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Adaptive Leadership Strategies and Project Success of Construction Project Managers in Jamaica

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Walden University

College of Management and Technology

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Devon R. Smith

has been found to be complete and satisfactory in all respects,
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Walden University
2020

Abstract

Adaptive Leadership Strategies and Project Success of Construction Project Managers in
Jamaica

by

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MBA, Manchester Business School, United Kingdom, 2010

BSc, University of Technology, Jamaica, 2003

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Walden University

October 2020

Abstract

The lack of effective project leadership strategies can influence organizations' performance to deliver projects successfully in a rigorous and complex business environment. Project leaders whose leadership performance is poor may experience business failure. Grounded in adaptive leadership theory, the purpose of this qualitative multiple case study was to explore adaptive leadership strategies used by some project managers in Jamaica to increase project success rates. Participants were 8 senior public sector project managers who successfully managed projects using adaptive leadership strategies. The data collection techniques were semistructured face-to-face interviews and review of company archival documents and artifacts from the organizations' websites. Yin's 5-step analysis was used to analyze the data. Three themes emerged: leader-follower relationship, stakeholders' engagement, and hard and soft leadership approach. Project leaders who develop relationships with followers, engage stakeholders, and use appropriate leadership skills in different situations will address problems effectively as they arise. The implications for social change include the potential to create a positive work environment for team members and utilizing a multiple party collaboration with community stakeholders to resolve issues such as environmental degradation, construction waste, and sociopolitical challenges.

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Dedication

I dedicate this doctoral study to my loyalists. To my family member who provided motivation and encouragement. Hope and Deborah, who provided guidance and thoughtfulness throughout my personal, academic, and professional journey. My sons, Gavin, Dylan, Gordon, and Aleem, who displayed support and inspiration. To my mother, Viola, and sister, Jackie, who provided much support. This study is also dedicated to C.A.S.T school family of 1992. Lastly, I must recognize my late father, Lloyd Alexander Smith, a giant of a man who is viewing from above with satisfaction for this accomplishment!

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Section 1: Foundation of the Study

The construction sector is a vital economic driver in any sovereign state (Chiang, Tao, & Wong, 2015). In Jamaica, the construction industry contributed 7.2% to the island's gross domestic product (GDP; Statistical Institute of Jamaica [STATIN], 2017). The Planning Institute of Jamaica (PIOJ, 2009) intimated the sluggishness of the local construction sector and urged improvement to build a more sustainable industry in keeping with the Jamaica Vision 2030 Plan. A relationship exists between low performance of the construction sector in an economy and an increase in the complexity of projects (Blaskovics, 2016). The purpose of this multiple case study was to explore adaptive leadership strategies that some construction project managers in Jamaica use to increase projects' success rates.

Background of the Problem

The construction industry contributes to a country's economic development (Chiang et al., 2015). In developing economies, the construction sector can improve a country's GDP by a pull-and-push multiplier effect on other economic sectors (Lopes, Oliveira, & Abreu, 2017). The push-and-pull mechanism creates a stable plateau for the supply and demand for goods and services (Chiang et al., 2015). If the success rates of projects are low, the country's economy will be modest (Lopes et al., 2017). The potential significance of the construction sector to a country's GDP suggests project managers should attempt to improve their success rates (Hornstein, 2015). Many project managers fail at the project implementation phase, which can negatively influence the company's performance, the community, or the country (Hornstein, 2015; Ponnappa, 2014).

The success or failure of projects is usually attributed to the project managers' leadership approach. Many project managers focus their attention on tools and techniques instead of the application of leadership strategies to manage their limited resources in an effective manner (Ponnappa, 2014). Using leadership strategies, they could navigate the project life cycle through any uncertainties (Böhle, Heidling, & Schoper, 2016; Ponnappa, 2014). Böhle et al. (2016) and Svejvig and Anderson (2015) observed that although project managers use the project management tools and techniques to support the performance of projects, continuously low success rates exist, especially with increases in project scope and complexity. The low success rates create stresses on the resources and the engagement of human capital to achieve project success (Hornstein, 2015). The objective of the current qualitative multiple case study was to explore adaptive leadership strategies used by some project managers in Jamaica to increase the project success rate.

Problem Statement

The lack of effective project leadership strategies can influence organizations' performance to deliver projects successfully in a rigorous and complex business environment (Ebrahimi, Moosavi, & Chirani, 2016). Reflecting on project performance over a 10-year period (2005-2015), Walker (2016) noted a decrease in projects' success rates. Another observation was that complex high-profile projects often did not meet their objectives because of ineffective project leadership styles (Fabricius & Büttgen, 2015). The low success rate can negatively influence the financial performance of an organization (Ebrahimi, 2016). The general business problem was that project managers do not apply adaptive leadership strategies to increase projects success rates. The specific

business problem was that some project managers in the construction industry lack the necessary adaptive leadership strategies to increase the project success rates.

Purpose Statement

The purpose of this qualitative multiple case study was to explore adaptive leadership strategies used by construction project managers in Jamaica to increase projects' success rates. The targeted population was four project managers from different public sector organizations in the construction industry who had successfully used adaptive leadership strategies in their respective construction projects in Jamaica. The four organizations were situated within the two parishes of Kingston and St. Andrew, which are urban areas in Jamaica. The results of the research may create positive social change in the following manner. First, findings may be used to increase inclusiveness among team members and other stakeholders in the construction industry. Second, findings may lead to a positive work environment for employees and a reduction of unnecessary waste, which can negatively impact the environment and communities. Third, findings may yield a more prudent approach to procurement practices and the development of a value-for-money culture. Finally, findings may be used to reduce waste products and eliminate defects from the end-products customers receive.

Nature of the Study

The integrity, accuracy, and value of any study is determined in large part by the suitability of the research method. M. N. K. Saunders, Lewis, and Thornhill (2015) noted three fundamental research methodologies: quantitative, qualitative, and mixed methods. The quantitative research method is a deductive process that researchers use to focus on an empirical inquiry of an observable phenomenon using a statistical approach to test

hypotheses using numerical data (M. N. K. Saunders et al., 2015). The quantitative method was not appropriate for the current study because the purpose of the study was to explore strategies, not test hypotheses. Conversely, researchers use qualitative methodology to uncover a deeper understanding of participants' experiences with a phenomenon using rich textual data (Yin, 2017). M. N. K. Saunders et al. described mixed methods as a different type of research approach that combines quantitative and qualitative data collection techniques.

Researchers use a mixed-methods approach to explore the research problem from different perspectives (Yin, 2017). The utilization of the mixed methods approach using both quantitative and qualitative data collection and analysis is time-consuming and extends the length of the study. The purpose of the current study was to explore how some construction project managers use adaptive leadership strategies in Jamaica to increase projects' success rates. For these reasons, an inductive qualitative research methodology was appropriate for this study.

Qualitative researchers can choose from several qualitative designs such as ethnography, phenomenology, and case study (Yin, 2017). The ethnographic design is used to explore participants' customs, habits, and culture, whereas phenomenology is used to explore the participants' lived experiences and the interpretation of those experiences (M. N. K. Saunders et al., 2015). Case study researchers, in contrast, conduct an in-depth investigation of a specific phenomenon within a real-life setting (Yin, 2017). Ethnography and phenomenology were not suitable for the current study because the focus was not on life experiences, culture, customs, or lived experiences of the participants. Instead, the purpose of the study was to explore the adaptive leadership

strategies used by four project managers from different organizations to increase their project success rate. The use of a multiple case study design allowed for the extraction of a deeper understanding of the contextual conditions that project managers face while managing projects.

Research Question

One central question guided this research study: What are the adaptive leadership strategies project managers in Jamaica use to increase project success rates?

Interview Questions

I used the following interview questions to address the research question:

1. How would you define project success?
2. What leadership strategies do you use to engage your team members in resolving challenging situations?
3. How do you manage stressful situations among the team members and stakeholders who are associated with the project?
4. What, if any, strategies do you use to foster an adaptive culture among the team members to achieve project success?
5. How do you ensure your project team is properly trained for each project?
6. How do you empower your team members, especially those who think their voices are not heard?
7. In managing your project team members, what different leadership strategies do you use to adapt as the project evolves?
8. What else can you add to help project managers increase their project success rate?

Conceptual Framework

The conceptual framework for this study was adaptive leadership (see Glover, Friedman, & Jones, 2002; Nelson & Squires, 2017). In 1994, Heifetz and Linsky (as cited in Nelson & Squires, 2017) developed adaptive leadership theory. According to the framework, organizational leaders who face challenges in unpredictable market conditions, persistent competition from rivals, and technology changes can use adaptive leadership to navigate these hurdles so that their firms can remain sustainable (Glover et al., 2002; Nelson & Squires, 2017). The theory also helps these leaders to confront internal and external issues that affect the organization.

The purpose of adaptive leadership style is to eliminate the technical approach to solve adaptive challenges (Heifetz, Linsky, & Grashow, 2009). Eliminating the use of technical approaches to solve adaptive challenges allows organizational leaders to utilize people as the core strategy to solve complex problems (Heifetz., 2009). To enable the adaptive leadership framework to be effective, Nelson and Squires (2017) suggested that leaders must utilize human capital by adopting a leadership approach that facilitates teamwork.

The definition of a project team is a group of individuals organized to complete a task (Feldbrugge, 2015; Sydow & Braun, 2017; Toivonen & Toivonen, 2014). Sydow and Braun (2017) suggested that the formation of a group into a project team is a temporary organization arranged with a leader and supported by team members. The project team will encounter complex challenges throughout the life cycle of the project, whereby both the leader and the team members must work collectively to address these issues (Ebrahimi et al., 2016; Feldbrugge, 2015). Given the dynamism that is required by

the leader and team members to solve complex changes and challenges, the adaptive leadership theory was expected to be an appropriate framework that project managers can use to increase project success rates.

Operational Definitions

The following are definitions used in the study.

Cross-sector collaboration: Cross-sector collaboration is one sector engaging another sector for a common action (Trujillo, 2018).

Dominance complementarity: Dominance complementary refers to the organizational cohesion and harmony among all members, in which the leader assumes the dominant role and the followers or agents accept the submissive role (Hu & Judge, 2017).

Get on the balcony: Get on the balcony is the ability of the project manager to have a bird's-eye view of the situation and assess the problem accurately (Arthur-Mensah & Zimmerman, 2017).

Multiparty collaboration: Multiparty collaboration refers to the partnerships between private, public, and social sectors working to solve societal issues (Trujillo, 2018).

Pull-and-push multiplier effect: Pull-and-push multiplier effect refers to influence of the construction sector over other sectors, which enables GDP growth (Lopes et al., 2017).

Relational climate: Relational climate is the relationship between a leader and the team members or followers to create a bond of mutual trust and cooperation (Thornberg, Wänström, & Pozzoli, 2017).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are claims the researcher accepts as true even though there is no scientific evidence to support them (M. N. K. Saunders et al., 2015). The following assumptions were applied to the current study. I assumed the project managers would have the necessary experience and knowledge of project management practice in the construction industry. I also assumed the participants would be honest in their responses and manage any potential biases with their responses. Another assumption was the responses to the questions by the participants would be solely their opinions based on personal experience. An additional assumption was the project managers were aware of the adaptive leadership framework, and they demonstrated positive leadership behaviors to successfully complete projects.

Limitations

Limitations are potential restrictions or weaknesses the researcher does not control (Yin, 2017). If not correctly identified and managed, limitations may distort the accuracy of the results (Yin, 2017). The results of the study were limited by the participants' experience and knowledge of project management practice in the construction industry. The study was also limited by the participants' honesty and thoroughness in their responses. Another limitation was inadequate supporting documentary material from the organizations' files or data sources to corroborate the interview data. Also, the study was limited in generalizability because the sample size was small. Finally, the results of the study were limited by the project managers' awareness and utilization of adaptive leadership strategies.

Delimitations

Delimitations are the boundaries a researcher sets (M. N. K. Saunders et al., 2015). The focus of the current study was the construction industry in Jamaica, with an emphasis on adaptive leadership practices applied in the construction sector to improve project success rates. The study was also restricted to projects that are publicly funded and provide a significant benefit to its stakeholders at the end of the process. Participant project managers had a minimum of 10 years of experience and a minimum of 10 project team members under their direct supervision. Because the focus was on project managers utilizing adaptive leadership strategies, the target group was those who were responsible for implementing projects once they received executive or board approval.

Significance of the Study

Implementing projects in an environment where uncertainty and rapid changes occur, whether external and internal to the organization, may negatively affect project success rates (Bjorvatn & Wald, 2018; ul Musawir, Serra, Zwikael, & Ali, 2017). A low project success rate can affect the business's financial performance. The results of the current study may highlight successful business practices for construction industry leaders. A new leadership approach may improve productivity, enhance trust within the project team, and foster a heightened sense of ownership by the team members. Increased project success may increase revenues, improve stakeholders' and shareholders' confidence, and improve a positive image of the business.

The findings of the study may also encourage a new approach to leadership that could lead to a change in the social norms of the culture within the construction sector in Jamaica. A gap exists in the literature about the applicability of adaptive leadership

strategies in the construction industry in Jamaica. In closing the literature gap, project managers may understand how this improvement in leadership style can engender a better working relationship with project team members, leading to a positive change in the work environment. A positive work culture could decrease stress and attrition among project team members, thereby reducing unemployment and turnover and enhancing stability within the community.

Contribution to Business Practice

Results of the study may provide project leaders in the construction sector with strategies to enhance their project success rates. Within the public sector space, the results may offer information to project managers on how to manage projects from a different perspective, thereby enhancing deliverables. At the private sector level, the results of this study may assist companies in completing projects and may also provide greater operational efficiencies to improve shareholders' return on investments, encourage greater accountability, and improve the performance of the firms (see Heifetz et al., 2009).

Implications for Social Change

The results of the study may encourage project managers to adopt an alternate leadership strategy that could lead to a change in the social norms of the culture within the construction sector in Jamaica. The results of the study may provide project managers with strategies to create a better working relationship with project team members, leading to a positive change in the work environment. A positive work culture may decrease stress and attrition among project team members, and thereby reduce unemployment and enhance stability within the community.

A Review of the Professional and Academic Literature

This section provides a critical analysis and synthesis of the literature to determine whether adaptive leadership style can influence project managers to improve project success rates. A decline in project success rates demonstrates that project managers are not meeting their stated objectives (Fabricius & Büttgen, 2015). Any decline in project success rates can affect the organization, community, and country negatively (Volden, 2018). Researchers posited that project managers with overconfidence in the use of tools and techniques instead of leadership may cause their project to fail (Arthur-Mensah & Zimmerman, 2017; A. Doyle, 2017; Fabricius & Büttgen, 2015). The purpose of the current qualitative multiple case study was to explore adaptive leadership strategies that some construction project managers use to increase projects' success rates.

Adaptive leadership is a contemporary leadership style when compared to other styles such as transformational, transactional, and situational. These earlier leadership styles focused on leader-centric philosophy, whereas adaptive leadership engenders a people-centric approach (Arthur-Mensah & Zimmerman, 2017). For the purposes of the literature review, I examined (a) adaptive leadership theory, (b) history of project management, (c) project management processes, (d) project management and the organization, (e) other leadership theories, (f) project success, (g) construction sector in Jamaica, and (h) adaptive leadership and positive social change.

I conducted a search of the literature using the following 14 keywords and phrases: *project success, project leadership, transformational leadership, transactional leadership, situational leadership, adaptive leadership, project management processes,*

project management tools and techniques, project management evolution, temporary and permanent organizations, construction sector – Jamaica, project management – Jamaica, and gross domestic product. The online search engines were primarily Walden University’s databases: Proquest, EBSCO, Science Direct, Emerald Insight, and SAGE Journals. Google Scholar was an important resource to obtain articles from open-access journals, which may not be available via subscribed databases. I also used an alert system through Google Scholar to notify me when recent articles on adaptive and project leadership were published.

I accessed trade publications from the Government of Jamaica and the Construction Industry Council regarding the construction sector. I consulted textbooks in the areas of project management, strategic management, leadership, and research methodologies. Within the Walden University databases, I limited the search for articles primarily to peer-reviewed scholarly journals (see Table 1) published within 5 years of the completion of the study. Once the search provided the relevant article, I examined key themes and concepts from each article.

Table 1

Literature Review Sources

Type of literature	Published within 5 years	Published beyond 5 years	Total	Total percentage %
Peer-reviewed articles	153	34	187	89
Industry publications	10	4	14	8
Texts	5	2	7	3
Total	168	40	208	100

Adaptive Leadership Theory

Managing projects to achieve an organization's strategic objectives and its competitive advantage is a challenge for project managers because of the complexities, risks, and nature of the project (Blaskovics, 2016; A. Doyle, 2017). Blaskovics (2016) posited that many projects fail because of a poor leadership approach. According to adaptive leadership theory, leaders must encourage their followers to adapt to changes, challenges, and issues confronting the organization (Heifetz et al., 2009). The theory is centered on the team members as the agents behind project success rather than procedures or systems (Arthur-Mensah & Zimmerman, 2017). Tools and techniques as a standalone approach to mobilize the project processes do not facilitate projects (Arthur-Mensah & Zimmerman, 2017; Blaskovics, 2016).

Arthur-Mensah and Zimmerman (2017) posited that adaptive leadership has six fundamental behaviors:

1. get on the balcony,
2. identify the adaptive challenges,
3. regulate the distress,
4. maintain disciplined attention,
5. give the work back to the people, and
6. protect leadership voices from below.

Leaders use these six behaviors to engage, mobilize, and motivate followers to change (Arthur-Mensah & Zimmerman, 2017). Managing projects to achieve success requires the project managers to understand all six behaviors. The six behaviors are the pivotal

concepts centered on project leader/follower relationships, the project management process, the organization, and project success.

Get on the balcony is a metaphor used to describe the team leader stepping back from the situation to determine the adaptive issues (Arthur-Mensah & Zimmerman, 2017). Adaptive issues may not be of a technical nature that requires technical expertise, but instead may be complex issues that require a different type of decision-making approach (Arthur-Mensah & Zimmerman, 2017; Vincent, Ward, & Denson, 2015). Similarly, Blaskovics (2016) underscored the point that, in addition to team leaders managing the project process with project tools and techniques, they also need to apply soft skills. Soft skills are abilities that team leaders use to engage followers through motivation and influence to participate in all aspect of the process for success. Get on the balcony is part of the adaptive leadership framework that allows the project manager to assess and understand the issues confronting the project (Arthur-Mensah & Zimmerman, 2017; Vincent et al., 2015).

The second behavior requires leaders to use an adaptive leadership approach to identify the adaptive challenge. To determine the adaptive challenge, Arthur-Mensah and Zimmerman (2017) suggested leaders must differentiate between the technical and nontechnical issues. Once the team identifies an issue, the leader must determine how to address the adaptive challenge (A. Doyle, 2017). Some project leaders tend to focus their management style on the application of tools and techniques to solve all project-related issues (Arthur-Mensah & Zimmerman, 2017; A. Doyle, 2017). Leadership and nontechnical attributes such as relationship building, accepting responsibility, and

demonstrating creativity positively relate to project success rate (Tabassi, Roufechaei, Bakar, & Yusof, 2017).

The third behavior is leaders must regulate distress within the team. To regulate distress, the team leader must create an environment that all team members are able to express themselves as drivers for change without fear of judgment or retribution (A. Doyle, 2017). Team performance and its relationship to project success is through active engagement between the team leader and the followers (D. A. Aga, Noorderhaven, & Vallejo, 2016; A. Doyle, 2017). To create an environment where team members can express themselves, the leader must control the interpersonal relationships by improving the social relations, clarifying roles, and solving interpersonal problems that the team may encounter (D. A. Aga et al., 2016). A. Doyle (2017) also added that the team leader must manage potential conflicts and uneasiness when asking difficult questions. These difficult questions will take the team members out of their comfort zones, and if not managed properly by the team leader, the distress level among team members will increase (Heifetz et al., 2009; Tabassi et al., 2017).

Leaders demonstrate the fourth behavior, maintaining disciplined attention, when they (a) ensure that the members focus on the task at hand and (b) provide a degree of structure to the working and operation of the team (Heifetz et al., 2009). The team leader must ensure that project members focus on the task at hand, which contributes to project success. D. A. Aga et al. (2016) pointed out the need for the project leader to ensure the team members focus on the project's objectives.

Team members may have their own objectives because of different social backgrounds (Hoch & Dulebohn, 2017). For example, a team member's social value or

moral system may be jeopardized by the project, which could have an adverse influence on a development project; these issues are real and require sensitivity on the part of the project leader (C. Lee et al., 2017). Further illustration is a team member who has a desire to protect the landscape from the physical harm done by construction. The action of that team member may influence the full participation of the other team members. Because of social differences, leaders who fail to properly manage these factors may operate counter to the stated organizational objectives (Hoch & Dulebohn, 2017). The team leader is responsible for keeping the project members focused by creating a good relational climate. Thornberg et al. (2017) described the relational climate as the social construct that influences the behaviors, beliefs, and attitudes of the team members, and encourages team members to work cohesively. A high level of focus and a positive relational climate developed by the leader with the team members can secure project success (Heifetz et al., 2009).

For the fifth behavior, the employer must give the work back to the people (Arthur-Mensah & Zimmerman, 2017; A. Doyle, 2017). Arthur-Mensah and Zimmerman (2017) argued that empowering team members would allow them to develop innovative and creative solutions to solve issues. Ceri-Booms, Curşeu, and Oerlemans (2017) and Hoch and Dulebohn (2017) supported the point and submitted that effective leadership strategies and empowered team members will lead to a greater level of effort and out-of-range goals for organizational objective. The effective leadership strategies that Hoch and Dulebohn posited to empower to the followers include inspiring, raising their levels of autonomy, and promoting the development of their skills and capabilities. This type of empowerment is centered on encouraging the building of intellectual capacity, sharing

the level of autonomy and responsibility, and heightening the awareness of what they can do (Ceri-Booms et al., 2017).

The sixth behavior is to protect the voices of the members of the team who may feel overshadowed throughout the process and may not express important views or make suggestions that will enable the change process to take place (Heifetz et al., 2009). Cullen-Lester, Maupin, and Carter (2017) and Epitropaki, Kark, Mainemelis, and Lord (2017) agreed a paradigm shift exists in leadership, moving from role based to interpersonal influences. One characterization of that shift in leadership style is to allow the leaders to encourage followers to share their views (Epitropaki et al., 2017). Cullen-Lester et al. asserted that this type leadership approach is both relational and multilevel, and extends beyond individual knowledge and skills to include social relationships and group networking to improve teamwork performance. The relational and multilevel approach encourages interaction between the leader and team members and fosters freedom of expression.

From the six behaviors highlighted by Heifetz et al. (2009), the philosophy behind adaptive leadership approach is a leader-follower relationship. Leader-follower relationship has similarities to leader-members exchange theory and path-goal theory (Arthur-Mensah & Zimmerman, 2017). What distinguishes the philosophical approach of adaptive leadership theory from the other theories is that the adaptive leader encourages the team members to work and adapt to changing environments and conditions (Arthur-Mensah & Zimmerman, 2017). Kapoutsis, Papalexandris, and Thanos (2019) posited that the leader must ensure a level of flexibility on a hard or soft approach. The hard influence is to ensure that there is a degree of formalities between the project manager and the team

members. By contrast, the soft approach is informal one-on-one communication between the leader and the team members with limited or no formal requirements (Kapoutsis et al., 2019).

Managing projects to achieve a high success rate in an environment characterized by uncertainty requires a management style that will allow team members to participate throughout the project life cycle (Arthur-Mensah & Zimmerman, 2017; Heifetz et al., 2009). The process of involvement by the team gives a sense of ownership of the project. The decision-making process regarding the direction of the project lies not only with the leader but is also open to all members of the group. To establish a sharper focus on the relationship between the leader and the followers, Starbuck (2015) noted the bond between the bond between the leader and the followers. The bond will engender trust among all members of the project team to undertake and deliver projects that are more significant and have greater levels of complexity and uncertainty, which according to F. C. Saunders, Gale, and Sherry (2016) business leaders are increasingly using.

Project Management

A project is the implementation of a temporary endeavor led by a project manager with a defined scope, a prescribed time, and a set budget (Acikara, Kazaz, & Ulubeyli, 2017; Pinto & Winch, 2016; Svejvig & Anderson, 2015). The concept of management has diverse meanings; however, Dyer, Godfrey, Jensen, and Bryce (2016) and Nonet, Kassel, and Meijs (2016) described management as the process of managing and controlling the resources available to meet an objective. Conjoining the two concepts *project* and *management* refers to the process of arranging the requisite resources to complete a task within a prescribed time, a defined scope and quality, and approved

budget (Acikara et al., 2017; Samset & Volden, 2016). To illustrate the concept of project management, there must be an understanding of the evolution of the practice. The following section provides a brief historical overview of project management from pre-20th century to the present.

Pre-20th century project management. Early monumental developments, including the pyramids of Giza in Egypt, the Great Wall of China, the Coliseum in Rome, and the Colossus of Rhodes in Greece are edifices scholars and practitioners have researched extensively (Picciotto, 2019; Seymour & Hussein, 2014). The expert craftsmen who built these monuments were not knowledgeable about modern project management theories, tools, and techniques, but they had rudimentary systems of determining the processes that would require measuring time, quality, scope, and cost (Seymour & Hussein, 2014). Additionally, these edifices took years to complete because these builders focused on the scope and quality of the project and less so on time and budget (Seymour & Hussein, 2014).

The focus for construction of the monumental edifices by rulers was to demonstrate their political and social dominance to other nations (Artursson, Earle, & Brown, 2016). The edifices also symbolized religious and political authority and illustrated territorial demarcations (Effros, 2017). Ancient rulers developed complex structures to display their superiority (Picciotto, 2019). Even though these rulers had financial resources to construct these edifices, they still required skilled craftsmen to undertake the ambitious tasks (Artursson et al., 2016; Effros, 2017). Architects and engineers had to find creative designs and develop methods to erect complex projects.

The architects and engineers in those days had to learn how to mobilize and lead people to ensure the successful completion of the structures (Seymour & Hussein, 2014). The architects and engineers viewed overcoming the challenges in developing these structures as a social and moral obligation (Artursson et al., 2016; Picciotto, 2019). Both Seymour and Hussein (2014) and Artursson et al. (2016) showed the early development of informal project management, that is, engagement in the initiation and planning process, then the build or execution stage, followed by close out and hand over of the project.

The trend of informal project management continued through the ages with leaders using improvisation methods to complete tasks (Klein, Biesenthal, & Dehlin, 2015). Improvisation methods are the processes in which the artisan who is appointed to implement a task lacks the requisite expert knowledge and seeks ideas from experts in other jurisdictions to complete the process (Klein et al., 2015; Picciotto, 2019). Improvisation methods fall within the framework of praxeology or humans behaving in a purposeful manner (Klein et al., 2015). Within the project management taxonomy, the more these informal project managers practiced their craft, the more resilient they became with their skillsets. Kozak-Holland and Procter (2014) observed that these early architects and engineers utilized the improvisation methods of adapting the closest procedures used in other jurisdictions for their own development. Although improvisation methods were evident during earlier stages of societal development, project management practice evolved at the beginning of the 20th century.

The construction of edifices across the globe prior to the 20th century was informal, with limited knowledge about formal project management (Klein et al., 2015).

Although the informal approaches to the processes of project management existed, the skilled craft persons understood, in a rudimentary manner, what was required to fulfill the task assigned to them by their respective rulers (Kozak-Holland & Procter, 2014). Klein et al. further remarked that even though the craft persons did not have all the requisite skillsets, they created and shared improvisation methods among themselves.

20th century to present: Formal project management. Project management emerged from the classical management theories at the beginning of the 20th century (Lamond, 2015). Theorists such as (a) Fayol (1841-1925), (b) Taylor (1856-1915), and (c) Gantt (1861-1919) shaped these classical scientific and behavioral management theories (Jarašūnienė, Sinkevičius, & Mikalauskaitė 2017; Picciotto, 2019). Fayol's theory [ca. 1916] focused on administrative management theory that examined the divisions of labor and separation of authority. In 1909, Taylor, an engineer by profession, created the theory of scientific management that embodied time and motion study to improve efficiency (Jarašūnienė et al., 2017). Between 1900 and 1910, Gantt, who was a colleague of Taylor and an engineer also, pioneered the theory of scheduling, planning, and reward innovation system (Wren, 2015). The design of the reward innovation system was to track the work progress of employees in order to determine a fair bonus for their performance (Picciotto, 2019). Through these theories, management practitioners started to move away from an industrial management system to a human resource management system.

Early work by the founding fathers of management theories created a paradigm shift on how 20th century leaders managed their resources and organizations (Khorasani & Imasifard, 2017; Lamond, 2015). The shift in management philosophy created a new

approach for managers to manage their resources to implement and complete initiatives in the shortest possible time (Khorasani & Almasifard, 2017). Obradović, Kostić, and Mitrovića (2016) presented evidence that by 1952, a formal approach to project management occurred, which originated from the early management theories. The initial concepts and theories created by the originators of the scientific and behavioral management morphed into the classical project management process (Picciotto, 2019). The classical project management process involved planning, executing, monitoring and controlling, and closing of projects (Obradović et al., 2016). Between the 1950s and the late 1990s, project management practice underwent five significant periods of change. Four of those developments focused on the tools and techniques, with the fifth underpins the success factor, which practitioners use today.

The first noticeable change in project management occurred in 1952, with the institutionalization of the Gantt Chart, through the work of Clark, a former colleague of Gantt (Wren, 2015). The first change was the publication of Clark's book, *The Gantt Chart: A Working Tool for Management*. Second, the institutionalization of the Gantt Chart in project management was solidified with the utilization of Gantt's work in his consultancy practice across the globe (Wren, 2015). The second period, between 1957 and 1979, Hajdu and Isaac (2016) remarked that practitioners used technology to create project management tools and techniques including (a) Program Evaluation Resources Technique (PERT), (b) Critical Path Method (CPM), and (c) work breakdown structure (WBS).

The PERT is a technical tool used by project managers to create a chart that outlines the tasks, schedules the activities, and organizes the tasks in a logical manner to

complete a project (Habibi, Birgani, Koppelaar, & Radenović, 2018). CPM technique can calculate the critical and noncritical paths by mathematical formula to determine the shortest time to complete a project (Hajdu & Isaac, 2016). The WBS is another technique project managers can use to breakdown the project into manageable components or tasks and to assign resources to each task (Park & Cai, 2017).

Trojanowska and Dostatni (2017) highlighted that the third period occurred during the 1980s with the introduction of the Projects Resource Organization Management Planning Technique II (PROMPT II) and Theory of Constraints (TOC). The PROMPT II is a process-based technique project managers use to examine key elements of the project to determine the best manageable approach (Trojanowska & Dostatni, 2017). The TOC is a technique founded on the principle that every project can be successful, subject to identifying and resolving all constraints that may affect the project success (Kaijun, Wen, Xuejun, & Lin, 2017).

Barnes (1988) described the fourth evolution period, referred to as the critical success factors of a project, which became known as the *Iron Triangle* (Bronte-Stewart, 2015; Owusu-Manu, Addy, Agyekum, & Aidoo, 2017)). These success factors reflect three elements: time, quality, and cost (Bronte-Stewart, 2015). These three elements are traditionally the mechanisms used to measure project performance and to determine its success. The fifth evolution was the development of the Critical Chain Project Management (CCPM), which evolved from the TOC (Kaijun et al., 2017). The CCPM is similar to the TOC, except this technique is process-driven to manage the project regarding the resources required.

Between 1952 and the late 1990s, project management underwent important changes to improve the tools and techniques to increase project success rates (Khorasani & Almasifard, 2017; Picciotto, 2019). Researchers showed the shifts in the different applications of tools and techniques (Obradović et al., 2016). Scrutiny of the information presented by the researchers indicated an implied view that a reliance on tools and techniques emanated from the early theorists (Khorasani & Almasifard, 2017; Obradović et al., 2016). The early theorists' educational background would suggest that their academic training played an important role in leading to an exact scientific approach to project management (Picciotto, 2019). The advancement of the tools and techniques became more relevant with the aid of technology between 1957 and 2018.

The pre 19th through to the post 20th century provided similar yet contrasting views regarding project management. Observations of similarities by scholars and practitioners of both periods showed the use of improvisation methods by project managers as a means to advance their practice. Crafts persons who led their team in the pre 19th century period viewed their assignment as a social and moral obligation; by contrast, project managers during the post 20th century focused on securing competitive advantage or changes for their country, community or organization (Khorasani & Almasifard, 2017). Further review of the literature of the practitioners of the 20th to 21st centuries appeared to focus on the human resource management approach. Evidence in the literature showed that project managers relied heavily on tools and techniques, and less on leadership and the team members (Kozak-Holland & Procter, 2014; Obradović et al., 2016). The examination of 19th and 20th centuries showed leaders of projects demonstrated insufficient focus on leadership as part of the project management process.

Project Management Process

The practices and approaches to project management were informal for the first part of the 20th century (Garel, 2013; Johnson, 2013; Obradović et al., 2016). The formalization of project management process enhanced the development of many signature engineering projects (Garel, 2013). The RAND project, a research and development program, created in the United States of America (USA) assisted in World War II efforts (Johnson, 2013). Another project known as the Manhattan Project was an initiative by the United States Army to build an atomic bomb. The creation of the atomic bomb was to increase the USA's military capabilities and to safeguard its interest (Garel, 2013). These two examples by Garel and Johnson suggested that project management perchance originated out of technical models primarily used by the military to implement projects. Obradović et al. (2016) observed project management transitional shift from a technical model to a social science theory application. Through the transitional shift and the success that project management had in the military, business leaders started to utilize the practice as a management tool in their organizations.

The concepts of project management theories varies (Garel, 2013). Project management is the utilization of tools and techniques, and the necessary resources to accomplish a given task or activity (Terlizzi & Moraes, 2017). The concept has three primary elements: (a) resources, (b) tools and techniques, and (c) the end-product (Abyad, 2018; Sanchez et al., 2017). Resources are all the relevant human and nonhuman requirements that will provide controls and the necessary systems to guide the project through its life cycle (Martens & Vanhoucke, 2017; Terlizzi & Moraes, 2017). Martens

and Vanhoucke (2017) also asserted that the human and nonhuman requirements focus on the (a) controls, (b) risks, and (c) scheduling approaches for the project to be successful.

Marcella and Rowley (2015) and The Project Management Institute (2017) defined tools and techniques as the collective processes, methodologies, and procedures to implement a project. The tools and techniques revolve around the discipline of planning, organizing, and managing the resources to meet a specific objective (Sanchez et al., 2017). These tools and techniques include, but are not limited to (a) work schedule, (b) machine and labor, (c) the project team, (d) organization structure, and (e) control systems to meet the project criteria (Bredillet, Tywoniak, & Dwivedula, 2015).

The work schedule is a list of itemized tasks required to carry out the project with the associated timeline to do each task, while machine and labor focus on the relevant tools and skillsets (human and nonhuman) that aid team members to perform the tasks (Sanchez et al., 2017). The project team is comprised of individuals who are brought together to carry out different tasks and functions to complete the project (Project Management Institute, 2017). The organizational structure is made up of social units of people brought together at different levels to meet the collective goals of the business, whereas the control systems are the established checks and monitors to regulate and measure the performance of the project (Bredillet et al., 2015).

The end-product is the final output or process that satisfies a client's needs, concerns, or expectations to fulfill the stated objective (Garel, 2013; Sanchez et al., 2017). The end-product is measured by the *iron triangle*: (a) time, (b) quality, and (c) cost, which was conceptualized by Barnes (as cited in Bronte-Stewart, 2015). Time refers to the duration of the project analyzed by the project managers to commence and

complete all deliverables. Cost denotes the total cost or expenditure to complete all project deliverables. Quality refers to all completed deliverables, to standard, that will perform based on intended use.

To achieve project success, the project manager must understand the interconnectivity of all the elements of tools and techniques, the resources required, and the desired end-product (Marcella & Rowley, 2015). The interconnectivity also suggested that the tools and techniques are inextricably linked to resources to deliver the client's end-product (Martens & Vanhoucke, 2017). A gap still exists between the project manager and the interconnectivity of the elements to ensure project success (Martens & Vanhoucke, 2017).

Formal project management and the processes started with the advancement of military capabilities (Johnson, 2013). Within the confines of the military, project managers placed a heavy reliance on the technical orientation to manage projects (Garel, 2013; Johnson, 2013). The shift of project management practice into business environs ignited the need to locate the practice within the social sciences dictum. Though information from the literature suggested the inherent shift, a sharp focus continued on the technical orientation instead of the leadership approach (Sanchez et al., 2017). Given the lack of the leadership element and an increase in project complexities, project managers continue to fail to improve their project success rates.

Project Management and the Organization

Organization leaders are under pressure to develop highly motivated, effective, and innovative team members to manage the internal and external challenges of the organization (Medina & Medina, 2017; Tyssen, Wald, & Heidenreich, 2014). The

escalation of internal challenges within the organization supports the paradigm shift from the traditional mass production business system to management by projects (Simard et al., 2018). External environment issues also affect the organization, which is susceptible to limited resources and the unprecedented uncertainty in delivering the objectives of the business (Simard et al., 2018). Whether the organization is temporary or permanent, effective and successful project management requires maximum cohesiveness between the leader and his team members (Simard et al., 2018).

Medina and Medina (2017) and Tyssen et al. (2014) examined the organizational design and characteristics of a successful project. Medina and Medina focused their research on the permanent project-based organization, as they suggested leaders must integrate new competencies and increase innovation to achieve success. Ramazani and Jergas (2015) supported Medina and Medina's argument by asserting that project managers must develop their skills through training and adopting new approaches for projects to achieve success. Both sets of researchers also noted that leaders of the permanent project-based organization must assess and understand new competency requirements for successful project implementation and encourage these new skills development through absorptive learning.

By contrast, Tyssen et al. (2014) focused their research on the temporary project organization, which is a group of persons formed into a team to perform a specific task. Given that the temporary organization is temporal in nature, the type of construct has more flexibility and adaptability to achieve project success. One reason for the flexibility and adaptability is the temporary organization leader can focus on a specific assigned activity, which is discontinued at the completion of the assignment. Further scrutiny is

necessary to uncover the intricacies of permanent and temporary organizations, and their underlying characteristics for value creation for project success.

Leaders must confront the internal and external challenges facing the organization. Information extracted from the literature suggested the shift in leadership strategy from a mass production business system to management by projects (Simard et al., 2018). Whereas the literature provided information on the shift in management approach, gaps still exist in the literature whether organizational leadership are using management by project approach, especially with the increase in complexities and uncertainties with projects (Ramazani & Jergeas, 2015). Management of projects can affect both the permanent and temporary organizations (Ramazani & Jergeas, 2015); therefore, an examination was necessary to understand the similarities and dissimilarities of the permanent and temporary organizations.

Permanent organizations. Permanent organizations are a system of complex and dynamic agents moving together to promote organizational goals (Mendes et al., 2016; Riis, Hellström, & Wikström, 2019). These goals form part of both the objectivity and subjectivity of the strategic intent done by the agents (Nonaka & Toyama, 2007). These agents are a combination of leaders and followers intertwined with specific roles by each agent to carry out organizational objectives (Riis, 2019). Uhl-Bien and Arena (2018) and Riis noted that permanent organizations provide permanence and stability to agents internal and external to the organization. Leaders in the permanent organization must navigate and adapt to the turbulence of organizational complexities and external uncertainties to achieve their strategic objectives (Mendes et al., 2016; Uhl-Bien & Arena, 2018). Mendes et al. (2016) supported the opinion that many organizations have a

multifaceted set of systems with agents having influence over groups or teams. Leaders in traditional organizational arrangements rely on leadership-centric agreement where they inform the team or group how to conduct their affairs (Aw & Ayoko, 2017; Riis, 2019). Both Aw and Ayoko, and Riis further explained that leader-centric agreement does not foster fellowship or engender an environment for team members to influence the leader. A leader must seek to adapt to challenges, confront complexities, and stimulate an ethos of interaction between the agent and members of the team (Mendes et al., 2016).

To adapt to the challenges, Mendes et al. (2016) suggested three functions for leadership are administrative, adaptive, and enabling. The administrative function necessitates the formal functions of the organization to secure the procedures and regulations within the hierarchical arrangements. The adaptive function is the flow of interactions that must be dynamic and foster informal exchanges of ideas between the leader and followers. The enabling function is the catalyst between the previous two functions where the leader creates the condition to allow the adaptive ideas to integrate into the administrative domain (Mendes et al., 2016).

Though Uhl-Bien and Arena (2018) supported Mendes et al.'s (2016) view, they had a different perspective. Uhl-Bien and Arena (2018) believed organizational leaders must adopt an ambidextrous philosophy to manage the uncertainties and the complexities of situations confronting the organization, through creative dialogue with team members. The ambidextrous philosophy is in line with the adaptive approach expressed by Mendes et al. (2016), where they focused on a culture of dialogue between the leader and followers. Uhl-Bien and Arena also argued that leaders must align their thoughts to reintegrate new capabilities within the organization, similar to the enabling function

outlined by Mendes et al. Uhl-Bien and Arena suggested that leaders must provide dynamic capabilities through dynamic learning, ideation, and integration.

The two sets of researchers, Uhl-Bien and Arena (2018) and Mendes et al. (2016), espoused similar views, though expressed differently. Leaders must create an environment where team members can exchange ideas to aid in solving problems confronting the organization (Mendes et al., 2016). Leaders must also engender an adaptive approach among the team members in confronting the challenges facing the organization (Uhl-Bien & Arena, 2018). Once a new solution or approach is developed to solve the challenges confronting the organization, the leader must institutionalize the method (Mendes et al., 2016). The research indicated that a paradigm shift exists toward greater involvement of team members to support the organization's direction.

Temporary organizations. A temporary organization is the formation of a group of persons within a permanent organization to conduct a specific activity; the temporary organization is disbanded upon completion of the activity (Sergeeva, 2019; Simard & Laberge, 2014). The temporary organization has a similar construct to the permanent organization of the leader-followers relationship to secure organizational objectives (Ding, Li, Zhang, Sheng & Wang, 2017). Whereas the leader-follower relationship is similar, information from the literature highlighted two primary demarcations between the permanent and temporary organizations (Sergeeva, 2019; Simard & Laberge, 2014).

The first demarcation is the governance and governability of the project between the temporary and permanent organizations (Müller, Zhai, & Wang, 2017; Sergeeva, 2019; Simard & Laberge, 2014). The governance is those formal agreements and approvals that leaders in the permanent organization determine for the project and then

transfer to the team leader of the temporary organization (Brunet & Aubry, 2016; Sergeeva, 2019). Likewise, the governability is how the project leader of the temporary organization demonstrates to the leader of the permanent organization the project process to ensure success (Müller et al., 2017). The second demarcation is that the leader of the temporary organization manages all the project team members, project controls, and systems to ensure an adaptive and enabling culture to facilitate the change process (Mendes et al., 2016). Although the leader of the temporary organization manages the team members, project controls, and systems, Mendes et al. (2016) and Sergeeva noted a constant administrative linkage with the permanent organization to ensure procedures and adherence to regulations.

Burke and Morley (2016) noted from the seminal work of Lundin and Söderholm (1995) that a temporary organization has four main characteristics: (a) time, (b) task, (c) team, and (d) transition. Time is the crucial element, as the project leader must establish the horizon when the team will commence and end the assigned activity. Task consists of one activity or a number of activities designed to achieve the desired outcome. Team refers to the formation of a group of persons specifically assigned to achieve the desired outcome. Transition is the difference between the commencement of the specific activity and the completion of the activity.

One factor central to the identity of the temporary organization is the higher energy output required to accomplish an assignment (Burke & Morley, 2016). Leaders of temporary organization have a specific time to perform these specific tasks using the processes and procedures to ensure success. In addition, the leader must utilize the available resources to accomplish the activity, and then transition the intended change

into the main function of the permanent organization (Burke & Morley, 2016). Ding et al. (2017) espoused that through effective leadership temporary organizations are successful. In addition, A. Doyle (2017) and Ding et al. explained that leaders in temporary organizations embrace the adaptive approach to confront challenges thereby allowing the specific activity to achieve success.

The temporary and permanent organizations are dissimilar in purpose, but similar in character and design (Ding et al., 2017). The permanent organization is the construct that allows a stable and continuous function of the organization. The temporary organization is project-specific and fosters the formation of a group of persons to conduct an assigned task (Simard & Laberge, 2014). The similarity is that both types of organizations rely on leadership as the hub to ensure success (Ding et al., 2017). The literature search showed that both organizations thrive on innovation and creativity as the hallmarks of success. The leader-follower relationship is important to achieve the hallmark of success.

Other Leadership Theories

Though adaptive leadership is the conceptual framework for this research, other leadership style is worthwhile to highlight. Leadership is a highly sought after management commodity in many industries, with many variations to its definition (Hartono, Sulisty, & Umam, 2019; Hu & Judge, 2017; Leonard, 2017 Zaman, 2020). Organizational leaders seek to attract managers with the requisite innovative and creative skillsets to improve and guarantee efficient production and meaningful results. The throughput of innovative and creative skillsets along with a strong team-building culture among team members may guarantee leaders positive results for the organization

(Hartono et al., 2019). Hughes et al. (2018) asserted that leadership must engender an ethos of innovativeness, creativity and team relationship to support positive performance of the organization.

Scholars and practitioners identified two categories of leadership style: *traits or skillsets* (Ritter, Small, Mortimer, & Doll, 2018; Wyatt & Silvester, 2018). A leadership trait is a psychological characteristic of the leader who displays reliability, decisiveness, integrity, and innate qualities (Wyatt & Silvester, 2018). Although these traits may be regarded as the standard for some leaders, Hu and Judge (2017) noted that these attributes do not stand alone. Hu and Judge also asserted that leaders' styles that support these traits must also support dominance complementarity. The support of dominance complementarity fosters a value system that encourages behaviors and qualities among members, which in turn shape the group's personalities (Hu & Judge, 2017).

Leadership skillsets relate to cognitive behavior (Behrendt, Matz, & Göritz, 2017). Connolly and Reinicke (2016) and Ritter et al. (2018) defined leadership skillsets as a *soft* style, which engenders effective communication skills, better problem-solving techniques, and tap into the emotional intelligence of the team members. Leaders who utilize skillsets develop their approach through areas such as (a) interpersonal, (b) informational, and (c) decisional roles (Behrendt et al., 2017). The review of the literature highlighted that although traits provide the foundation for leadership, allowances must be made by scholars and practitioners regarding the relevance of cognitive leadership behavior (Behrendt et al., 2017). Leadership traits provide a stable position; however, their utilization must not stand alone and requires some level of cognitive elements to assist in mobilizing the team members.

Whichever leadership style leaders adopt, Behrendt et al. (2017) emphasized that the success of the organization depends on the abilities and style of the leader. Anderson, Baur, Griffith, and Buckley (2017) noted an opposing view of leadership and its influence on mobilizing teams of millennials. Anderson et al. also asserted that although trait and cognitive styles remain relevant, millennial teams found some shortcomings with these approaches. Anderson et al. remarked that because of millennials' social upbringing, they are inspired by leaders who demonstrate empowerment and inspiration to them.

Scholars and practitioners identified two types of philosophical approaches to leadership - *traits and skillsets*. The trait approach to leadership is the psychological characteristics of the leader, whereas skillsets focuses on the cognitive behavior used by the leader. Researchers provided different leadership theories emanating from these two philosophical styles (Hughes et al., 2018). Given the different leadership theories, an examination is necessary to explore these styles. The leadership styles identified as the most commonly used are (a) transformational, (b) transactional, and (c) situational.

Transformational leadership. Transformational leadership, as the name suggests, occurs when the leader induces changes to an organization to achieve success (Raziq, Borini, Malik, Ahmad, & Shabaz, 2018; Zaman, 2020). Developed by Burns (1978), transformational leadership is the psychological influence of the leader over the followers through inspiration and motivation (Deinert, Homan, Boer, Voelpel, & Gutermann, 2015; Potter, Egbelakin, Phipps, & Balaei, 2018). Deinert et al. (2015) asserted that this type of leadership style encourages the follower to move beyond self-interest for the greater good of the team to achieve a specific objective. At the

philosophical level, this leadership style focuses on the intrinsic value of the follower to move from a zone of comfort to a psychological space to confront challenges that have a pronounced level of uncertainty (Potter et al., 2018; Zaman, 2020). Deinert et al. and Ng (2017), shared similar views that distinguished transformational leadership: (a) idealized influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration. Idealized influence is the leader's ability to portray a level of confidence and charisma that will stimulate the follower to act, while inspirational motivation describes how the leader articulates the vision of the organization and the expectations. Intellectual stimulation is the leader's talent for encouraging innovative thoughts and action among the followers, whereas individual consideration reflects the leader's ability to address the personal issues of the follower and provide guidance for both personal and professional development.

Transformational leaders self-regulate their actions without guidance or motivation from agents or their followers (Potter et al., 2018; Raziq et al., 2018; Zaman, 2020). The transformational leader influences the emotions of their followers and guides them toward organizational goals (Iqbal, Long, Fei, Ba'ith, & Bukhari, 2015; Potter et al., 2018). A significant relationship exists between the leader's influence and project success (Iqbal et al., 2015). The relationship, also found by Raziq et al. (2018), highlighted the reliance the followers place on the leader to achieve project success.

The review of the literature showed that transformational leaders induce changes in the organization and the project team by motivating and inspiring the followers to conduct their respective tasks to meet stated objectives (Iqbal et al., 2015; Raziq et al., 2018). The distinction that transformational leadership style has is the ability to influence

the followers from a state of comfort by manipulating their emotional personas to conduct out-of-the-norm tasks. Transformational leaders influence the followers' behavior.

Transactional leadership. A transactional leader exchanges action in consideration for an achievement (Bian et al., 2019; Deichmann & Stam, 2015). Deichmann and Stam (2015) noted that transactional leaders outline the expectation of the exchange based on an agreement with the followers to complete a task. Unlike transformational leadership, where leaders focus on intrinsic motivation, Bian, et al. emphasized that transactional leaders motivate followers through task-related exchange and extrinsic motivation.

Transactional leadership is a stable approach to extract results, grounded in the fulfillment of a contractual obligation between the leader and the follower (Aga, 2016). Within this contractual obligation, Aga (2016) identified three factors that are fundamental to transactional leadership: (a) contingent reward, (b) active management by exception, and (c) passive management by exception. *Contingent reward* is the leader and the follower clarifying roles and task requirements for the contractual obligation to take effect; the followers will not deviate from the contractual arrangement agreed upon with the leader. *Active management by exception* refers to the leader focusing primarily on standards and procedures by the followers. *Passive management by exception* is the leader taking corrective actions after a behavior by the followers creates a problem.

Transactional leaders focus on the contractual arrangement between the leader and the followers (Bian, et al., 2019; Deichmann & Stam, 2015). The transactional leader focuses primarily on standards and procedures established within contractual

arrangements (Aga, 2016). The approach by transactional leader goes counter to transformational leadership style that encourages the followers to move beyond self-interest for the greater good of organizational success (Aga, 2016). Given the complexity, uncertainty, and associated risks within the project life cycle, transactional leadership style is difficult to apply as it limits its approach to contractual assignment only and does not encourage followers to move beyond the norms (Deichmann & Stam, 2015).

Situational leadership. Situational leaders provide a platform where the leader and the followers work in an organic process that changes frequently (Marques, 2015 Thompson & Glasø, 2018a). Within this organic process, the leader will adjust to the followers' personalities, experience, and level of commitment to the team (Thompson & Glasø, 2015b). Marques (2015) noted, that given the complexity and dynamic nature of business environments, leaders must adjust to the followers' attitudes and belief systems to ensure the survival of the organization. To understand the characteristics of a situational leader, Thompson and Glasø (2015b) identified four levels in the relationship between the situational leader and the followers: (a) the enthusiastic beginner, (b) disillusioned learner, (c) capable but cautious performer, and (d) the self-reliant achiever.

The enthusiastic beginner is the follower who has a low level of competence yet a high level of commitment. The follower require will a low level of support given their enthusiasm yet high level of direction because of their lack of competence (Thompson & Glasø, 2018a). *The disillusioned learner* is one who is low on competence and commitment. The learner requires major attention, through coaching by the leader, in both competence and commitment (Marques, 2015). *The capable but cautious performer* is moderate to high on competence with a low variability on the level of commitment,

while *the self-reliant achiever* is high on both competence and commitment. The situational leader performs from a philosophical level of facilitating members of the organization by improving their competence and commitment, where necessary, for organizational success (Kotlyar, Richardson, & Karakowsky, 2015).

Leaders must understand the dynamic changes that take place in the organization. These changes are in the societal value of employees, the ability of the team to understand the change process required for success, or the excessive stress on employees (Marques, 2015). The constant changes that affect the organization support the idea that situational leaders must adjust their approach to facilitate team members to achieve organizational success (Kotlyar et al., 2015). The challenge, observed by Kotlyar et al. (2015) is that the situational leader thrives in a system of recurring activities rather than a structure of complexity and uncertainty. Within the scope of managing projects, adjustments of the leader's approach to the team's performance is critical to ensure projects are kept within the stated planned deliverables. Following on Kotlyar et al., Marques (2015) stressed that the philosophy of the situational leader is to coach the team to reach their full potential; providing consistent coaching to team members could result in the leader missing the strategic imperative of the organization and causing missed deliverables. Therefore, utilizing a situational leadership style within the realm of managing projects, the leader must provide support to team members where necessary and delegates to members according to their competence and commitment.

The situational leader's philosophical dictum is to facilitate the team members by adjusting the leadership approach according to the team members' strengths and weaknesses (Marques, 2015; Thompson & Glasø, 2018a). Situational leadership style

supports a relationship-orientation and engenders interpersonal relations among the leaders and followers (Thompson & Glasø, 2015b). Temporary organizations support a social praxis for cohesion and common values to ensure success. Although situational leadership style may enhance the organization's performance, the literature suggested that situational leaders may lose on the long-term strategic objective with its focus on mentoring team members (Kotlyar et al., 2015).

Reflection on the three leadership styles provided similar yet contrasting approaches to leading teams for organizational success. Transformational leaders engender an idealized approach to influence the followers through inspiration and motivation (Iqbal et al., 2015; Raziq et al., 2018). The approach of transformational leadership also prompts a level of mentoring, similar to situational leadership. By contrast, the transactional leaders prosper when recurrent activities with contractual arrangements between the leader and the followers occur (Deichmann & Stam, 2015). Situational leadership engenders flexibility and mentorship by the leader to the followers (Marques, 2015; Thompson & Glasø, 2015b). The three leadership styles centered the praxis on a leader-centric arrangement. From the literature inquiry, leadership styles are limited to foster engagement with the team members to collectively solve complex and uncertain issues, which may be new to them. The critical characteristic of a leader to engender engagement may be necessary on both sides to solve the challenges associated with current projects.

Project Success

With the formalization of project management, researchers continue to provide different definitions of project success (Bjorvatn & Wald, 2018; Gunduz & Yahya, 2018;

Volden, 2018). Williams (2016) defined project success with five criteria: (a) efficiency of the process, (b) project effectiveness, (c) project relevance, (d) project impact, and (e) project sustainability. *Efficiency* focuses on how well the project manager implemented the project while *effectiveness* targets whether it meets the established objective. The *relevance of the project* is centered on its contribution to the organization's strategic objectives. *Project impact* emphasizes the appropriateness of the project to the direction of the organization. The *sustainability of the project* stresses the long-term impact it will have on the strategic objective and direction of the organization (Williams, 2016).

Leaders measure project success against several sets of purposes: (a) project objectives, (b) business objectives, and (c) social and environmental objectives (Gunduz & Yahya, 2018; Rolstadås, Tommelein, Morten Schiefloe, & Ballard, 2014; Volden, 2018). Each purpose is different in definition and provides different perspectives of project success. The *project objective* is the goal set at the very rudimentary level of satisfying scope, time, and cost (Pirotti, Keshavarzsaleh, Rahim, & Zakaria, 2019; ul Musawir et al., 2017). The *business objective* is what the business owner or project sponsor expects for the exploitation of commercial use. The *social and environment objectives* are the benefits that the society expects to derive from the project (Volden, 2018).

Using the Boston Highway Project, which had a 190% cost overrun and many years of project delays, Rolstadås et al. (2014) noted that many stakeholders deemed the project a failure. Volden (2018) noted that many of the public sector projects in Norway had similar delays and cost overruns; however their project evaluation deemed those projects successful. The evaluation of project success in the different countries

incorporated conditions that were not stated clearly at the beginning of the projects, which were the social and environmental objectives (Rolstadås et al., 2014; Volden, 2018). Bayiley and Teklu (2016), and Gunduz and Yahya (2018) posited that project managers who manage a project with ambiguous objectives may find that their project does not attain success. Bayiley and Teklu added that the lack of clearly defined project objectives along with external influences such as culture, politics, war, and conflict can influence the ultimate project outcome.

Bayiley and Teklu (2016) examined the success factors for international development projects funded by the European Union (EU) within the African States and found that clear policy of donors and government, followed by strong ownership of the project by the locals and consultation of interest groups are important elements for project success. Measures of success for noncommercial projects are different from those of commercial projects (Bjorvatn & Wald, 2018; Bayiley & Teklu, 2016). Success factors for noncommercial projects include (a) intellectual capital, (b) sound project case, (c) key manpower competency, and (d) effective stakeholder engagement. The intellectual capital refers to the individual, stakeholders, and social components that underpin all the human elements. A clear working policy relates to the compatible rules and procedures for engagement, despite the fact that key manpower competency will decide the relevant team to carry out the various stages of the project cycle. Effective stakeholder engagement focuses on the participation of all members that are, directly or indirectly, related to the project (Bayiley & Teklu, 2016).

Project success has no singular definition (Gunduz & Yahya, 2018). Project managers, along with the leaders of the organization, determine success according to the

conditions of the project implementation process and players who participate (Rolstadås et al., 2014). One common factor of success criteria for noncommercial projects rests with the type of governability associated with a project. The type governability is dependent on the type of organization and the structure of the industry (Bayiley & Teklu, 2016). First, the project manager must remove all ambiguous objectives of the project. Second, the project must have relevance and influence the intended organization and affected stakeholders. Third, though each stakeholder may have personal objectives, there must be a common goal for the stated success of the project. Fourth, leaders of organizations must accept the inclusion of social and environmental considerations for the success of the project.

Construction Sector in Jamaica

This section of the proposal, I outlined the structure of the Jamaica construction sector. The information includes a brief history of Jamaica, an overview of the construction sector, and Jamaica's current position to meet specific national goals. In addition, I explored the performance of the construction sector, the various professional bodies that make up the industry, and give an overview of the various public sector agencies that implement public sector projects.

Jamaica and the Vision 2030 Plan. Jamaica is the third largest island located in the Caribbean (Ram, Durant, & Howell, 2014). The populace gained independence in 1962 from the United Kingdom and, since that time, managed their affairs as a parliamentary democracy (Jamaica [Constitution] Order in Council, 1962). The island consists of 14 parishes with Kingston being the capital (Jamaica [Constitution] Order in Council, (1962). Jamaica has two urban areas: Saint Andrew in the east and Montego Bay

in the west Jamaica [Constitution] Order in Council, 1962). The country's primary economic drivers are tourism, mining, manufacturing, entertainment, and remittance service (Ram et al., 2014). Between 2011 and 2016, the contribution of the construction sector to the country's GDP was an average 7.2%, with other Caribbean and Latin American territories were on average 3.8 % of their respective GDP (Izquierdo et al., 2018; Statistical Institute of Jamaica [STATIN], 2017). Similar to many countries, the Jamaican construction sector consists of public and private sector projects.

The Planning Institute of Jamaica (PIOJ, 2009) reported that Jamaica's Vision 2030 Plan has four goals:

1. Jamaicans are empowered to achieve their fullest potential;
2. The Jamaican Society is secure, cohesive, and just;
3. Jamaica's economy is prosperous; and
4. Jamaica has a healthy natural environment.

The construction sector in any country contributes to meet the national strategic goals of (a) proper facilities and infrastructure, (b) economic growth, and (c) social improvements (PIOJ, 2009). The report by PIOJ supports Kapelko and Oude Lansink's (2015) research, which suggested that a relationship exists between a thriving construction sector and the economic growth and social improvements in a country.

Between 2011 and 2017, the Jamaica construction sector had steady growth (STATIN, 2017). The growth of the construction sector started with many public sector projects, in partnership with international agencies (Izquierdo et al., 2018). For the 2011 to 2017 period, Jamaica's GDP improved in tandem with the growth of the construction sector (STATIN, 2017). The correlation supported the concept that a pull-and-push

multiplier effect occurs on other economic sectors when construction is thriving (Lopes et al., 2017). The challenge for the construction sector in Jamaica, similar to other jurisdictions within the region, is to manage the resources of the projects effectively to achieve success (Izquierdo et al., 2018).

Between 2011 and 2017, many development projects occurred that aligned to the Vision 2030 Plan. Research showed that other aspects of the economy benefited from vibrant and successful projects from the construction sector. The challenge facing many construction sectors is the correlation between projects that are more complex and the higher degree of risk (Callegari, Szklo, & Schaeffer, 2018). These complex projects require a different approach to project management to confront the anticipated challenges to ensure their success.

The construction sector. The construction sector plan, part of the Vision 2030 Plan lists seven professional associations. Four of the professional associations provide related project management service as part of their professional practice (PIOJ, 2009). These professional bodies are (a) The Incorporated Master Builders Association (IMAJ), (b) The Jamaica Institute of Architects (JIA), (c) The Jamaica Institute of Engineers (JIE), (d) The Jamaican Institute of Quantity Surveyors (JIQS), (e) The Land Surveyors Association of Jamaica (LSAJ), (f) Jamaican Institute of Planners (JIP), and (g) Association of Land Economy and Valuation Surveyors (PIOJ, 2009).

Of the seven professional associations, four play a primary role in the project management services of construction projects (PIOJ, 2009); the remaining three associations provide support to the primary professional associations. The four that provide direct project management services are the (a) IMAJ, (b) JIA, (c) JIE, and (d)

JIQS. These registered building professionals represent the project implementing organizations through employment or contract services in both the private and public sector.

The primary focus of the association is to provide a collective voice that advocates and protects the interest of its members (Incorporated Master Builders Association of Jamaica [IMAJ], 2001). The JIA is the body that governs the professional conduct of 104 architects and provides a collective voice to the construction sector (Jamaican Institute of Architect [JIA], 2015). The primary objective of the JIA is to provide knowledge to their members and the public relating to architecture and to promote the advancement of living and working standards through improved environment, health, welfare, and safety (JIA, 2015).

The JIE is the professional association for all engineers practicing in Jamaica. Similar to the JIA, the JIE established a registration board known as the Professional Engineer Registration Board (PERB) to conduct assessment, education, and approval for registered engineers (Professional Engineers Registration Board, 2019). The purpose of the JIE and the PERB is to promote and encourage the advancement of good engineer and management practice to the construction sector and to enhance the economic and social profile of Jamaica. The JIQS is the cost consultant institute in the construction sector. The main purpose of the Institution is to standardize the cost management practices for its 78 members of the Quantity Surveyors.

These professional associations described above provide a structured system to advocate for the protection and sustainability of the industry (JIA, 2015; PERB, 2019). In addition, the structure and governance of the associations also provide protection to the

sector and the general population (JIA, 2015; PERB, 2019). Although these professionals conduct and exhibit their specialized skills, many of them provide project management services, which are not reflected in any of the associations' constitutions and by-laws; this represents a gap in their respective regulatory provisions.

Primary agencies for capital government projects. In Jamaica, public sector agencies implemented the construction component of the Vision 2030. The leaders of these public sector agencies established Project Management Offices (PMOs) to implement their assigned initiatives. The PMO is a group of project management staff who implement and deliver a product or service on behalf of the organization (Darling & Whitty, 2016). The staff members ensure governance of the entire project process and facilitate sharing of resources, methodologies, and the utilization of project management tools and techniques (Darling & Whitty, 2016).

Each public sector agency implemented its respective projects. Eight primary agencies contributed to Jamaica's public sector capital expenditure projects for the period 2013 to 2017 (STATIN, 2017): (a) National Works Agency (NWA), (b) National Road Operating & Construction Company (NROCC), (c) National Water Commission (NWC), (d) Jamaica Public Service Company Limited (JPS), (e) Telecommunication Subsector, (f) Jamaica Social Investment Fund (JSIF), (g) Port Authority of Jamaica (PAJ), and (h) Urban Development Corporation (UDC).

The NWA has two primary functions. The first is to promote and improve the road network through modern management practices and cost-effective techniques, and the second is to provide commercialized technical services to the Ministry of Transport and Works, a government entity (NWA, 2016.). The agency continues to implement

major infrastructure projects as part of the Vision 2030 Plan (STATIN, 2017). One organization that works closely with NWA to implement infrastructure projects is NROCC. The NROCC is a public company representing the Government of Jamaica for the management of all toll roads concession agreements under public-private partnership arrangements (National Road Operating and Constructing Company [NROCC], 2019). The primary objective of the company is to work with international partners to design, build and maintain toll road facilities to meet the need of surface travels across the country.

The NWC commenced operation by an Act of Parliament (National Water Commission Act, 1980). The NWC provides potable water to 90% of the population and also treats, and disposes of the sewage. The NWC leadership seeks to implement projects to improve the water distribution network and expand treatment facilities as part of the Vision 2030 Plan. The expansion of the treatment facilities is necessary as it satisfies Goal 4 of the Vision 2030 Plan (PIOJ, 2009).

The JPS is an integrated utility enterprise that generates, transmits, and distributes power to businesses and households. The leadership of the organization places a keen focus on the Vision 2030 Plan in two primary areas. The first is the improvement of the current network system, and the second is the improvement and expansion of existing generating plants with a strong emphasis on the natural environment. The other utility enterprise is the telecommunication subsector comprising of organizations, private and public, which allow for the communication among the populace (Fair Trading Commission [FTC], 2007). Given the dominance of the private sector and the frequent technological changes in the industry, the sector is regulated by the FTC and Office of

Utilities Regulation (OUR; Telecommunication Act, 2000). The regulation is to ensure fair play among the competitors and fairness to the customers (FTC, 2007). The responsibility of the sector is to ensure constant alignment to the Vision 2030.

The JSIF is a limited liability company is part of the Government of Jamaica poverty alleviation strategy (JSIF, 2018). The objective of JSIF it to implement community-based socio-economic infrastructure and social services projects by mobilizing the respective human and financial resources. The primary aim of these infrastructure and social services projects is to improve the lives of the underserved thereby ensuring fulfillment of Vision 2030 Plan (JSIF, 2018).

The PAJ is a statutory organization established by the Port Authority Act 1972 ([PAJ, 2017.]). The primary function of the organization is to manage and regulate the development of Jamaica's ports and shipping industry. The PAJ leadership focuses on the advancement of the Vision 2030 Plan through two key areas. The first is to modernize the ports especially with the global expansion of the shipping industry that is influencing new thinking in shipping and logistics in Latin America and the Caribbean. The second is to continue the path of job creation through Business Processing Outsourcing (PAJ, 2017.).

The UDC is a public sector organization formed by a special act of Parliament (UDC, 2016). The primary function of the UDC is planning, designing and implementing development projects in designated urban areas (UDC, 2016). Many of the developments implemented are physical and social infrastructure projects geared toward improving the quality of lives in communities.

The examination of the eight public sector agencies that implement projects on behalf of the Government of Jamaica shows their respective diverse strategic imperatives.

The leaders of these organizations retain construction professionals to manage the portfolio of projects. The leaders would have within the organizational structure a PMO where these professionals would perform their duties.

Project Adaptive Leadership Style and Positive Social Change

Social change is an adjustment of values and attitudes of a social order within an organization or society (Greenfield, 2018). Demographic factors such as level of formal education, culture, type and spread of technology, and type of economy were some of the drivers of these changes in values and attitudes (Greenfield, 2018). Within each society or organization, people recognized the need to adapt to new conditions to ensure survival (Millar & Lockett, 2014). Greenfield (2014) and Millar and Lockett agreed that the changes in values and attitudes take place in a demographic context, and noted that change is heavily influenced by external factors that may threaten the survival of the organization or society.

One primary factor of leadership is to obtain positive results with the utilization of innovation and creativity (Hughes et al., 2018; Leonard, 2017). To foster creativity and innovation, leaders of projects must rethink their approach to problem solving (Seah, Hsieh, & Huang, 2014). Leaders must understand the type of problems and apply the necessary responses to receive positive actions (Doyle, 2018; Verdu-Jover, Alos-Simo, & Gomez-Gras, 2018). Placed into a comparable context, Doyle (2018) and Seah et al. observed that technical solutions may not necessarily solve complex problems. Instead, solving complex problems require a leader to move beyond the boundaries of the utilization of expert knowledge to a zone of changes in leader/followers priorities, shedding certain entrenched habits, and engendering collective dialogue among all

stakeholders (A. Doyle, 2017; Heifetz et al., 2009). Based on the literature search, to solve complex problems requires a different leadership style that allows the participation of a collective force as part of the decision making process.

Organizational leaders also encounter challenges and complexities that affect the social elements of the organization (Cherrier, Goswami, & Ray, 2018). The *social elements* refer to how the organizational or team members at different levels interact to create a relational climate that would encourage success for the organization (Cherrier et al., 2018; Thornberg et al., 2017). The negative effect of social elements in the organization may create tension and attrition among organizational or team members, which will permit underperformance by all participants.

To counter these tensions and attritions, Cherrier et al. (2018) identified three primary strategies: (a) appropriation, (b) integration, and (c) differentiation. *Appropriation* refers to an individual taking control of the issues. For appropriation, the leader must recognize the challenges and provide sound leadership to remove unnecessary tensions and attritions. *Integration* represents institutionalizing new approaches into existing norms within the organization. Within the context of adaptive leadership, A. Doyle (2017) remarked that leaders must incorporate an adaptive culture within the organization. Cherrier et al. remarked that *differentiation* denotes the conscious effort to create a unique organizational identity. Leaders utilizing these three primary strategies to reduce tension and attrition in one sector can explore collaboration in other sectors.

Trujillo (2018), for example, explored the benefits of multiparty collaborations among sector leaders to bring about systematic changes in behaviors among team

members). Multiparty collaboration may include private firms, public sector agencies, and social sector organizations, with a primary focus for leaders to engage collectively to address society's most complex problems. Multiparty collaborations may also encompass cross-sector collaborations (Trujillo, 2018). Cross-sector collaboration is one sector engaging another sector for a common action. Leaders who provided sound leadership in their respective sector may aid other leaders to enhance systematic changes for social good through cross-sector collaboration (Trujillo, 2018). These cross-sector collaborations may create new space for trust among leaders, which may help solve some societal problems while engendering systematic changes and adaptive thinking.

Cross-sector collaboration may allow community leaders to benefit from project managers in the construction sector to develop new leadership approaches to confront social challenges in communities (Trujillo, 2018). Likewise, Cherrier et al. (2018) remarked that social challenges are those issues that create conflicting opinions and actions among members of a community. Some of these social challenges that create negative effect to a community are (a) dereliction of the environment, (b) inequality within the work place, and (c) food security, and (d) gender equality, to name a few (Lee & Ferguson, 2019). Solving these social challenges with the utilization of adaptive leadership style through cross-sector collaboration may engender social entrepreneurship that can inspire a positive social change in the communities (Cherrier et al., 2018; Trujillo, 2018). The evidence from the literature review demonstrates that solving social challenges in communities require a sound leadership approach which may necessitate collective cross-sector collaboration.

The core of adaptive leadership is the people-centric model, which encourages leaders to address complex and challenging issues by involving stakeholders (Doyle, 2018). Adaptive leaders encourage adaptive work while adopting and conforming to new values and attitudes arrangements (Doyle, 2018; Verdu-Jover et al., 2018). Verdu-Jover et al. (2018) and Millar and Lockett (2014) remarked that an adaptive culture may influence positive social change within a society or organization. Adaptive leadership is managing, with the involvement of team members and stakeholders, consequential changes in an uncertain environment with limited solutions available.

Positive social change is necessary for organizations or societies as leaders seek to improve on performance and quality of work-life (Greenfield, 2018). Within the dominion of quality of work-life, the new thinking is that positive working relationship can influence improved work and social connections (Hughes et al., 2018; Leonard, 2017). Positive work environment improve leader-to-follower, and followers-to-follower relationships to reduce conflicts and attrition in social value in the work environments (Hughes et al., 2018). The approach by these team members may encourage cross-sector collaboration with communities to demonstrate to stakeholder groups another method of solving critical issues (Trujillo, 2018). From the literature inquiry, positive social change is critical both inside and outside the organization. The shift requires a different leadership approach to solve society's complex social problems.

Transition

Modern project management started in 1952 with a focus on the use of tools and techniques. The emergence of information technology enabled scholars and practitioners to create frameworks such as (a) the Gantt chart, (b) program evaluation resources

technique, (c) critical path method, and (d) work breakdown structure (Habibi et al., 2018; Hajdu & Isaac, 2016; Wren, 2015). Tools and techniques provided much advancement of project success rates; however more complex projects required a different approach to ensure optimum results. The search of the literature uncovered the theory of adaptive leadership utilized in mainstream permanent organizations. Adaptive leadership theory is the elimination of the technical approach to solve adaptive challenges. Conversely, transformational, transactional, and situational leadership styles are typical in mainstream project management. Transformational and situational leaders focus their leadership style on encouraging and empowering followers to move beyond self-interest for the greater good of the organization (Iqbal et al., 2015; Thompson & Glasø, 2015b). By contrast, transactional leaders conduct routine activities with a focus on the contractual arrangement between the leader and the followers.

The review of the literature revealed a need for project managers to seek new ways to enable projects to be more successful; one way is more inclusive leadership styles (Iqbal et al., 2015; Raziq et al., 2018). Whereas many leadership styles exist, the adaptive leadership theory fosters inclusiveness between the project managers and the team members (Arthur-Mensah & Zimmerman, 2017; A. Doyle, 2017). The model is centered on encouraging both the leader and followers to adapt to changes, challenges, and issues confronting the organization (A. Doyle, 2017). Leaders function in two types of organizations: permanent and temporary. Both organization types have similar designs and functions, except the temporary organization's formation emanates from the permanent organization. Governance and governability are the primary attributes that

maintain the distinction between the leaders of the temporary and permanent organizations.

Given the dynamics, complexities, and uncertainties of projects, project practitioners and scholars recognized no single definition for project success exists. Project practitioners and scholars recognized the original criteria of quality, time, and cost were insufficient to evaluate project success. Because of the low original criteria for project success, new criteria emerged: (a) efficiency of the process, (b) project effectiveness, (c) project relevance, (d) project impact, and (e) project sustainability (Williams, 2016). A project's success is assessed using a wider spectrum of factors that must support organizational, national, and economic development. Greater inclusion of employees in the work processes can enhance positive social change. Enhanced positive social change contributes to greater performance and quality of work-life, thus improving the organization as well as the surrounding community (Hughes et al., 2018; Leonard, 2017).

For Section 1, I provided the problem statement regarding low successful project rates and the effect it may have on an economy. In addition, I outlined the purpose for the study in the context of the influence leadership may have on the success rates of construction projects in Jamaica. Further inclusion in the study is the adaptive leadership framework used along with an in-depth review of the literature on (a) the history of project management, (b) project management processes, (c) project management and the organization, and (d) other leadership theories.

For Section 2, the objective was to set out the approach to conduct the research. First, I defined the role of the research and the participants. Second, I provided an

explanation of the approach of the research methods and design, along with the population sampling. Third, I provided an in-depth explanation regarding the ethics behind the research. The data collection instrument, techniques, and analysis formed the backbone of the gathering and utilization of the evidence received. Finally, an explanation of the reliability and validity was included to corroborate the findings observed from the interviews of the participants. In section 3, I presented my findings, examined the influence of positive social change, my experience with this research, and areas where further research may be necessary.

Section 2: The Project

Section 2 provides an overview of the process for the project section of this research. In this section, I describe the role of the researcher and the participants. Also, I include a detailed explanation of the research methods, research design, and population sampling. I also identify the ethical issues that arose from the research and explain my approach to maintaining strict adherence to all ethical protocols. I also examine the reliability and validity of findings. The data collection instrument, techniques, and analysis also form part of the discussion.

Purpose Statement

The purpose of this qualitative multiple case study was to explore adaptive leadership strategies used by construction project managers in Jamaica to increase projects' success rates. The targeted population was eight project managers from four different public sector organizations in the construction industry who had successfully used adaptive leadership strategies in their respective construction projects in Jamaica. The four organizations are situated within the two parishes of Kingston and St. Andrew, which are urban areas in Jamaica. The results of the research may create positive social change in the following manner. First, findings may be used to increase inclusiveness among team members and other stakeholders in the construction industry. Second, findings may lead to a positive work environment for employees and a reduction of unnecessary waste, which can negatively impact the environment and communities. Third, findings may yield a more prudent approach to procurement practices and the development of a value-for-money culture. Finally, findings may be used to reduce waste products and eliminate defects from the end-products customers receive.

Role of the Researcher

The role of the qualitative researcher is to unlock and inductively explore a phenomenon (Petrović, 2017). Unlike quantitative researchers, qualitative researchers are dependent on their participants (Choy, 2014; Kruth, 2015). The connection enables a conduit to investigate a phenomenon (Choy, 2014). The primary data collection instrument in a qualitative study is the researcher (Choy, 2014). One method for data collection is semistructured or unstructured interviews (Petrović, 2017), which allow the researcher to ask investigative questions and any other follow-up queries to understand the phenomenon. I used a similar data collection instrument with emphasis on guiding the participants through a detailed interview.

To prevent any ethical issues with the research, I followed the guidelines as outlined in the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). The Belmont Report supports three fundamental moral protocols: (a) respect for persons, (b) beneficence, and (c) justice (Adashi, Walters, & Menikoff, 2018). I demonstrated respect for participants in two ways: I treated each participant as an autonomous agent and ensured their protection. All participants were leaders in the construction industry; none were in protected categories and all were 18 years of age or older. Beneficence means the researcher safeguards the welfare of the participants by minimizing risk and maximizing benefits (Adashi et al., 2018). No psychological, legal, professional, economic, relationship, or physical risks were observed during this study. Justice is ensuring nonexploitative procedures during and after the research and balancing the distribution of the benefits and burden of the research (Adashi et al., 2018). Although participants' and their

organizations' identities were kept private, the study results were published and shared with the participants so they could benefit from the results. To strengthen ethical protocols, I also submitted my proposal to Walden University's Institutional Review Board (IRB). My approved IRB number was 01-03-20-0675442.

I work in the construction sector in Jamaica; therefore, I may have approached the study with personal biases. Kallio, Pietilä, Johnson, and Kangasniemi (2016) asserted that the researcher must eliminate all bias from their research. To mitigate bias, I conducted the interviews with an unprejudiced judgment by maintaining an open mind. Also, I focused on information gathering through active listening, recording, and note taking. I also ensured participants were comfortable during the data gathering so that they would be objective in their responses. Kallio et al. asserted that qualitative research requires rigorous data collection to ensure the quality and trustworthiness of the information. To collect the quality data required, I created proper interviewing protocols (see Appendix A).

Castillo-Montoya (2016) and Yeong, Ismail, Ismail, and Hamzah (2018) remarked that four phases of interview protocols exist: (a) ensure the interview questions align with research questions, (b) construct an inquiry-based conversation, (c) receive feedback on interview protocols, and (d) pilot the interview protocol. To follow the phases of these protocols, the researcher must adhere to (a) listening attentively, (b) considering for the meeting settings, (c) observing body language, (d) respecting participants' time taken to do the interview, and (e) controlling the interview process. For purposes of the study, I followed the interview protocols as outlined in Appendix A.

For the data collection process, I used semistructured interviews and reviewed documents from the organizations. Castillo-Montoya (2016) and Kallio et al. (2016) emphasized that for semistructured interviews the questions are determined before the interview and should align with the research question. The researcher must use an additional data collection approach to support the semistructured interviews (Castillo-Montoya, 2016; Yeong et al., 2018). I reviewed the organizations' documentation. An interview protocol was necessary as my approach to the research was from an etic standpoint. Darling and Whitty (2016) explained that an etic approach to research is the researcher having an insider perspective of the lived phenomenon. Conversely, an emic approach is when the researcher has an outside perspective of the lived experience. Because I conducted the study from an etic standpoint, I was mindful of my emic position within the construction industry, which could have encouraged bias. My fundamental role as the researcher was to guarantee that all ethical issues conformed to the Belmont Report and Walden University's IRB protocols.

Participants

Proper selection of participants is critical for a worthwhile qualitative research project. A case study is a methodological choice used by researchers to study and understand a particular phenomenon (Gentles, Charles, Ploeg, & McKibbin, 2015). The participants for the research were eight project managers who participated in successfully leading construction projects in St. Andrew, Jamaica. The participants were taken from four of eight public sector agencies that are assisting in fulfilling Jamaica's Vision Plan 2030 (PIOJ, 2009). The project managers had led a diverse team from conceptualization to completion and hand over of construction projects. The participants were required to

have (a) a minimum 10 years of experience in project management with at least 5 years at a senior managerial position and (b) used adaptive leadership as a strategy to improve project success rates.

Gaining access to participants is a pressing concern for qualitative researchers (Shenton & Hayter, 2004). Shenton and Hayter observed that researchers must pay attention to two factors when strategizing access to participants. The first is securing access to the participants or organizations, and the second is persuading the participants to contribute to the study. To gain access to these organizations, I obtained relevant contact information from two sources. The first approach was through the professional association directory to find the location and contact details of project managers. The second was through the telephone directory where I contacted the human resource department to learn about the types of project managers on staff.

Participants' comfort, privacy, and confidentiality are necessary during the interview process (Olsen, Lehto, & Chan, 2016). A comfortable meeting space will allow participants to feel relaxed during the interview session (Olsen et al., 2016). I selected the meeting space in the following manner. I allowed the participant to select the meeting space of their choice. I conducted all interviews at each participant's office; all offices were private and comfortable. The neutral meeting space allowed participants to feel comfortable and satisfied their privacy and confidentiality concerns.

A positive researcher/participant relationship contributes to the successful completion of the study (Olsen et al., 2016). Once I acquired participants' contact information, I followed up with an introductory email outlining the research and important points about the upcoming interview. I then scheduled a face-to-face meeting

with each participant so that I could explain the purpose of the research. I provided an overview of the research question, followed by a review of the consent form. I also followed the interview protocol, which was approved by IRB.

Research Method and Design

The central question for the study was the following: What adaptive leadership strategies do project managers in Jamaica use to increase project success rates? To acquire rich contextual data, I used a qualitative multiple case study as my research design. The research method and design centered around the research question with semistructured interviews as the data collection technique to extract rich textual data from the participants.

Research Method

Researchers conduct research to describe, explain, and articulate phenomena (Almalki, 2016; Kruth, 2015). Three fundamental research methodologies exist: quantitative, qualitative, and mixed methods (Cabrera & Reiner, 2018; M. N. K. Saunders et al., 2015). The quantitative research method is a deductive process that researchers use to focus on an empirical inquiry of an observable phenomenon. The approach includes statistical testing of hypotheses using numerical data (Cabrera & Reiner, 2018; M. N. K. Saunders et al., 2015). Almalki (2016) explained that quantitative researchers use numerical data often gathered through questionnaires and surveys to solve a research problem by computational techniques. Quantitative method requires a large data set to test hypotheses regarding relationships or differences between research variables. Using numerical data would not have allowed me to gather rich textual data to answer the research question.

Researchers use qualitative methodology to uncover a deeper understanding of participants' experiences of a phenomenon using rich textual data (Hesse-Biber, 2016; Yin, 2017). Almalki (2016) and Kruth (2015) noted that qualitative research is done by investigating and observing participants' experiences and opinions. Participants reveal their perspectives primarily through words, text, and images (Davis et al., 2016; Hesse-Biber, 2016). The researcher extrapolates the themes from the raw data to explore the phenomena relative to the research question. Qualitative methodology was appropriate because the purpose of the current study was to discover an insightful perspective of the phenomenon.

Mixed methods is a different type of research approach that combines quantitative and qualitative data collection techniques (Almalki, 2016; Davis et al., 2016; M. N. K. Saunders et al., 2015). The combination of qualitative and quantitative methods provides a platform that the researcher uses to examine the research question from different methodological perspectives (Hesse-Biber, 2016). One of the main reasons a researcher uses mixed methods is to enable triangulation (Hesse-Biber, 2016). A mixed-methods study is challenging to design and can be time consuming.

The purpose of the current study was not to test hypotheses. Researchers use a mixed-methods approach to explore the research problem from different perspectives (Almalki, 2016; Yin, 2017). Quantitative and qualitative data collection and analysis extends the length of this research. The purpose of the current study was to explore the phenomenon of adaptive leadership strategies that some construction project managers in Jamaica used to increase projects' success rates. Qualitative method allowed me to uncover a deeper understanding of participants' experiences of the phenomenon using

rich textual data. For these reasons, an inductive qualitative approach was appropriate for the study.

Research Design

Researchers can use several qualitative research designs such as ethnography, phenomenology, and case study (Hoang-Kim et al., 2014; Percy, Kostere, & Kostere, 2015; Yin, 2017). Researchers use the ethnographic design to explore the participants' customs, habits, and culture (Hoang-Kim et al., 2014; Palinkas & Zatzick, 2019).

Ethnographic designed research is a systematic study by the researcher to observe the behaviors associated with members of a group or society (Davis et al., 2016; Palinkas & Zatzick, 2019). Researchers use phenomenology to study the participants' lived experiences and the interpretation of those experiences (Percy et al., 2015; M. N. K. Saunders et al., 2015).

Conversely, case study researchers conduct in-depth investigations of a specific phenomenon within a real-life environment (Adeyinka-Ojo, Nair, & Khoo-Lattimore, 2014; Van Erp & Loyens, 2020; Yin, 2017). Adeyinka-Ojo et al. (2014) and Van Erp and Loyens (2020) articulated that case study is an empirical inquiry to investigate a phenomenon within a real-world context with the use of multiple data sources. Hoang-Kim et al. (2014) noted that researchers can obtain a diverse array of data through interviews and observations. Two types of case studies exist: single case study and multiple case study (M. N. K. Saunders et al., 2015). A single case study is analogous to a single experience because it focuses on a specific case. Yin (2017) noted that multiple case study is a combination of small case studies to determine a literal replication of a

phenomenon. Because I wanted to understand a phenomenon by replication from several project managers, a multiple case study design was most appropriate.

Ethnography and phenomenology were not suitable because the focus was not on life experiences, culture, customs, or habits of the participants. Instead, the purpose of the study was to explore the adaptive leadership strategies used within a real-world context. To conduct this type of research, I undertook a multiple case study approach to interview eight project managers representing four different organizations. The reason for the multiple case design was to extract a deeper understanding of the contextual conditions that project managers face in managing construction projects to achieve project success using adaptive leadership strategies.

Because the research was a multiple case study to understand how project managers use adaptive leadership techniques, I approached the study using a descriptive research method. By using a descriptive technique, I sought to ensure accuracy and consistency of participants' results (see Asadollahi Kheirabadi & Mirzaei, 2019; Malterud, Siersma, & Guassora, 2016). The descriptive technique allows the qualitative researcher to attain data saturation from participants' responses (Asadollahi Kheirabadi & Mirzaei, 2019; Malterud et al., 2016). For the data gathering process, I started with four project managers (one from each organization); however, given the need to acquire sufficient rich textual data and achieve data saturation, I increased the sample to two project managers from each of the four public sector agencies selected. Participants were required to satisfy the selection criteria outlined earlier.

Population and Sampling

The appropriate selection of a population for qualitative research is necessary so that the identified and selected group is aligned with the research question (Palinkas et al., 2015; M. N. K. Saunders et al., 2015). Also, participants must understand the phenomenon being explored (Asadollahi Kheirabadi & Mirzaei, 2019; Palinkas et al., 2015). The population selected for the qualitative multiple case study was based on the research question: What adaptive leadership strategies do project managers in Jamaica use to increase project success rates? The participants consisted of eight project managers representing four different organizations that implement construction projects in St Andrew, Jamaica as part of the Vision 2030 Plan. Sim, Saunders, Waterfield, and Kingstone (2018) noted that 3-10 participants can participate in a phenomenological study. The selection of eight project managers was intended to ensure that I would reach data saturation.

Sampling in qualitative research provides an opportunity to shed experiential knowledge about a particular principle or concept (Yin, 2017). Ames, Glenton, and Lewin (2019) and Krause (2016) highlighted that the samples used for qualitative research were usually dependent on that part of a population to whom researchers want to get an in depth understanding of a particular phenomenon. Because the study was specific to a unique segment of the construction sector, I used purposive sampling. Purposive sampling is a nonprobability method researchers use to select participants for a multiple case study who have knowledge in the specific area (Ames et al., 2019; Robinson, 2014). I used a sampling strategy to unlock how project managers apply adaptive leadership to improve project success rates.

The researcher must have a strategy to achieve data saturation when using purposive sampling (Saunders et al., 2018). Ames et al. and Dworkin (2012) noted that researchers must not only concentrate on the number of participants in the study, but should focus on when the data collection process offers no further insight into the inquiries. Of the eight primary agencies that provide the services of construction project management to fulfill the Vision 2030 Plan, I used four of those organizations. From each of the four organizations, I selected two participants to conduct my study.

Strict observance of participants' selection for qualitative research is necessary (Malterud et al., 2016). The criteria to participate in the study include the following attributes. Each project manager represented the organization that is part of the Vision 2030 Plan. Also, each project manager had minimum of 10 years of working experience at a senior management level in the respective organization. In addition, each project manager had used adaptive leadership strategy to manage projects.

I conducted semistructured interviews with each participant. As I encouraged each participant to express their preference for the meeting location, I also ensured that I maintained the privacy and confidentiality of each participant. To ensure the privacy and confidentiality of participants, all interview sessions were conducted in a space that only the interviewee and I occupied during the entire process. The interview took place at the interviewee's office. I designated a maximum of 45 minutes for each interview session (see Appendix B).

Ethical Research

The qualitative inquiry demands strict compliance with the rules of ethical engagement (Denzin, 2017). Ethical engagement is the protection of human subjects in

relation to their safety and well-being as they provide information to the researcher (Denzin, 2017). The traditional audit of ethics emerged from the biomedical community and was adopted by qualitative researchers as the benchmark to mitigate risks to participants and misguided practice by the researchers (Doyle & Buckley, 2017; Palinkas & Zatzick, 2019). The adoption by qualitative researchers allows them to probe a phenomenon without detriment or harm to the participant. The influence and management of the ethical protocols, especially for the Common Rule within the confines of a university, falls under the purview of the IRB (Osborne & Luoma, 2018). With these practices in place, researchers must adhere to the requirements to provide the results of their inquiry to ensure minimal risks and disruptions to the wellbeing of participants.

The Belmont Report (1979) was the compliance guide for this study (Doyle & Buckley, 2017; Palinkas & Zatzick, 2019). To demonstrate my understanding of the Belmont Report, I participated in a National Institutes of Health web-based training course, *Protecting Human Research Participants*; my certificate number was 2952201. Also, before I collected the data, the IRB approved the research ethics and protocols that I submitted (Denzin, 2017). I could not proceed with any data collection until the IRB indicated that my methodologies satisfied all ethical requirements. Once I received the approval from the IRB, I proceeded to engage the participants.

The engagement of participants was formal, yet simple communication. The communication process was to receive formal consent from the participants about their willingness to participate in the study. The participants signed the formal consent form before the interview (see Appendix B). The request for participation and the consent was done in simple language so that no confusion with the participants. Doyle and Buckley

(2017) expressed that the consent form is important as it protects the participants. The protection of the participants was to advise them about the entire ethical and data collection process of the study. I identified the potential benefits of (a) providing the participants with the opportunity to review his or her use of adaptive leadership, (b) to learn about the most recent development in adaptive leadership, and (c) adding to the existing body of knowledge. I shared the information with all participant by email and phone conversation. All participants accepted my invitation to participate in the study by signing a letter of consent.

The researcher of any study, whether qualitative, quantitative, or mixed methods, must minimize the risks and protect the privacy and rights of the population (Doyle & Buckley, 2017). The requirement of protection is for all participants especially vulnerable subjects such as prisoners, children, pregnant women, and disabled must receive extra protection. For this study, I did not interview any vulnerable participants such as prisoners, children, pregnant women or disabled individuals. The participants did not fall within the categories outlined earlier as the research focused on practicing professionals.

Because the participants were practicing professionals, I assumed that their cognitive skills were intact and thereby understood their involvement in the study. Because an assumption was made that the participants' cognitive skills were intact, I expected they read and comprehend the informed consent form and determined to participate in the study. Because participants want to participate in the research, Denzin (2017) and Doyle and Buckley (2017) remarked that they must also be given the option to withdraw from the research at any time. Withdrawal can be via an email, telephone call or terminate the interview at their discretion. No participant withdrew from the

interview. Notwithstanding, if during the interview the participant sought to withdraw, I would have destroyed all recorded data by deleting from the recording device. I would have also returned all hard copies of documents to the participants and, where not possible, I would shred them.

Humanities and social sciences research are nonclinical studies that involves human subjects (Doyle & Buckley, 2017). The study did not have any physical harm or emotional distress to persons when conducting the research. Doyle and Buckley (2017) noted that the emotional distress of the participants can entail feeling of (a) upset, (b) that their dignity is undermined, and (c) an invasion and violation of their privacy. To counter any potential emotional distress, I provided the participants with a consent form highlighting their rights and the protection afforded during and after the study. I included the following items in consent form: (a) the procedure of the interview, (b) their involvement in the study, (c) confidentiality, and (d) a statement of consent. The interview protocol highlighted the step-by-step approach that took place while conducting the interview. Confidentiality outlined the level of privacy that was observed, which included nondisclosure of their demographics or information about the organization, and the methodology of the data stored. The statement of consent illustrated that the participants understood their rights and protection, and agreed to participate in the study.

Researchers must take into consideration whether any incentives is required for participating in a research study (Palinkas & Zatzick, 2019). Doyle and Buckley (2017) suggested that social science researchers must not conduct research studies where an inducement to the participants is required, as this could create bias with the information provided. I advised the participants no incentives would occur for participating in the

study. The consent form clearly stated that participation to the study was voluntarily. As a result, I ensured ethical protection for all participants.

Protection of the participants includes privacy and identity (Doyle & Buckley, 2017; Palinkas & Zatzick, 2019). I provided each participant with an identification code that I used throughout the interviews, coding, and analysis: PM01, PM02, PM03, PM04, PM05, PM06, PM07, and PM08 for participants. For the matching organizations, the code was ORG01, ORG02, ORG03, and ORG04. I also provided code names for the respective organization's documents which I reviewed as part of my data collection. The code was ORG01-Doc1, ORG02-Doc2, ORG03-Doc3, and ORG04-Doc4. The strategy I used to protect participants' and the organization's identity was not to collect any demographic information. Also, I refrained from using names when discussing the study with other persons. To protect participants' identities, I did not share the data collected with anyone internal or external to the organizations. All information was secured with a security code on my computer hard drive and hard copies placed in a locked file cabinet at home for a period of no more than 5 years, from the dates of the interviews.

Data Collection Instruments

Data collection is a systematic process of gathering information for a specific purpose from different sources (Rimando et al., 2015). The type of data collection instruments used by the researcher will be dependent on the type of study and the information that the researcher seeks to uncover (Rimando et al., 2015). Yin (2017) noted that researchers who use qualitative case study may utilize different collection methods such as (a) interview, informal or semistructured, (b) phenomenological in-depth interviews or direct observation, (c) focus groups, and (d) company or archival

documents. Within the confines of social sciences research, the primary data instrument is the researcher (Nico, 2016). As the primary data collection instrument, I used semistructured interviews and reviewed archival documents as the primary and secondary data collection, respectively. Yin (2017) observed that scholars must determine a systematic process to extract and utilize the data received. To have a study of high quality, the researcher must implement a process that is effective.

Because the data collection was a systematic process, I conducted open-ended in-person interviews (Rimando et al., 2015). The open-ended in-person interview was semistructured. Although I conducted the semistructured interview for the primary data collection, I sought permission to review the company's documents for secondary data collection. Participants provided project meeting reports, site meeting notes, project implementation manuals, and official company annual reports. Also, I accessed information of the organizations from their respective websites. The documentation review process enhanced the reliability, validity, and confirmability of the results.

The interview approach ensured that participants felt comfortable. To achieve a personable atmosphere for the meeting, I opened a discussion using relaxed comments before commencing the formal interview; also, I highlighted the importance of the confidentiality of the interview. A comfortable atmosphere prior to the interview allowed the participants to share their views and thoughts openly. The openness of the participants also unlocked new discoveries for the study (Rimando et al., 2015). Although I took notes as part of the semistructured interview, I also sought permission from the participants to use an electronic recording device during the interviews. The permission was sought before the formal interview commences. Following the interview session, I

reviewed the organizations' files, such as meeting notes, policy documents, journals, and transcribe speeches. Rimando et al. (2015) remarked that the review the organizations' files will aid the researcher in the validation process.

Because I am the primary data collection instrument, a strict data collection processes and techniques was followed. First, the participants and I were situated in the Kingston and St. Andrew parishes of Kingston Jamaica; therefore, face-to-face interviews was done. Second, the face-to-face interview was the most effective as I observed the nonverbal actions by the participants. For the social sciences, qualitative research face-to-face interview can be most effective as the researcher may observe nonverbal movement of the participants. The nonverbal movement can influence the researcher whether to probe further or abstain (Nico, 2016). I adhered to strict interview protocols set out in Appendix A.

The interviewer must ensure that participants feel comfortable, including dressing appropriately for the situation (Nico, 2016). The interviews were semistructured with predetermined questions. If any vagueness occurred in the participant's response to any of the questions, I probed further with follow up queries. All questions along with the follow up queries were focused on the central research question to ensure quality of the data collected. Kallio et al. (2016) noted the value of the systematic process of data collection for qualitative research is important as it improves the quality and trustworthiness of the results.

Following the data collection and the analysis, I conducted the member checking procedure of the results generated. Wilson, Onwuegbuzie, and Manning (2016) posited that member checking is vital for qualitative research studies as it helps the researcher to

ensure the accuracy of the information provided by the participants. To conduct member checking, I analyzed the data and the findings were presented to each participant to confirm the accuracy of the results. Nico (2016) and Yin (2017) also supported member checking especially to ensure both descriptive and accurate validity of the data collected; this aspect of the study was mandatory. As the primary instrument of the study, I ensured that all information collected was accurate and trustworthy; member checking was critical. Part of the reliability of the research was the trust that exist between each professionals within the sector. As a member of the sector, I have established a sound reputation among the industry leaders.

Data Collection Technique

Whether conducting qualitative, quantitative or mixed methods, the researcher must develop a data collection technique. Data collection technique is part of the research method that the researcher uses to identify a strategy to collect the data (Chu & Ke, 2017). In the qualitative case study research, interviews, document review, and observations are the primary approach for the data collection process (Chu & Ke, 2017). For a case study, Yin (2017) postulated that researchers use multiple sources such as interviews, observations, and review of organizations' documents to ensure the trustworthiness of the data collected. Because the research was a qualitative study, I used semistructured face-to-face interviews and review of the organizations' documents.

The participants for the study were eight project managers taken from the four public sector agencies that continue to fulfil the mandate of Jamaica's Vision 2030 Plan (PIOJ, 2009). The participants worked at the following agencies: (a) (NWA), (b) (NWC), (c) (PAJ), and (d) (UDC). The initial contact with the participants was telephone and

email from information provided on the organizations' websites. The initial contact was to introduce the research project and to get a preliminary agreement. I received preliminary agreement from the participants and thereafter sent the letter of consent, which they approved.

After the participants signed the letter of consent, I commenced the interviews. The interviews took place at the participants' offices. I used a REC digital voice recorder to collect data from the interviews. The reason for a digital recorder was to ensure better clarity of the recording, and was not prone to internet hacking. At the end of the interviews, I plan to store the digital recorder along with hard copy documents in a secured file cabinet for five years.

Before I conducted face-to-face interviews, I sought IRB approval. To receive IRB approval required for me to submit the consent form along with the statement of approval showing authorization of the participant's willingness to participate in the study. Seeking permission from the organization leaders and participants required a three staged approach. I gained access to the organization through telephone contact to the relevant superiors or the human resource departments, using contact information from the internet. I also provided my letter of consent with the statement of approval to the participants. In addition, I followed up with the participants to get the statement of approval signed confirming that they were willing to participate in the study.

Because my research was a multiple case study, I used the semistructured face-to-face interview technique to collect the primary data. I also reviewed the organization's documents such as project meeting reports, site meeting notes, project implementation manuals and official company annual reports to support the information collected from

the interviews. The information gathered was to examine how these participants led their team members and stakeholders to ensure project success. Because I did a multiple case study using interviews and documents review as data collection instruments, a pilot study was not necessary. A pilot study is a smaller study to determine if a larger experiment is necessary (Ghofranipour et al., 2018). The semistructured interview process, supported by document review, was sufficient to provide the necessary data needed to understand the phenomenon.

As the researcher, I identified a clear technique for the interviews (Chu & Ke, 2017). I conducted semistructured interviews, i.e., the face-to-face and the telephone interview with the option of a Skype platform. My preference was to conduct face-to-face interviews, as this technique provided the opportunity to observe any nonverbal cues. For the face-to-face interview, the participants' offices were used because of location, convenience, and privacy. I had questions with follow up queries to ensure that I received all the all relevant information. Before I commenced the interview, I introduced myself, explained the aim of the interview, and at all times, adhered to the ethical interview protocols. Before my opening statements, I provided each participant with their coded identification number. Once I recorded the code, I commenced the interview by restating the purpose of the research and outlined the central research questions followed by the interview protocols (see Appendix A).

During the interview, I ensured that participants understood every question before they provided a response (Taubman et al., 2013). The participants understanding every question allowed them to provide fair, accurate, and free from any error. Also, if there was clarification required based on the responses provided by the participants, I asked

follow-up questions to get clarity (Taubman 2013). I asked follow-up questions to secure fair and accurate responses. The follow-up questions were to receive proper interpretation of participants' leadership style and how they viewed stakeholders' engagement.

Once the data was collected from each participant, I transcribed the information within 48 hours. I asked the participants to review the contents to ensure that the information was consistent with their comments (Wilson et al., 2016). The participants were emailed their individual transcripts and were asked to respond within one week. The transcript must go through this review process to guarantee validity (Wilson et al., 2016). The participants indicated that the transcript reflected a true record of the interviews conducted.

Semistructured interviews for data collection has its advantages; however, the review of the literature also showed disadvantages. Semistructured interviews are suited for the exploration of attitudes, values and beliefs, and provide the opportunity to evaluate the validity in the participant's responses, facilitate comparability among all participants (Barriball & While, 1994). In addition, semistructured interviews ensure that the respondent is unable to receive assistance from others to formulate their response (Barriball & While, 1994).

Semistructured interviews provide a platform to have the participants explore their attitudes, values, and beliefs about a particular phenomenon (Barriball & While, 1994). Semistructured interview can create a platform for potential rich in-depth data once the researcher probes the participants accurately. In addition, semistructured interviews provide the opportunity to evaluate the validity of participants' responses is one of the core requirements of qualitative research. One way of conducting validity is

observing nonverbal indicators portrayed by the participants especially discussing sensitive matters (Barriball & While, 1994; McIntosh & Morse, 2015). In addition, the facilitations of comparability with all participants are important as they are asked the same questions and in the same order (McIntosh & Morse, 2015). Semistructured interviews as data collection method ensures that the participants do not get assistance from others in formulating their responses. The assistance of others to conduct the interviews may distort the data collected. McIntosh and Morse (2015) remarked that a focused interview must be the affinity of the qualitative researcher and every attempt must be made by the scholar to adhere to this doctrine.

If the interviewer lacks experience conducting interviews, then the information extracted from the participants may be inadequate (Barriball & While, 1994). Insufficient information will limit the rich textual data; therefore, the quality of the research may be compromised (Irvine & Sainsbury, 2013; McIntosh & Morse, 2015). Participants may feel inhibited to provide some sensitive information especially in a face-to-face arrangement (McIntosh & Morse, 2015). When conducting telephone interviews, dilution in understanding the responses may occur as the researcher could lose out on the participants' nonverbal communication (Barriball & While, 1994; McIntosh & Morse, 2015). Barriball and While (1994), Irvine and Sainsbury (2013), and McIntosh and Morse (2015) agreed that if the researcher is inexperienced, then the extraction of the data from the participants may diminish the quality of the research. Persistent practice with work colleagues before the actual interview and guidance from more experienced researchers helped me resolve any weakness.

Data Organization Technique

Organization of the data is important to the quality of the (Chen & Zhang, 2014). Chen and Zhang noted that the researchers process the data into a formal information classification for ease of practical comprehension. Each participant, organization, and relevant documents had special identifiers. I organized the data to allow (a) data collection and tracking, (b) storage of information, (c) data coding, and (d) retention of information.

Data collection is the process of going into the field to collect data (Rimando et al., 2015; M. N. K. Saunders et al., 2015). The data collection must be done in a systematic manner to enable consistency throughout the entire process, so as to preserve the integrity of the research (M. N. K. Saunders et al., 2015). I conducted the data collection through established semistructured interviews and at the same time following all data collection protocols outlined earlier (Rimando et al., 2015). To support the information received during the interviews, I reviewed some of the organization's documents. Some of the documents were project meeting reports, site meeting notes, project implementation manuals, and official company annual reports. Tracking of data involves maintaining all information received during the data collection process (McLellan, MacQueen, & Neidig, 2003). Creating a robust data tracking system allowed for easy retrieval of information particularly because each participant, organization, and the respective documents received coded names. The code names of the participants were PM01, PM02, PM03, PM04, PM05, PM06, PM07, and PM08. For the corresponding organizations, the code were ORG01, ORG02, ORG03, and ORG04. For the matching organizations and participants, the document codes were ORG01-Doc1, ORG02-Doc2,

ORG03-Doc3, and ORG04-Doc4. Before commencing the interview, I referred to each participant and organization by a code number. Using code names was to ensure I could later retrieve each participant to the specific coded number. Once I commenced the review of the file, I assigned the respective code number relative to the participant and organization.

Proper storage of data collected is important for any research (Chen & Zhang, 2014). Although a researcher wants to store the data for easy retrieval, Hesse et al. (2019) and McLellan, MacQueen, and Neidig (2003) asserted that ethical protocols must be followed by the researcher. The researcher must store the data bearing in mind any unanticipated event (Hesse et al., 2019; McLellan et al., 2003). I stored the data on my computer with password protection. Also, I stored all information at my home in a special cabinet with keyed access; the key is placed in a separate secured location. I removed all voice recording from my electronic device, once I uploaded the recordings into my computer password protected system. As an added security feature, I transferred the recordings onto a flash drive, which is stored in the locked filing cabinet.

Coding is the process to determine meaning and understanding to the data collected (Stuckey, 2015). Stuckey (2015) noted that the primary steps involves reading or listening through the data and creating a storyline followed by categorizing into codes. After each interview, I reviewed the notes and recordings to get the story that the participant articulated from the questions provided. The review process was to ensure that I received all information and determined whether any gaps existed in the responses that could require clarification. Following the review of the recordings, I commenced coding of the data. I conducted data coding with NVivo version 11, a qualitative data analysis

software (Hilal & Alabri, 2013; Stuckey, 2015). Hilal and Alabri (2013) remarked that coding using a software ensures that the researcher work in a methodical and thorough manner when analyzing the data. While the software organized the data, I did the coding.

The retention period of collected data should be a minimum of three years as outlined in the Office for Human Research Protections (HHS). The reason for data storage is the material may have long-term value for other research in the future. According to Walden University's IRB policy, the information will be retained for 5 years. Once the retention period of the data expired, the information will be destroyed. For hard copies, I will shred all material with a shredding machine. The electronic copies, will be deleted from my computer by overwriting of the media, and also the physical destruction of all portable data storage devices.

Data Analysis

Integral to the authenticity and credibility of qualitative research is the meticulous and systematic organization of data to facilitate the identification of the recurring themes (Stuckey, 2015). A meticulous and systematic organization of the data allows a researcher to know when the point of saturation occurs, and also highlights any gaps that might require follow up with participants. Several scholars emphasized the necessity for such an approach of careful organization of the data (Barbour (2001). Yin (2017) noted that once the data are collected, the researcher must start the analysis through an analytical and logical process. The commencement of the data analysis by the researcher is to first understand the storyline about what the participants seek to convey (Stuckey, 2015).

Triangulation refers to using more than one method to collect data for a research investigation (Denzin, 2012). Barbour (2001) and M. N. K. Saunders et al. (2015) asserted that the primary use of triangulation is to examine the central research problem with two or more independent sources of data collection methods. These two independent sources of data collection methods are the semistructured interviews and the review of organizations' documents. My documentation review process consisted of projects meeting reports, site meeting notes, project implementation manuals and official company annual reports. Denzin (2017) outlined four types of triangulation. These are (a) method triangulation, using multiple methods of data collection about the same phenomenon; (b) data source triangulation, using different types of people or groups to gain multiple perspectives of a phenomenon; (c) theory triangulation, using different theories to analyze and interpret the data; and (d) investigator triangulation, using two or more researchers in the same study to provide multiple observations. I used method triangulation in the form of interviews and documents review. Methodological triangulation involves the use of more than one type of data collection technique to understand a phenomenon (Carter et al., 2014). Triangulation helped me understand the central research question.

The data analysis must commence quickly as the process can be iterative (M. N. K. Saunders et al., 2015). A researcher, through the iterative process, may need to revisit previous participants in order to maintain consistency with the interpretation of the information provided. Also, data analysis allows for the research to quickly identify the themes and concepts (Lowe, Norris, Farris, & Babbage, 2018). To attain proper data analysis, researchers must undergo five stages of review: (a) compiling, (b) disassembling,

(c) reassembling, (d) interpretation, and (e) conclusion (Castleberry & Nolen, 2018; Yin, 2017).

Before I commenced examining the five stages of data analysis, I identified a software package that would be useful for the study. Researchers conducting qualitative data analysis have at their disposal several software packages. Reviewing the software packages, I focused on three (a) NVivo, (b) Atlas.ti, and (c) MAXQDA. Researchers use the NVivo version 11 software package to analyze small to medium size samples, which have rich textual data (Fan, Zhu, Pei, Li, & Wu, 2015). NVivo version 11 provides the flexibility of organizing the data so the researcher can identify the coding and themes (Fan et al., 2015). Researchers use Atlas.ti software to analyze large bodies of data to uncover textual, graphical audio, and video data. The software's primary function is to uncover a complex phenomenon concealed in unstructured data across different platforms (Paulus & Bennett, 2017). MAXQDA software aids researchers who conduct qualitative and mixed-method research. The software can analyze large and small data sets in the form of interviews, articles, media, surveys, videos, and social media platforms such as Twitter (Marjaei, Yazdi, & Chandrashekara, 2019; Nie, 2017). The three software packages can do the analysis. Because I was not conducting a research with large data set and complex unstructured data across different platforms, the NVivo software version 11 was ideal for the study.

The first stage involves compiling the data, which refers to the organization of data in a useable form and includes transcribing the audio recording. I transcribed the interviews and documents reviewed into a Microsoft Word file. I also sorted and arranged all documents collected from the organizations. The second stage, I dissembled the data

and create meaningful groupings. Disassembling the data is usually done through coding (Castleberry & Nolen, 2018). I disassembled the data using the Microsoft Word software. I then uploaded the disassembled data into the NVivo version 11 software to assist with the coding during this process (Lowe et al., 2018). The third stage, I reassembled the data by looking for the key themes, which captured the relationship highlighted by the participants relative to the central research question.

The fourth stage was interpretation, where I sought to understand what the participants conveyed relative to the central research question. Lowe et al. (2018) suggested that the interpretation stage requires a critical thinking approach by the researcher. I explored all areas of the relationships between the themes and codes so all aspect of the data was covered. The final stage was the conclusion where the researcher compiles all themes (Castleberry & Nolen, 2018). The conclusion stage allowed me to answer the central research question that was part of the generalizable observation throughout.

One aspect of the data analysis process is coding (Creswell, 2014; Stuckey, 2015). Coding helps identify the key themes (Stuckey, 2015; Yin, 2017)). The themes are the patterns observed that tells the story of the phenomenon (Creswell, 2014). The NVivo version 11 software assisted me to manage and explore the patterns arrived from the transcripts provided after the interview. I observed the patterns created by NVivo. From these pattern, I developed the codes. In NVivo version 11 software system, these codes are known as nodes. From these nodes, I developed the themes. My reason to develop the themes was the NVivo version 11 software cannot determine my research methodology choice. To highlight the themes, I used direct quotations, where necessary, from the data.

The use of direct quotations highlighted to my audience the quality of my coding, themes, and subsequent conclusions.

During the analysis and interpretation of the data, the researcher must also examine how the key themes correlate with the literature and the conceptual framework (Yin, 2017). The correlation was to determine whether any variance exists between the researcher's result and the literature; or if there are new questions that may require answers. I correlated the analysis of the data to the conceptual framework and the literature to determine the similarities or variances. I also conducted further literature review to determine if any similarities to the analysis was necessary, or whether there were new questions, which may require exploration. In closing, Yin noted that researchers must also explore their personal interpretation of the study with respect to personal culture, history, or experience.

Reliability and Validity

The value of any qualitative research rests with the level of reliability and validity of the study (Saunders et al., 2016). Yin (2017) added that reliability and validity are the central judgment of the study, especially in the domain of qualitative social scientific work. Given the subjectivity of the result, researchers must have a robust system so that the outcome is trustworthy (Yin, 2017).

Reliability

Reliability in qualitative study involves the production of consistent results (Amankwaa, 2016; Creswell, 2014). Reliability was based on dependability of the data. Dependability refers to the stability and consistency of the data between the investigator and the participants (Amankwaa, 2016). Threats of reliability may vary. Saunders et al.

(2016) identified four risks (a) participants' error, any factor that may change the manner in which the participants may perform during the interview; (b) participants' bias, any factor that may influence a false response to a question; (c) researcher's error, where the researcher alters the participants interpretation; and (d) researcher bias, where the researcher may influence bias according to his or her belief systems. To achieve reliability, I used triangulation and membership checking to ensure consistency with the data analysis.

Validity

Validity in qualitative research is the indicator on the level of appropriateness of the research, the soundness of the analysis and results, and the generalizability of the study (Saunders et al., 2016). Validity encompasses credibility, transferability, and confirmability. Erlingsson and Brysiewicz (2013) remarked that one aspect of validity is that it must be grounded in the theory and principles surrounding the central research question. The rigor of the research should demonstrate the *truth value* of the study (Erlingsson & Brysiewicz, 2013). To ensure validity, I ensured credibility, transferability, and confirmability by placing the central research question at the forefront of the study with each research question, and follow up queries, aligned to the conceptual framework.

Credibility. Credibility is the confidence of the truth identified through the lived experience of each participant (Amankwaa, 2016). To ensure credibility, Amankwaa (2016) and Leung (2015) highlighted that researchers must conduct persistent observations, prolong engagements, triangulation, and member checking. Also, the researcher must, at all times, be transparent with the work and the results identified. I

ensured credibility by conducting member checking and conduct triangulation with both primary and secondary data collection.

Transferability. Transferability relates to whether the findings of the study are applicable in other settings within the context of the theory (Amankwaa, 2016). To attain transferability, a researcher must provide adequate details of the research findings, thereby demonstrating the study's applicability to other settings (Bengtsson, 2016). I ensured transferability of the research by using member checking, strict analysis of the data, and detailed unbiased discussion about findings. The quality of the participant, triangulation, and description of the findings may ensure transferability of the study.

Confirmability. Confirmability is the authenticity or neutrality of the data (Bengtsson, 2016). One method of ensuring confirmability is triangulation, constant comparison of multiple data sources, proper audit, and documentation as the research is done (Leung, 2015). If a researcher fails to get confirmability, then the issue of biases may arise. I ensured confirmability of the study by doing consistent triangulation and keeping proper audit of the documentation of study.

Transition and Summary

For Section 2, I examined the methodological approach in conducting the research. To outline this section, I restated the purpose statement then explained the role of the researcher. Through the use of the literature and seminal work, I identified strategies on how to select and gain access to the participants, and the methodology to collect the data. For this study, I used multiple case study research. I also examined research methods and design, and explored population and sampling. The selection of the participants was purposive sampling given their knowledge of the field of study.

The core of Section 2 was the research ethics. To ensure prudent ethical research protocols, I used the Belmont report and Walden University's Ethical Review committees to review and monitor my research work. Also, I examined the data collection instruments, data collection techniques, data organization techniques, and data analysis so that there were consistency with the method of collection, organization, analysis, and dissemination. I reviewed reliability and validity, along with credibility, transferability, and confirmability.

For Section 3, I presented the findings of the study. I also presented explanations on the application of the data and the implications for positive social change. In addition, I provided recommendations for action, examined areas for future research, and concluded with my reflections and conclusions.

Section 3: Application to Professional Practice and Implications for Change

The objective of this qualitative multiple case study was to explore adaptive leadership strategies used by construction project managers in Jamaica to increase project success rates. The targeted population was initially four project managers from different public sector organizations in the construction sector. The assumption was made that these project managers would have used adaptive leadership strategies in their respective construction projects in Jamaica to achieve success. Upon I received the letters of cooperation from the leaders of these organizations, and thereafter commenced contact with the potential participants, other members from these organizations volunteered to participate in the study.

After reviewing the eligibility requirements of potential participants, I identified one additional participant from each of the four organizations who could participate. I, therefore, interviewed eight project managers. These project managers were selected from four of the eight public sector organizations in the construction industry, as outlined in my proposal. The four organizations are situated within the two parishes of Kingston and St. Andrew, which are urban areas in Jamaica. The assumption was that these project managers used an adaptive leadership style to enhance project success rates. The result revealed that although they used an adaptive leadership style, they also relied on project management tools and techniques to manage projects (see Sanchez et al., 2017).

Presentation of the Findings

In this study, I explored strategies project managers in Jamaica used to implement their project to ensure project success. One research question guided this study: What are the adaptive leadership strategies project managers in Jamaica use to increase project

success rates? The data analysis revealed three themes: (a) leader-follower relationship, (b) stakeholders' engagement, and (c) hard and soft leadership approaches. Table 2 provides the three themes along with the number of times each participant made comments about each theme, followed by the number of documents that contained material related to each theme.

Table 2

Composition of Participants and Number of Responses

Name	Theme 1: Leader-follower relationship	Theme 2: Stakeholders' engagement	Theme 3: Hard and soft approaches
PM01	9	4	4
PM02	6	4	1
PM03	10	10	7
PM04	6	4	5
PM05	8	2	5
PM06	8	5	6
PM07	18	8	6
PM08	6	3	1
Doc1	2	2	2
Total	73	42	37

The purpose of this study was to determine how project managers in Jamaica used adaptive leadership strategy to achieve project success. I selected the eight participants from four public sector agencies that are currently assisting to fulfill Jamaica's Vision Plan 2030 (PIOJ, 2009). Participant selection was by purposive sampling. The sample represented project managers who had led a diverse team from conceptualization to completion and hand over of construction projects. Participants were senior project managers or directors who had (a) a minimum 10 years of experience in project management with at least 5 years at a senior managerial level and (b) used adaptive

leadership as a strategy to improve project success rates. I contacted the participants through formal communication channels using their human resource department followed up by emails and telephone calls. Given the open-ended nature of the interview questions, the participants provided a diversity of experiences and details.

Once I had all of the participants' letters of consent, I conducted open-ended semistructured interviews. All interviews occurred at the participants' offices in a private location. Conducting the interview, I used the interview protocols (see Appendix A) along with restating the research question, followed by an explanation of the attributes of adaptive leadership. Also, I sought permission to record the interviews, which was approved by all participants. I complied with all IRB protocols to ensure ethical standards for social science data collection were maintained.

Upon completion of my data collection, I transcribed the recorded interviews. I reviewed the transcripts to determine whether any additional information was necessary. I contacted participants to get clarification on areas that were not clear during the initial interviews. After all adjustments were made to the transcripts, I conducted transcript reviews by sending the transcripts to the participants for them to confirm the accuracy of the information. Once the participants agreed that the transcripts represented a true reflection of their responses, I uploaded the data into the NVivo version 11 software application for analysis and coding. To develop the initial coding schema, I used the main points from the interview questions with a constant focus on my research question. I presented a brief summary of the findings to the participants for them to confirm the results were accurate and honest. Upon the review of the summary by the participants, they confirmed the accuracy and honesty of the results presented.

Theme 1: Leader-Follower Relationship

The first theme related to the leader-follower relationship. A positive leader-follower relationship inspires positive teamwork, which can lead to an increase in project success rates. The leader-follower relationship focuses on how the participants viewed their relationship with the team members. The relationship arrangement is necessary so that team members know and recognize their value. Although all participants commented on the importance of leader-follower relationships, PM01, PM03, and PM07 made compelling points on its importance. PM01 shared

We start-off a meeting by lightening the atmosphere with about 10- 15 minutes of happy “banter.” We then follow-up with the task at hand. If the meeting started on that basis it would be my responsibility to continue on that trend of reducing the stress level and not to immediately ramp up stress levels. Using examples and focusing on the importance of one-on-one relationships with team members.

PM03 provided a slightly differently comment: “I have an open policy agreement between myself and my team members.” With the open (door) policy, the participant reported that team members have access to discuss issues that are affecting the project. PM03 further remarked to support the open policy:

I try utilizing more encouragement and employ that soft method approach. You don’t want a situation where persons only move when you tell them to move. You would prefer when persons exercise some form of initiative, which is what I think is most important.

PM07 provided a different summation of the relationship with team leaders:

When you are in a management position, like I am acting now, it is not a reporting matter. We try to have mentorship of the team members, so that young project managers have mentorship from the more experienced ones on how to handle team members.

Participants PM01, PM03 and PM07 gave responses that suggested that they provide focused attention on their relationship with the team members within the confines of the office environment. PM06 provided a different view on how to develop a good leader-follower relationship. PM06 remarked that “it is also good for team building exercises where if you have a monthly meeting where you are able to share a meal; it is an important thing culturally.” The approach by the project manager can be extended the relationship outside of the formal arrangements.

These types of leader-follower relationships expounded by the participants go to the core of team building. The leader-follower relationship strengthens the relational climate and creates multilevel arrangements that extend beyond individual knowledge, workspace, and skills to include social interactions and group networking (Cullen-Lester et al., 2017). The type of one-on-one relationship highlighted by the participants will sometimes move from the boundaries of the office. The intention is to create social connections as part of team-building experiences.

Within the context outlined by the participants, Cullen-Lester et al. (2017) noted that there is value in moving the relationship beyond the borders of the workplace. Moving beyond the borders of the workplace is to nurture the relationships of team members within a social setting. PM01 and PM08 provided a different perspective where more informal discussion takes place before engaging in a formal discourse. In addition,

PM01 stated that “there is a strategy we use to start the day off (our staff being very close) we prepare a happy period.” In this context of a happy period, there are usually informal discussions or bantering before getting to the formalities of the project meeting. PM05 also commented “I prefer one-on-one discussion as I tend to get more honesty from team members and they share ideas which they would not share in larger settings.” A document review supported the project manager’s claim of engaging the team members. The type of engagement was through a report commending a team member on the efforts in doing a particular job. Figure 1 highlights a section of the ORG02 departmental report.

I wish to place on record the office’s heartfelt commendation to you on the role you played in the recent drill exploration and finding of a sustainable source of water to supply the [REDACTED]. I recall the deep passion and enthusiasm you displayed when you first approached me in 2014 about making a presentation to the team from [REDACTED]. Since then you have been the “key stone” between the company and the [REDACTED] in executing the drilling exercise. No doubt your contribution to the [REDACTED] throughout the process is invaluable.

Figure 1. Letter of commendation to a team member.

The participants’ general comments were that a positive leader-follower relationship contributes to project success. The finding supports conclusions from the research literature that there are two elements of discussions that are necessary about the importance of leader-follower relationships: (a) relational climate and (b) dominance complementarity (Hu & Judge, 2017; Thornberg et al., 2017). For relational climate, PM01 and PM03 comments were similar in that they sought to foster a positive relational climate among themselves and team members. The participants fostered the relational climate by creating a relaxed atmosphere in which team members could express themselves freely. These participants’ comments support the argument presented by

Thornberg et al. (2017) that the relational climate between the leader and the team member can create a bond of mutual trust and cooperation. A positive relational climate for the leader and the team members to work cohesively can improve project success (Heifetz et al., 2009).

Although the participants expressed value in creating a relational climate, they maintained that there must be an area of authority between themselves and the team members. The area of authority demarks the role that each team member plays during the life cycle of the project. The area of authority is referred to in the literature research as dominance complementarity. Dominance complementarity is the organizational cohesion among its members where the leader assumes the dominant role and the follower accepts the submissive role (Hu & Judge, 2017).

PM06 commented that “I am an easygoing (project) manager but I do not want my staff to pass their boundaries.” The comment by PM06 reinforced the argument that team members must accept the submissive role while the project manager accepts the dominant role. Hu and Judge (2017) and Wyatt and Silvester (2018) commented that leadership attributes must encourage, motivate, and mobilize team members. Leadership attribute to encourage, motivate, and mobilize team members should also be supported by the dominance complementarity theory, particularly in a collective team’s value system. The theory of dominance complementarity is a necessary supplement within the domain of team cohesion to increase project success rates.

The results of the current study indicated that the participants recognize the value of creating relationships with the team members. As expounded earlier, this type of creating relationships goes to the core of leader-follower relationship. My review of the

literature indicated the value of the leader-follower relationship through active engagements (Thornberg et al., 2017). Furthermore, through a positive leader-follower relationship, there is also a sense of mutual trust and cooperation (Thornberg et al., 2017). The relationship is the social construct that influences the behaviors, beliefs, and attitudes of the team members, and encourages them to work cohesively (Hoch & Dulebohn, 2017; Thornberg et al., 2017). The positive relationship between the project manager and the team member will enhance the project success rates.

Regarding the conceptual framework, A. Doyle (2017) and Heifetz et al. (2009) remarked that adaptive leadership is the intersection of people as the core strategy for problem-solving. The intersection of people as the core strategy is the leader taking a positive role and, at the same time, facilitating teamwork through the development of a robust interactive arrangement with the team members. The underpinning theory of adaptive leadership is that the leader must encourage the follower to adapt to issues and challenges confronting the temporary or permanent organization (Heifetz et al., 2009).

From the comments made by the participants in the current study, the utilization of adaptive leadership moves from the processes and systems to an emphasis on the team members' relationship as the driving force for project success. A noted observation was how the participants sought to utilize the fifth behavior: give the work back to the people. The participants' engagement of their team members demonstrates the need to allow them to participate in the decision-making process. Team members participating in the decision-making process will be prompted to make meaningful contributions to the advancement of the project. Another factor highlighted was the sixth behavior: protect leadership voice from below. The protection of leadership voice from below is allowing

team members not to be overshadowed. An overshadowing of team members can create a fear of expressing important views or suggestions that will enable the project to proceed positively. These two strategies from the conceptual framework showed the value of leader-follower relationship and its effect on project success rates.

Theme 2: Stakeholders' Engagement

The second emerged theme related to the project manager encouraging an inclusive arrangement with individuals or groups outside of the project team, thereby engaging all stakeholders. These individuals or groups usually would also have an interest to ensure project success. Similar to team member relationship, stakeholders' engagement is required to ensure the project is successful. To achieve that level of engagement, the participants referred to two types of approaches: formal and informal. The formal engagement is through official channels designed or designated by the organization and the project team. The informal engagement is through flexible one-on-one conversations and consultations to ensure the project can achieve its success.

All of the participants recognized the value of positive stakeholders' engagement as a means to secure project success. PM03, PM04, and PM07 viewed formal stakeholders' engagement as necessary because it allows all contributors to know and appreciate their respective roles and functions that they will perform. PM03 remarked

It is necessary to engage as many agencies or individuals as soon as possible. This is part of managing your risks though brainstorming with the team members. So you must engage the security forces, parliamentarians, political directorate, labour ministry, regulatory agencies, etc.

PM07 made similar comments of extending that stakeholders' engagement to the end users so they feel included in the decision process. PM07 remarked

You have to face your stakeholders head-on; you have to facilitate them. We have had issues in Port Royal where one agency is doing a development plan, another bringing in the cruise ship and yet another bull-doing the squatters at the same time. Now how do you solve that problem? You have a public meeting: this is where you allow the people to give ideas of what their town needs to be. You provide the drawings so people can understand that this is their vision of Port Royal.

Conversely, PM01, PM02, and PM06 commented that stakeholders' engagement should start with one-on-one conversations and, when required, participants will thereafter provide formal communication. PM01 remarked "we are always in direct contact with the various agencies via telephone conversation and then we back that up with emails which create a paper trail." Similarly, PM02 commented

One of the things we had used is to have a one-on-one conversation with the key contact persons in these stakeholders organization (e.g. the land agency). We would try to identify who is the legal officer (i.e. the person who is responsible for the land transfer and establish a one-on-one relationship with that person and develop trust and integrity with those key persons in those organizations.

From the participants' comments, stakeholders' engagement, whether *formal* or *informal*, is necessary to achieve project success. A documentation review also confirmed that these organizations focused on the engagement of stakeholders. For example, ORG02's annual report emphasized, in part, "creating a world class facilities and services

that ensure sustainable development and maximum satisfaction to stakeholders.” Also, part of ORG04’s strategic charter stated the need “to constantly challenge ourselves to identify new approaches to meet the needs of our customers, stakeholders and the organization.”

Both the interview and document data indicated an emphasis on stakeholders’ engagement by project managers to improve success rates. Within the literature review, Hornstein (2015) opined that there must be a high level of human capital participation, through stakeholders’ engagement, to achieve project success. This type of high level stakeholders’ engagement is supported by Mendes et al. (2016) who remarked that there must be an adaptive function that allows the interactions among members. The interactions of members, both formal and informal, can foster an exchange of innovative ideas or engagements.

Within the *formal* dimension, the approach by PM07 to properly engage the stakeholders during town hall discussions has merit. Volden (2018) posited that project managers who engage stakeholders early in the project will see an increase in success rates. Similarly, Bayiley and Teklu (2016) and Rolstadås et al. (2014) contended that projects that lack a clearly defined objective along with external influences such culture, politics, war, and conflict can influence the project outcome. Bayiley and Teklu suggested one success factor for noncommercial projects is an effective stakeholders’ engagement. Project managers must identify the relevant stakeholders and engage them, so that there is a positive influence on the project.

Similarly, using *informal* engagement has its merits as it creates a sense of oneness among the team members and allows them to freely and voluntarily express

themselves (Uhl-Bien & Arena, 2018). PM02 made the point that creating a sense of oneness can build trust and integrity with the stakeholder through one-on-one engagement. The comment by PM02 supports Kapoutsis et al. (2019) analysis that suggests that leaders must have a level of ambidexterity with their approaches to stakeholders and team members to influence them for a common goal. The level of ambidexterity by the leaders should factor interpersonal styles and calibrate their approach according to contextual demands (Kapoutsis et al., 2019). Both Mendes et al. and Kapoutsis et al. supports one-on-one engagement as a means to improve relationship and foster greater collaboration and expression of ideas to ensure project success.

Within the conceptual framework, there is much debate on the benefits of stakeholders' engagement. A. Doyle (2017) and D. A. Aga et al. (2016) commented that there is a positive relationship between success and team performance when there is positive stakeholders' engagements. These authors posited that the relationship is prompted by active engagement between the project manager and relevant individuals or groups that may influence the project success. Active stakeholders' engagement requires the project manager to manage stakeholders closely and provide proper updates on the progress and any impediments that may occur.

An observation noted within the conceptual framework is the linkage of stakeholders' engagement to the first two behaviors to – *get on the balcony* and *identify the adaptive challenge*. For the first behavior, the participants demonstrated to *get on the balcony* behavior by stepping back to analyze the situation to determine the issues. The participants determined that the situation may not be of a technical nature that requires technical expertise, particularly within the core project team. Instead, the issues may be

complex and require a different type of decision-making approach. An example is labor or political issues that confronted the projects. A different decision-making approach was required by the participants that are linked to the second behavior to - *identify the adaptive challenge*.

Understanding the adaptive challenges, the participants determined what additional human resources support, outside of the core team, they would require. An example was the involvement of the political directorate as part of the stakeholders' engagement. Importantly, the participants recognized when complex issues arise, invariably, it will require a different kind of discourse and involvement to identify the adaptive challenge. The involvement of individuals or groups can provide a diverse set of approaches, which eventually will provide an adaptive solution.

Theme 3: Use of Hard and Soft Leadership Influences

The third theme that emerged from the data analysis was the need to use either a hard or soft leadership influence to motivate or inspire the team members to carry out their functions to ensure project success. From the data analysis, six of the eight participants stated, more than once, the type of influence they used to lead their team members varied. These influences were either *hard* or *soft*. Also, five of the eight participants mentioned that creating a positive relationship with the team members also contributes to project success.

PM03 and PM05 commented that project managers must ensure that all team members understand the goals and objectives of the project. PM03 commented

I start with a soft approach, that is, by telling the candidate what the project involves, what his input entails and what role he plays in the overall development

of the project. I want him to have a feeling of being a part of the project objective. You then follow-up with a more autocratic/direct approach as you go along. I rather you know why your input is required and how you fit in the overall picture which leads back to your objectives.

Likewise, PM05 remarked that

Convey to them that they must strive for excellence in the sense that they must make every effort to ensure that they are achieving high standards. It is important that we motivate them to not just accept mediocre results but to strive for the highest standards.

PM03, PM06, and PM07 explained that they had a preference toward *hard* influence. The participants remarked that they would use the *hard* influence initially.

PM06 provided an example

At the beginning of the project, I set the ground rules in terms of formal communication. I am very formal in the early days in terms of setting that tone. I do not encourage any slacking off in terms of the reporting, the meetings must be held on the agreed date and time, there is no postponement.

PM01, PM02, and PM05 revealed that their style of leadership is the *soft* influence with their team members. PM02 commented

I think we tend to start-off soft and very informal when we start. Because we have the contract signing, the inaugural meetings, the walk-thru' and the regular monthly meetings. But if you see it going down the wrong track you try to pull the team back on-track. Maybe that is a good way we need to look at some of these government projects.

PM05 and PM08 revealed that they make a determination of the type of influence to apply according to the situation that they must confront. PM05 commented

What may work for team A in a particular scenario might not necessarily work for team B in another scenario. It could be same team, same members. The situation changes. So adaptive leadership is really apt for the way how we go about engaging in trying to get success from our staff.

Further, PM08 remarked, “You summed up the situation, usually there is a combination of skillsets to use; it depends on the nature of the challenge.” The documents also revealed project managers using *soft* and *hard* influences. One example was seen with ORG03 where the meeting commenced using a *soft* approach; see Figure 2. However, there was evidence of noncompliance by a team member where the project manager applied a *hard* approach to the team member; see Figure 3. In short, an ultimatum was given to the team member to ensure there was not a recurrence of the particular situation.

The review of the literature supported the argument that leaders have different styles to motivate their team members. Although participants commented on the use of *hard* and *soft* influences (leadership styles) in an ordinary manner, there are theoretical linkages within the literature about these approaches. These types of leadership styles suggest how leaders must respond to team members according to their behaviors, beliefs, and attitudes.

2.0 Welcome, Introduction and Apologies

Welcome & Introduction

A warm welcome was extended to all, especially to [REDACTED] who returned to office from Leave, [REDACTED].

Figure 2. Section of meeting minutes showing leader soft influence.

[REDACTED] enquired about the status of [REDACTED], the labourer that was involved in the accident on April 1, 2014. He also asked what actions were taken against the Sub-contractors that were working on the site.

[REDACTED] responded that [REDACTED] was still recuperating. He further explained that a meeting was held with [REDACTED], the Sub-contractor on the site. A warning was issued advising that their Contract would be terminated if there was a reoccurrence of the accident or any other accident.

Figure 3. Section of meeting minutes showing leader hard influence.

Mainstream literature evidence showed that the *soft* approach is linked to adaptive leadership style. The adaptive leader performs in a manner to enable team members to improve their competence and commitment, for organizational success (Kotlyar et al., 2015). The adaptive leader must sometimes adjust to the followers' strengths and weaknesses to ensure the project objectives are met (Thompson & Glasø, 2015b). Adaptive leadership style is therefore organic in nature and changes according to team members' personalities, experience, and levels of commitment (Marques, 2015; Thompson & Glasø, 2018a).

The *hard* approach aligns with the transactional leadership style, where Bian et al. (2019) expounded that this type of leadership style is the leader formally providing an instruction to the team member for a specific achievement. The *hard* approach is grounded in the fulfillment of a contractual obligation between the leader and the follower (Aga, 2016). The contractual obligation motivates the team member to do the task related to the specific arrangement with the leader. If there is no clear contractual obligation, then a breakdown would occur with the specific task.

In observing the participants' comments regarding the hard and soft leadership influences, there are relationships with the third and fourth adaptive behavioral approaches - *regulate the distress* and *maintain discipline attention*. Regulating the distress required the participants to create an environment where all the team members can express themselves freely. The type of environment created an atmosphere where innovation and creativity would be at the forefront to confront any issues affecting the project. The participants' approach to having an open-door policy and moving the relationship outside the office environs provided a relational atmosphere among members. The participants, in various ways, articulated this type disciplined attention. One way to ensure disciplined attention is to initially provide the ground rules about how team members should work. Another example is, if there are any deviations of the team members from the stated objective, the project manager must ensure they are brought back in line.

In summary, the participants' comments provided relevant linkages to the conceptual framework. These linkages are the participants utilizing various adaptive leadership behavioral approaches to resolve some of the challenging issues confronting their projects. Arthur-Mensah and Zimmerman (2017) and A. Doyle (2017) emphasized that utilizing tools and techniques as a standalone will not assure a project manager any success. The credence is more relevant now based on the validation of the literature review that there is increased complexity and uncertainty with projects. From the research study, there is an alignment of the participants' comments to adaptive leadership. Therefore, project managers should consider using adaptive leadership as a strategy to improve their project success rates.

Application to Professional Practice

The findings presented are the adaptive leadership strategies project managers can use to increase project success rates in Jamaica. This study can be beneficial to project managers who implement construction projects, particularly those who practice within the public sector. Millar and Lockett (2014) stated that as individuals learn and develop, they must adapt to changing conditions. Project managers who can adjust to changing conditions ensure that they can adapt to varying situations to secure project success. Similarly, project managers who can adapt will remain relevant in their practice.

There is a link between the conceptual framework, the literature review, and findings. The link within the conceptual framework is that project managers must utilize adaptive leadership strategies to support projects success (Ebrahimi et al., 2016; Fabricius & Büttgen, 2015). Also, the review of the literature suggests that project managers must utilize more leadership styles instead of tools and techniques (Böhle et al., 2016). The findings identified three areas of leadership strategies, namely (a) greater leader-follower relationship, (b) proactive stakeholders' engagement, and (c) the use of hard and soft leadership influences. Within the domain of leadership styles, the participants' comments emphasize the need for adaptive leadership as an approach to confront some of the most challenging issues affecting projects. I will expound on each with its applicability within the professional practice.

The participants for this study observed the relevance of leader-follower relationship. The relationship is the one-on-one connection between the project manager and the team members (Ding et al., 2017). Leader-follower relationship is to build a positive work environment where innovativeness and creativity is at the forefront

(Ramazani & Jergeas, 2015). The participants remarked that a leader-follower relationship between the project managers and team members can encourage a bond of mutual trust and cooperation. The participants' comments suggested that a good leader-follower relationship can develop a relational climate with the team members where there is decreased stress and attrition among members (Cherrier et al., 2018). The decrease in stress and attrition can reduce high staff turnover and thereby enhance stability within the organization (Thornberg et al., 2017). The application to practice is that project managers must adopt a leader-follower relationship culture with team member to enhance project success.

The participants pinpointed positive stakeholders' engagement as another strategy that project managers should use to manage their projects. The participants reasoned that low levels of stakeholders' engagement will negatively affect the project; therefore, the project manager must use pay proactive attention to stakeholders' engagement (Rolstadås et al., 2014). The proactive approach by the project manager should be at the initial stage of the project so that expectations and objectives are defined early in the project cycle. The project manager must identify the stakeholders and understand their priorities for the project (Volden, 2018). Once the project manager understands the priorities of the stakeholders, they must be kept engaged through regular updates and dissemination of information (Rolstadås et al., 2014; Volden, 2018). The call for application is project managers should seek to identify the relevant stakeholder and thereby engage them to participate positively in the project life cycle.

The utilization of leadership styles was another factor identified by the participants. The participants reiterated that managing projects require leading people;

therefore, the project manager must utilize leadership strategies to manage the team (Ebrahimi et al., 2016; Fabricius & Büttgen, 2015). Based on the participants' comments, there is no singular approach that will fit all circumstances. The project manager must adjust according to the circumstances. The participants emphasized the need to engage the team members according to their strengths, weaknesses, customs, and belief systems (Hartono et al., 2019; Hu & Judge, 2017; Leonard, 2017). What is evident from the comments provided by the participants is that effective leadership style will engender a strong team building culture. From the comments provided, the application for professional practice is project managers to develop leadership styles that engenders inclusiveness where there is an intersection of people as the core strategy for problem solving.

There is linkages within the findings and the conceptual framework. The comments from the participants identifies adaptive leadership as a style that will enhance the inclusiveness of people (Arthur-Mensah & Zimmerman, 2017; Heifetz et al., 2009; A. Doyle, 2017). Their position is that adaptive leadership style is to reduce the reliance of using technical approaches and procedures to solve complex issues (Blaskovics, 2016). Adaptive leadership is therefore the use of the team members as the core driving force for project success. The use of adaptive leadership style by project managers as a business strategy may enhance productivity, invoke trust within the project team, and foster a heightened sense of ownership among team members.

Implications for Positive Social Change

The use of adaptive leadership strategies for project success can have an influence on the positive social changes in the (a) organization, (b) the community, and (c) the

country. Within the organization, there can be greater inclusiveness with the team members and stakeholders. The level of inclusiveness can transfer from the project team to the mainstream organization so as to engender an adaptive culture. The integration is to institutionalize a new adaptive culture into the existing norms of the organization. An adaptive culture can create a positive work environment as the new norm, and thereby encourage greater value in project success. Developing a multiparty collaboration is to seek solutions collectively that can also engender trust among leaders and team members. The creation of trust will preserve integrity and build mutual relationships among the parties.

For community impact, there can be adjustments in the norms, values, and attitudes. The review of the literature mentioned that people within a community can adapt to new conditions to ensure their survival (Greenfield, 2018). Project managers who are exposed to adaptive leadership strategies may assist a community, through their representatives, to resolve some social issues. These adaptive leadership strategies can be achieved through multiparty collaborations where the two primary sectors, public and private, can collaborate with the community members in how to work together collectively to solve complex issues. Some of these complex issues relate to reduction of environment degradation, reduction in waste, and socio-political issues.

The positive social impact on the country can be elevated through improved organizational performance and community engagement. The improved organizational performance will positively influence the growth in the country's GDP. The country could see a reduction in the unnecessary expenditure of taxpayers' money. The collective improvement in organizations contribution to the national economy would enhance the

country's GDP performance. An improved GDP of the country can enhance the quality of lives for the citizens through improved utilities and services.

Recommendations for Action

The purpose of this study was to explore adaptive leadership strategies that project managers can use to improve project success rates in Jamaica. While I have explored this research with a focus on construction project managers working in public sector agencies, my recommendations go beyond the limits of the targeted group. My recommendations extend to the private and social sectors, as well as community-based members. These specific recommendations are for current and future project managers related to (a) leader-follower relationship, (b) stakeholders' engagement, and (c) hard and soft leadership approaches.

The first recommendation is that project managers must develop the leader-follower relationship with their team members. To achieve project success, project managers must recognize that there is value in engaging the team members. The engagement of team member by project managers is relevant as tools and techniques are limited in scope and reach to solve complex nontechnical issues. Instead, complex issues and uncertainty require teams of people to solve problems to secure project success. The complex issues and uncertainty encountered will require a project manager and the team members to have collective dialogue so that proper decisions are made. Furthermore, meeting demanding clients' expectations will also require a leadership approach that involves inclusiveness among its members. Current and future project managers will perform under more demanding constraints to address complex issues and also to meet the increased demand made by clients. The plan of action is for current and future project

managers to develop a culture of leader-follower relationship to enable them to confront issues affecting the projects to ensure success.

The second recommendation is that project managers must also create an atmosphere of stakeholders' engagement. Stakeholders' engagement is relevant now and for the future, as there is greater involvement of external individuals and groups that can influence the project. These stakeholders span the regulatory agencies, private and public sector bodies, and international partners. To improve stakeholders' engagement, project managers must create an environment where active participation takes place. Active participation by stockholders must include individuals or groups who have a vested interest in the success of the project. The project manager must manage the stakeholders' expectation carefully through reports on project progress and any potential impediments affecting the project.

The third recommendation is the flexibility of hard and soft leadership styles. Hard and soft leadership styles are two approaches that project managers can utilize to ensure that (a) a robust leadership-follower relationship is sustained and (b) stakeholders' engagement is natured. Project managers must determine the leadership style that must be used to receive maximum output from each team member and stakeholders. To determine the style of leadership that must be employed, the project manager must understand the needs, behaviors, and attitudes of the members. Therefore, the call for action is for project managers to understand the behavioral patterns of team members and stakeholders so that the appropriate leadership style can be adopted.

By applying these recommendations, the hoped is that both current and future project managers can effectively manage their projects to increase project success rates.

Also, these recommendations should contribute to project managers' experience and skillsets so that improvement can take place in the profession. Because this research focused on construction project managers, the strategy in managing projects can be used in other sectors. To share this research and its findings with project managers in other sectors, I will make presentations to their local professional Associations' annual conferences. Also, I plan to embark on submitting my research work through project management and business academic journals. Finally, I hope to conduct further presentations at overseas conferences and participate in local training programs for project managers.

Recommendations for Further Research

I used a qualitative multiple case study to explore what adaptive leadership strategies construction project managers use to achieve project success in Jamaica. The specific population of my research was public sector organizations located in Kingston and St. Andrew that are mandated to implement projects to satisfy Jamaica's Vision 2030 plan. The defined qualitative research study along with the specific population provided some levels of limitations to the study outlined in Section 1.

The first recommendation is to expand the research using the private sector. The recommendation emanates from the fact that this defined research focused primarily on construction project managers within the public sector. The review of the literature suggests that project managers, in general, view project implementation approaches similarly. However there appears to be uniqueness in strategies and methods to achieve success in different sectors.

The second recommendation is to conduct the research from a quantitative standpoint. Because a qualitative research is inductive, it would be useful to analyze data from a deductive perspective. The central phenomenon of this research study was to uncover a deeper understanding of participants' experiences. Therefore, an empirical research could test a hypotheses of the impact of project success using hard or soft leadership styles. Further, expanded research could test the hypotheses of the three themes identified in this study to determine which would significantly improve project success rates.

The third recommendation is future researchers could consider comparing leadership styles across different cultures. Cultural norms within the community as well as the organizational culture may influence the effectiveness of adaptive leadership style. It could be argued that this research method will require more time to conduct, if properly implemented, it could provide useful information that can add value to the findings provided in this research study.

Reflections

My reflection regarding my doctoral journey has two folds – the first is within the profession, and the second is self. For the profession, I have been a project management practitioner for over 20 years. My approach to managing projects has primarily been a heavy reliance on various tools and techniques with limited focus on effectively leading people. Although there were achievements with the completion of many projects, the success rates were low. In my search to seek answers, I realize that an element was missing from my approach. This missing element was project leadership.

To understand the influence of leadership on project managers, I embarked on this doctoral journey to seek answers. Therefore, to conduct this research study, I had to develop an unbiased approach to the research methodologies and designs to ensure I could identify some of the real pressing issues confronting construction project managers in my country. The doctoral program has demonstrated to me that there is an increased need to ensure that leadership forms part of project management training.

Although there will be a bias toward the continued use of the various tools and techniques for managing projects, there is an increasing need for project managers to understand leadership rudiments, especially in managing complex issues that may affect projects. The research study has demonstrated to me that project managers share similar challenges. These challenges are attending to more complex issues that confront projects, along with more demanding clients seeking to extract greater value. The study is, therefore, the backbone for further engagement of project managers in my country to inform them of leadership strategies to manage the project process.

The second element is self. This doctoral journey has taught me humility. Humility is developing a high tolerance and understanding of perseverance. Humility was strengthened by the mentorship of my Chair and the myriad of information within the literature review related to my area of interest. This doctoral journey has provoked mixed thoughts questioning my real purpose as an individual and what would be the endgame for me after the journey. However, I am comforted that I can make a significant contribution to nation-building through my primary job, potential cross-sector collaborations with other agencies or groups, and influence on positive social change in

my community. Finally, I am delighted of my academic achievement and the opportunity to improve in the area of project management.

Conclusion

The purpose of this multiple qualitative case study was to explore the adaptive leadership strategies construction project managers used to increase project success rates. Adaptive leadership theory was the conceptual framework used for this research study. The research method and design determined the research scope, the data collection approach, and the analysis technique. For the primary data collection, I interviewed eight construction project managers from four public sector organizations that implement projects on behalf of the government. For the secondary data collection, I reviewed project meeting reports, site meeting notes, project implementation manuals, and official company annual reports. For data analysis, I used the Nvivo version 11 software. The analysis uncovered three themes, (a) leader-follower relationship, (b) stakeholders' engagement, and (c) hard and soft leadership approaches.

The findings revealed that construction project managers utilize these themes as strategies to mobilize team members and stakeholders to achieve project success. Therefore, this research revealed that while tools and techniques are useful to manage projects, the intersection of people thoughts, ideas, innovative and collective actions are necessary to ensure project success. The recommendation for action is that construction project managers, and by extension other project managers, can utilize these strategies to improve project performance for organizational success. There is also opportunity for project managers to influence positive social change within the social sector through multiparty collaboration to enhance communities. Finally, with improvement in

organizational success and enhanced communities' outputs, these factors can improve and promote a country's achievements.

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Appendix A: Interview Protocols

Date of Interview _____ Organization Code Number: _____

Interviewer: _____ Interviewee Code Number: _____

Pre-interview protocols

1. Agree with the participant on a suitable meeting location, date, and time
2. Send the participant a calendar invitation once the date and time are agreed.
3. Send a meeting reminder note to the participant one day before the interview.

Interview protocols

1. Begin with an introduction and greetings to establish rapport to allow the participant to feel comfortable.
2. Request permission to record the interview; if request is granted I will commence recording.
3. Restate the purpose of the research, and review consent form agreed by the participant agreed.
4. Restate the central research question.
5. Ask each question (8 in total).
6. Ask following-up questions to probe further, where necessary.
7. Enquire if the participant has any question relevant to the research.
8. Seek permission to access organization's files such as meeting notes, policy documents, journals transcribe speeches.
9. Discuss the importance of member checking with each participant
10. Once interview is complete, stop recording

11. Thanks each participant for the time and restate that contact may be made for follow up questions.
12. Remind each participant to that there may be follow up questions.

Appendix B: Interview Questions for Project Managers

1. How would you define project success?
2. What leadership strategies do you use to engage your team members in resolving challenging situations?
3. How do you manage stressful situations among the team members and stakeholders who are associated with the project?
4. What, if any, strategies do you use to foster an adaptive culture amongst the team members to achieve project success?
5. How do you ensure your project team is properly trained for each project?
6. How do you empower your team members, especially those who think their voices are not heard?
7. In managing your project team members, what different leadership strategies do you use to adapt as the project evolves?

What else can you add to help project managers increase their project success rate?