/15265161.2016.1276644

Giordani da Silveira, W., Pinheiro de Lima, E., Gouvea da Costa, S. E., & Deschamps, F. (2017). Guidelines for Hoshin Kanri implementation: Development and discussion. *Production Planning & Control*, *28*(10), 843-859. https://doi.org/10.1080/09537287.2017.1325020

Glenna, L., Hesse, A., Hinrichs, C., Chiles, R., & Sachs, C. (2019). Qualitative research ethics in the big data era. *American Behavioral Scientist*, *63*(5), 560–583. https://doi.org/10.1177/0002764219826282

Gomes, J., & Romão, M. (2016). Improving project success: A case study using benefits and project management. *Procedia Computer Science*, *100*, 489-497. https://doi.org/10.1016/j.procs.2016.09.187

Grady, C. (2019). The contribution of ethics review to protection of human participants: Comment on "Measuring the quality and performance of institutional review boards". *Journal of Empirical Research on Human Research Ethics*, *14*(3), 197-199. https://doi.org/10.1177/1556264619837774

Guion, L. A., Diehl, D. C., & McDonald, D. (2011). *Triangulation: Establishing the validity of qualitative studies* (Publication no. FCS6014).

Guimaraes, A., & Wang, Z. J. (2017). Project management office to the rescue: Aligning workforce and resources with library vision and delivering results. In B. R. Bernhardt, L. H. Hinds, & K. P. Strauch (Eds.), *Roll with the times or the times roll over you: Charleston Conference proceedings 2016.* Purdue University Press. https://doi.org/10.5703/1288284316473

Guimaraes, A., McGowan, L., VanNevel, M., & Wang, Z. (2018). The value of full-time project management positions: PMO nuts and bolts at Hesburgh Libraries. *Project Management in the Library Workplace*, *38*(6), 199-228. https://doi.org/10.1108/S0732-067120180000038015

Gunduz, M., & Maki, O. L. (2018). Assessing the Risk Perception of Cost Overrun through Importance Rating. *Technological & Economic Development of Economy*, *24*(5), 1829–1844. https://doi.org/10.3846/20294913.2017.1321053

Haas, M., & Cummings, J. (2015). Barriers to knowledge seeking within MNC teams: Which differences matter most? *Journal of International Business Studies 46***,** 36–62. https://doi.org/10.1057/jibs.2014.37

Habibi, M., Kermanshachi, S., & Safapour, E. (2018, April 2-4). Engineering, procurement and construction cost and schedule performance leading indicators: state-of-the-art review. In C. Wang, C. Harper, Y. Lee, R. Harris, & C. Berryman (Eds.), *Proceedings of Construction Research Congress, New Orleans, Louisiana.* ASCE. https://doi.org/10.1061/9780784481271.037

Hadi, M. A., & Closs, S. J. (2016). Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *International Journal of Clinical Pharmacy, 38*(3), 641-646. https://doi.org/10.1007/s11096-015-0237-6

Hamid, W. J., & Waterman, A. (2018). Analysis of the main causes of cost overruns in construction industry in developing countries and the UK. *International Review of Civil Engineering*, *9*(3), 105-113. https://doi.org/10.15866/irece.v9i3.14525

Harkiolakis, N. (2017). *Quantitative research methods: From theory to publication.* Create Space.

Heravi, G., & Mohammadian, M. (2017). Cost overruns and delay in municipal construction projects in developing countries. *AUT Journal of Civil Engineering*, *1*(1), 31-38. https://doi.org/10.22060/CEEJ.2017.12189.5163

Honig, B., Lampel, J., Siegel, D., & Drnevich, P. (2017). Special Section on Ethics in Management Research: Norms, Identity, and Community in the 21st Century. *Academy of Management Learning & Education*, *16*(1), 84–93. https://doi.org/10.5465/amle.2017.0023

Hopkins, R. M., Regehr, G., & Pratt, D. D. (2017). A framework for negotiating positionality in phenomenological research. *Medical Teacher*, *39*(1), 20-25. https://doi.org/10.1080/0142159X.2017.1245854

Hyväri, I. (2016). Roles of top management and organizational project management in the effective company strategy implementation. *Procedia-Social and Behavioral Sciences*, *226*, 108-115. https://doi.org/10.1016/j.sbspro.2016.06.168

Hudson, E. A. (2015). *Economic growth: facts, effects, processes and theory*. Vernon Press.

Ilmudeen, A., Bao, Y., & Alharbi, I. M. (2019). How does business-IT strategic alignment dimension impact on organizational performance measures: Conjecture and empirical analysis. *Journal of Enterprise Information Management*, *32*(3), 457-476. https://doi.org/10.1108/JEIM-09-2018-0197

Jovanović P. M., & Jovanović F. P. (2018). New roles of a project manager. *Tehnika, 73(2),* 270-275. https://doi.org/10.5937/tehnika1802270j

Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, *72*(12), 2954-2965. https://doi.org/10.1111/jan.13031

Kangwa, J., & Ebohon, O. J. (2019). Exploring the perceptions of construction SMEs on appropriate supporting policies for growth and development by the Qatari government for effective participation in infrastructure procurement and delivery for the 2022 World Cup. Association of Schools of Construction of Southerns Africa, 12, 35-61. Retrieved from http://researchopen.lsbu.ac.uk/2898/

Kerzner, H. R. (2014). *Project management best practices: achieving global excellence*. John Wiley & Sons, 2014.

King, D. B., O'Rourke, N., & DeLongis, A. (2014). Social media recruitment and online data collection: A beginner's guide and best practices for accessing low-prevalence and hard-to-reach populations. *Canadian Psychology/Psychologie canadienne*, *55*(4), 240. https://doi.org/10.1037/a0038087

Klar, S., & Leeper, T. J. (2019). Identities and intersectionality: A case for purposive sampling in survey-experimental research. In P. Lavrakus, M. Traugott, C. Kennedy, A. Holbrook, E. de Leeuw, & B. West (Eds.), *Experimental methods in survey research: Techniques that combine random sampling with random assignment* (pp. 419-433). John Wiley & Sons. https://doi.org/10.1002/9781119083771.ch21

Ko, J., & Kim, D. (2019). The effects of maturity of project portfolio management and business alignment on PMO efficiency. *Sustainability*, *11*(1), 238. https://doi.org/10.3390/su11010238

Kopmann, J., Kock, A., Killen, C. P., & Gemünden, H. G. (2017). The role of project portfolio management in fostering both deliberate and emergent strategy. *International Journal of Project Management*, *35*(4), 557-570. https://doi.org/10.1016/j.ijproman.2017.02.011

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, *24*(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Kua, H. W. (2016). A new integrated framework for stakeholder involvement in sustainability policymaking–A multidisciplinary approach. *Sustainable Development*, *24*(5), 281-297. https://doi.org/10.1002/sd.1629

Kumar, S., & Thakkar, J. J. (2017). Schedule and cost overrun analysis for R&D projects using ANP and system dynamics. *International Journal of Quality & Reliability Management*, *34*(9), 1551–1567. https://doi.org/10.1108/ijqrm-04-2016-0050

Lancaster, K. (2017). Confidentiality, anonymity and power relations in elite interviewing: conducting qualitative policy research in a politicised domain. *International Journal of Social Research Methodology*, *20*(1), 93-103. https://doi.org/10.1080/13645579.2015.1123555

Larsson, J., Eriksson, P. E., & Pesamaa, O. (2018). The importance of hard project management and team motivation for construction project performance. *International Journal of Managing Projects in Business*, *11*(2), 275–288. https://doi.org/10.1108/IJMPB-04-2017-0035

Lisak, A., & Erez, M. (2015). Leadership emergence in multicultural teams: The power of global characteristics. *Journal of World Business*, *50*(1): 3–14. https://doi.org/10.1016/j.jwb.2014.01.002

Lobo, M. A., Moeyaert, Cunha M., Babik I., (2017). Multiple-case design, analysis, and quality assessment for intervention research. *Journal of Neurologic Physical Therapy*, *41*(3).

Lub, V. (2015). Validity in qualitative evaluation: Linking purposes, paradigms, and perspectives. *International Journal of Qualitative Methods*, *14*(5). https://doi.org/10.1177/1609406915621406

Marcus, B., Weigelt, O., Hergert, J., Gurt, J., & Gelléri, P. (2017). The use of snowball sampling for multi-source, organizational research: *Some cause for concern. Personnel Psychology*, *70*(3), 635–673. https://doi.org/10.1111/peps.12169

Mahat-Shamir, M., Neimeyer, R. A., & Pitcho-Prelorentzos, S. (2019). Designing in-depth semi-structured interviews for revealing meaning reconstruction after loss. *Death Studies*, 1-8. https://doi.org/10.1080/07481187.2019.1617388

Maqbool, R., Sudong, Y., Manzoor, N., & Rashid, Y. (2017). The impact of emotional intelligence, project managers' competencies, and transformational leadership on

project success: An empirical perspective. *Project Management Journal, 48*(3), 58-75. https://doi.org/10.1177/875697281704800304

Majeed, A. (2019). *Failure of projects in Pakistan Electron Limited due to lack of project management office* [Doctoral dissertation, Capital University].

Mensah, C. N., Dauda, L., Boamah, K. B., & Salman, M. (2020) One district one factory policy of Ghana, a transition to a low-carbon habitable economy? *Environment, Development & Sustainability*, *23*, 703–721. https://doi.org/10.1007/s10668-020-00604-5

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Melander, A., Löfving, M., Andersson, D., Elgh, F., & Thulin, M. (2016). Introducing the Hoshin Kanri strategic management system in manufacturing SMEs. *Management Decision*, *54*(10), 2507-2523. https://doi.org/10.1108/MD-03-2016-0148

McGrady, E., & Blanke, S. J. (2014). Twelve best practices to mitigate risk through continuity planning and a scorecard to track success. *Journal of Management Policy and Practice, 15*(3), 11-19. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1080.948&rep=rep1&type=pdf

McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. *Medical Teacher*, *41*(9), 1002-1006. https://doi.org/10.1080/0142159X.2018.1497149

Moeyaert, M., Ugille, M., Ferron, J. M., Onghena, P., Heyvaert, M., Beretvas, S. N., & Van den Noortgate, W. (2015). Estimating intervention effects across different types of multiple -subject experimental designs: Empirical illustration. *School Psychology Quarterly*, *30*(1), 50–63. https://doi.org/10.1037/spq0000068

Mok, K. Y., Shen, G. Q., & Yang, J. (2018). Stakeholder management studies in mega construction projects: A review and future directions. *International Journal of Project Management, 33*, 446-457. https://doi.org/10.1016/j.ijproman.2014.08.007

Monteiro, A., Santos, V., & Varajão, J. (2016). Project management office models–A review. *Procedía Computer Science*, *100*, 1085-1094. https://doi.org/10.1016/j.procs.2016.09.254

Monteiro, A. J. V. (2017). *Project management office (PMO): typologies and models* [Doctoral dissertation, Universidade Nova de Lisboa].

Montenegro, C., & Barragán, G. (2018, January). Alignment of software project management with the business strategy in VSEs: Model and evaluation. In Á Rocha & T. Guarda (Eds.), *Proceedings of the International Conference on Information Technology & Systems* (pp. 178-190). Springer. https://doi.org/1007/978-3-319-73450-7_18

Mossalam, A., & Arafa, M. (2017). Governance model for integrating organizational projectmanagement (OPM) with corporate practices. *HBRC Journal*, *13*(3), 302-314. https://doi.org/10.1016/j.hbrcj.2015.08.003

Mpofu, B., Ochieng, E. G., Moobela, C., & Pretorius, A. (2017). Profiling causative factors leading to construction project delays in the United Arab Emirates. *Engineering Construction and Architectural Management, 24*(2), 346-376. https://doi.org/10.1108/ECAM-05-2015-0072

Musawir, A., Serra, C. E. M., Zwikael, O., & Ali, I. (2017). Project governance, benefit management, and project success: Towards a framework for supporting organizational strategy implementation. *International Journal of Project Management, 35*(8), 1658-1672. https://doi.org/10.1016/j.ijproman.2017.07.007

Nascimento, D. L. M., Alencastro, V., Quelhas, O. L. G., Caiado, R. G. G., Garza-Reyes,J.A., Rocha-Lona, L. & Tortorella, G. (2019), Exploring Industry 4.0 technologies to enable circular economy practices in a manufacturing context: A business model proposal. *Journal of Manufacturing Technology Management*, 30(3), 607-627. https://doi.org/10.1108/JMTM-03-2018-0071

Nguyen, T. N., Lobo, A., & Greenland, S. (2017). The influence of cultural values on green purchase behaviour. *Marketing Intelligence & Planning, 35*(3), 377–396. https://doi.org/10.1108/MIP-08-2016-0131

Nicholas, J. (2016). Hoshini kanri and critical success factors in quality management and lean production. Total Quality Management & Business Excellence, 27, 250-264. https://doi.org/10.1080/14783363.2014.976938

Nicholas, J. M., & Steyn, H. (2017). *Project management for engineering, business and Technology*. Routledge.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1). https://doi.org/10.1177%2F1609406917733847

Ong'ondi, J. (2017). *Strategies for improving the performance of project managers in South Sudan* [Doctoral study, Walden University].

Otra-Aho, V. J., Iden, J., & Hallikas, J. (2019). The impact of the project management office roles to organizational value contribution. *International Journal of Information Technology Project Management*, *10*(4), 79-99. https://doi.org/10.1108/17538370910930563

Oyewobi, L. O., Jimoh, R., Ganiyu, B. O., & Shittu, A. A. (2016). Analysis of causes and impact of variation order on educational building projects. *Journal of Facilities Management, 14*(2), 139-164. https://doi.org/10.1108/JFM-0102015-0001

Pall, G. K., Bridge, A. J., Skitmore, M., & Gray, J. (2016). Comprehensive review of delays in power transmission projects. *IET Generation, Transmission & Distribution*, *10*(14), 3393-3404. https://doi.org/10.1049/iet-gtd.2016.0376

Parry, V. K. A., & Lind, M. L. (2016). Alignment of business strategy and information technology considering information technology governance, project portfolio control, and risk management. *International Journal of Information Technology Project Management*, *7*(4), 21-37. https://doi.org/10.4018/ijitpm.2016100102

Paton, S., & Andrew, B. (2019). The role of the project management office (PMO) in product lifecycle management: A case study in the defence industry. *International*

Journal of Production Economics, *208*, 43-52. https://doi.org/10.1016/j.ijpe.2018.11.002

Pedrini, M., & Ferri, L. M. (2019). Stakeholder management: a systematic literature review. *Corporate Governance: The International Journal of Business in Society*, *19*(1), 44-59. https://doi.org/10.1108/CG-08-2017-0172

Philbin, S. P. (2016, October). Exploring the project management office (PMO)–Role, structure and processes. In S. Long (Ed.), *Proceedings of the International Annual Conference of the American Society for Engineering Management* (pp. 1-11). American Society for engineering Management. .https://doi.org/10.1016/j.procs.2017.11.012

Podgórska, M., and Pichlak, M. (2019). Analysis of project managers' leadership competencies: Project success relation: what are the competencies of polish project leaders? *International Journal of Managing Projects in Business*, *12*(4), 869-887. https://doi.org/10.1108/IJMPB-08-2018-0149

Project Management Institute (2013). Project management body of knowledge (PMBOK 5th ed.). Newtown Square. PA: Author

Rad, F. H., & Rowzan, S. M. (2018). Designing a hybrid system dynamic model for analyzing the impact of strategic alignment on project portfolio selection. *Simulation Modelling Practice and Theory*, *89*, 175-194. https://doi.org/10.1016/j.simpat.2018.10.001

Rao, B. P., Shekar, S. C., Jaiswal, N., Jain, A., & Saxena, A. D. (2016). Delay analysis of construction projects. *Journal of Information Technology & Economic Development, 7*(1), 15–24.

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Sage Publications.

Roth, W.-M., & von Unger, H. (2018). Current perspectives on research ethics in qualitative research. *Forum: Qualitative Social Research, 19*(3), 798–809. https://doi.org/10.17169/fqs-19.3.3155

Ruggiano, N., & Perry, T. E. (2019). Conducting secondary analysis of qualitative data: Should we, can we, and how? *Qualitative Social Work, 18*(1), 81-97. https://doi.org/10.1177/1473325017700701

Safapour, E., Kermanshachi, S., & Taneja, P. (2019, June). Investigation and analysis of the rework leading indicators in construction projects: state-of-the-art review. In *Proceedings of the 7th CSCE International Construction Specialty Conference, Laval, Quebec, Canada* (pp. 12-15). https://csce.ca/elf/apps/CONFERENCEVIEWER/conferences/2019/pdfs/PaperPDFversion_294_0421025253.pdf

Sande, J. B., & Haugland, S. A. (2015). Strategic performance effects of misaligned formal contracting: The mediating role of relational contracting. International Journal of Research in Marketing, 32, 187-194. https://doi.org/10.1016/j.ijresmar.2015.02.002

Sandhu, M. A., Al Ameri, T. Z., & Wikström, K. (2019). Benchmarking the strategic roles of the project management office (PMO) when developing business ecosystems. *Benchmarking: An International Journal*, *26*(2), 452-469. https://doi.org/10.1108/bij-03-2018-0058

Saxena, A. D. (2016). Delay Analysis of Construction Projects. *Journal of Information Technology & Economic Development*, *7*(1), 15–24.

Schram, T. H. (2006). *Conceptualizing and proposing qualitative research* (2nd ed.). Pearson.

Seitz, S. (2016). Pixilated partnerships, overcoming obstacles in qualitative interviews via Skype: A research note. *Qualitative Research*, *16*(2), 229-235. https://doi.org/10.1177/1468794115577011

Sirisomboonsuk, P., Gu, V. C., Cao, R. Q., & Burns, J. R. (2018). Relationships between project governance and information technology governance and their impact on project performance. *International Journal of Project Management*, *36*(2), 287-300. https://doi.org/10.1016/j.ijproman.2017.10.003

Shah, R. (2016). An exploration of causes for delay and cost overruns In construction projects: Case study of Australia, Malaysia & Ghana. *Journal of Advanced College of Engineering and Management*, *2*, 41-55. https://doi.org/10.3126/jacem.v2i0.16097

Shahhosseini, V., Afshar, M. R., & Amiri, O. (2018). The root causes of construction project failure. *Scientia Iranica, 25*(1), 93-108. https://doi.org/10.24200/sci.2017.4178

Silvius, G., & Schipper, R. (2019). Planning Project Stakeholder Engagement from a Sustainable Development Perspective. *Administrative Sciences*, *9*(2), 46. https://doi.org/10.3390/admsci9020046

Sterling, E. J., Betley, E., Sigouin, A., Gomez, A., Toomey, A., Cullman, G., & Filardi, C. (2017). Assessing the evidence for stakeholder engagement in biodiversity conservation. *Biological Conservation*, *209*, 159-171. https://doi.org/10.1016/j.biocon.2017.02.008

Szalay, I., Kovács, Á., & Sebestyén, Z. (2017). Integrated Framework for Project Management Office Evaluation. *Procedia engineering, 196*, 578-584. https://doi.org/10.1016/j.proeng.2017.08.033

Tabassi, A. A., Argyropoulou, M., Roufechaei, K. M., & Argyropoulou, R. (2016). Leadership behavior of project managers in sustainable construction projects. *Procedia Computer Science*, *100*, 724-730. https://doi.org/10.1016/j.procs.2016.09.217

Taofeeq, D. M., Adeleke, A. Q., & Hassan, A. K. (2019). Factors Affecting Contractors risk attitude from Malaysia construction industry perspective. *Social Science and Humanities Journal*, 1281-1298. https://doi.org/0.15641/jcbm.3.2.668

Taylor, P. (2016). Leading successful PMOs: how to build the best project management office for your business. Abingdon, United Kingdom: Routledge.

Torres, A. R., Khemici, N., & Paré, M. (2017). The hot potato game: roles and responsibilities for realizing IT project benefits. *The Journal of Modern Project Management*, *5*(2). https://doi.org/10.19255/JMPM01407

Tsang, E. W. (2013). Case study methodology: Causal explanation, contextualization, and theorizing. *Journal of International Management*, *19*(2), 195–202. https://doi.org/10.1016/j.intman.2012.08.004

Turner, J. R. (2017). *Contracting for project management*. Routledge.

Ullah, K., Abdullah, A. H., Nagapan, S., Suhoo, S., & Khan, M. S. (2017). Theoretical framework of the causes of construction time and cost overruns. In *IOP Conference Series: Materials Science and Engineering*, *271*, 1-7. https://doi.org/10.1088/1757-899X/271/1/012032

Ummel, D., & Achille, M. (2016). How not to let secrets out when conducting qualitative? research with dyads. *Qualitative Health Research*, *26*(6), 807-815. https://doi.org/10.1177/1049732315627427

Van der Linde, J., & Steyn, H. (2016). The effect of a project management office on project and organisational performance: A case study. *South African Journal of Industrial Engineering*, *27*(1), 151-161. https://doi.org/10.7166/27-1-1114

Vaughn, P., & Turner, C. (2016). Decoding via coding: Analyzing qualitative text data through thematic coding and survey methodologies. *Journal of Library Administration*, *56*(1), 41-51. https://doi.org/10.1080/01930826.2015.1105035

Waheed, Z. (2016). Understanding project management: Skills and insights for successful project delivery. *Facilities*, *34*(7/8), 493–494. https://doi.org/10.1108/F-09-2015-0068

Wedekind, G. K., & Philbin, S. P. (2018). Research and grant management: The role of the project management office (PMO) in a European research consortium context. *Journal of Research Administration*, *49*(1), 43-62. https://doi.org/10.32738/ceppm.201411.0035

Wilson, R. (2012). *Economic development in the Middle East*. Routledge.

Yin, R. (2014). *Case study research: Design and methods* (5th ed.). Sage.

Yin, R. K. (2017). *Case study research: Design and methods* (6th ed.). Sage Publications.

Yu, T., Liang, X., Shen, G. Q., Shi, Q., & Wang, G. (2019). An optimization model for managing stakeholder conflicts in urban redevelopment projects in China. *Journal of Cleaner Production*, *212*, 537-547. https://doi.org/10.1016/j.jclepro.2018.12.071

Zwikael, O., & Meredith, J. R. (2018). Who's who in the project zoo? The ten-core project roles. *International Journal of Operations & Production Management*, *38*(2), 474-492. https://doi.org/10.1108/IJOPM-05-2017-0274

Zhao, X., Hwang, B. G., & Lee, H. N. (2016). Identifying critical leadership styles of project managers for green building projects. *International Journal of Construction Management*, *16*(2), 150-160. https://doi.org/10.1080/15623599.2015.1130602

Zidane, Y. J. T., & Andersen, B. (2018). The top 10 universal delay factors in construction projects. *International Journal of Managing Projects in Business*, *11*(3), 650-672. https://doi.org/10.1108/IJMPB-05-2017-0052

Zuo, J., Zhao, X., Nguyen, Q. B. M., Ma, T., & Gao, S. (2018). Soft skills of construction project management professionals and project success factors. *Engineering Construction & Architectural Management*, *25*(3), 425–442. https://doi.org/10.1108/ECAM-01-2016-0016

Appendix: Interview Protocol

Demographics

Gender: ___

Age: ____

Nationality: _____

Years working in Ghana Construction Sector: ____

Working on which Ghana government-funded infrastructure project:

_____

Years working on this specific project: _____

Introduction:

My questions today will relate to a research study regarding strategies for improving performance of project managers in Ghana to reduce delays. For the purposes of this interview, the term *capacity planning practices* refers to the processes used by an organization to determine their productivity and resource capacity required to meet their project needs.

Performance Improvement Practices Questions

1. How do you ensure that adequate supply of tools, capital, equipment, and resources are available to improve performance in your government-funded infrastructure project and what challenges do you face in this area? **(*organization level*)**

2. How do you ensure that the employees are sufficiently knowledgeable regarding the principles and policies of the organization in executing government-funded

infrastructure project and what challenges do you face in this area? (***individual/organizational level)***

3. How do you ensure that employees are following management procedure to ensure projects are completed on time and what challenges do you face in this area? (***individual/organizational level)***

4. How do you ensure the effective performance of employees by the resources deployed in your government-funded infrastructure project to enhance productivity and minimize redundancy and how do you manage challenges faced in this area? (***individual level)***

5. How do you ensure that projects are completed within the agreed budget to reduce cost overrun and what challenges do you face in this area? **(*organization level*)**

6. How do you ensure adequate organizational support services such as training facilities, quality control, safety & health etc. are available to enhance the capacity need for your government-funded infrastructure project and how do you manage any changes in this area? **(*organization level*)**

7. How do you ensure effective flow of communication within your government-funded infrastructure project to ensure employees are working as need? (***individual/organizational level)***

8. How to do you ensure adequate organizational decision making and accountability structure in your government-funded infrastructure project and how do you manage any changes in this area? (***individual/organizational level)***

9. How do you ensure adequate delegation of authority and responsibility to team members within your government-funded infrastructure project to enhance project capacity need?
10. Have we missed any point that you think is relevant and important to the topic that you would like to address?