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# Strategies for Identifying and Managing Public-Private Partnerships' Critical Success Factors

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This is to certify that the doctoral study by

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

Strategies for Identifying and Managing Public-Private Partnerships' Critical Success

Factors

by

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MSS, United States Army War College, 2016

MBA, Webster University, 2014

BS, Morgan State University, 1987

Doctoral of Business Administration Proposal International Business

Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

In the United States, some public-private partnerships (PPPs) have cost taxpayers millions of dollars due to poor project performance or management. Grounded in the critical success factors (CSFs) framework, the purpose of this qualitative multiple case study was to explore strategies for PPP leaders to use to identify and manage critical success factors (CSFs) to offset barriers to profitability. Understanding and using effective strategies for both profitability and project success are vital to PPP value as a procurement method and private investment opportunity. The participants comprised 5 former leaders of PPPs in the southeast region of the United States with successful experience in PPPs. Semi structured interviews, internal and external documents, and the company's website were included in the data collection process. A thematic content analysis was used to analyze the data. Three salient themes emerged: diverging and converging efforts in PPPs, strategies to establish and manage PPPs, and strategies for long-term success for PPPs. Recommendations include identifying early both negative and positive CSFs and risks associated with PPPs and stakeholder engagement. The implications for positive social change include the potential to increase the probability that PPPs are successful and reduce shortfalls in public funding for projects designed to meet public needs.

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## Dedication

I want to dedicate the following: To my father and mother, James and Florence, whose unconditionally support and encouragement throughout my life allowed me to be in a space to accomplish my goals.  To my wife, Rosa, who supported me throughout this educational journey, thank you.  Dedication of this study goes to my exceptional sons and daughters, Gavin, Guy, Jonathon, Morgan, Giana, and Ella.  I hope my work serves as an inspiration to you to pursue educational goals to the doctoral level.  I love you all.

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Section 1: Foundation of the Study

## Background of the Problem

Public-private partnerships (PPPs) are a viable option in the development and financing of public infrastructure and services following the financial crisis in 2007-2008 due to their inherent benefits (Babatunde, Perera, Zhou, & Udeaja, 2015). PPPs are procurement methods for tackling complex social and development challenges and are seen as collaborative arrangements between public and business sector actors to address societal concerns (Stadtler, 2016). PPP advantages include the sharing of risks and responsibilities among stakeholders, the inclusion of provisions to allow the public sector to retain sovereign powers of a project, and opportunities for both innovation and a long-term contractual relationship with options to dictate service and payment mechanisms (Ileana & Cristina, 2015). However, even with the inherent benefits of PPPs, the actual execution of a PPP requires refinement to mitigate the challenges to the successful execution of the partnership's contractual obligation.

Despite the enthusiasm for PPP from public and private sectors, there is slow progress in terms of implementing PPP contracts due to number of failed and distressed projects (Osei-Kyei, Chan, Javed, & Ameyaw, 2017). Common challenges involve aligning different partners' interests and priorities and striking a balance between partner autonomy and shared accountability while respecting existing authority (Stadtler, 2016). Unfortunately, factors such as public opinion, political support, poor risk management, and inflexible contracts are a few areas that can affect a project's success.

## Problem Statement

In the United States, some local and state PPPs are failing or distressed due to their participant's lack of understanding of what it takes for a PPP project to succeed. The aggregate of failed PPPs from 2000 through 2013 in the southeast region of the United States has cost investors and taxpayers over $960M (Wang & Zhao, 2018). The general business problem is the inability of business owners and investors to identify and manage critical success factors (CSFs) for long-term project management may result in business failure. The specific business problem is that some project leaders lack proportionate strategies to identify and manage CSFs to offset barriers to profitability during PPPs projects' lifecycles.

## Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that project leaders in PPPs use to identify and manage CSFs to offset barriers to profitability throughout a project's lifecycle. The targeted population included both current and former leaders of two project teams in the southeast region of the United States with successful experiences in PPPs. Implications for positive social change from this study include the potential to reduce shortfalls in public funding for projects designed to meet public needs in infrastructure, public works, and other civil systems while reducing the need for added public debt.

## Nature of the Study

The three research methods considered for this study were qualitative, quantitative, and mixed methods. Qualitative researchers often share an assumption about the existence of different perceptions that are intangible, shaped, and maintained or transformed by the experiences and meanings of a study's participants (Anderson, 2017). Researchers use quantitative methods for hypothesis testing for examining the significance of variables' relationships or differences (Park & Park, 2016). Mixed methods allow researchers to use components from both quantitative and qualitative studies (Doody & Bailey, 2016). In this study, I used the qualitative study method.

Four research designs were considered for this qualitative study: miniethnography, focus group, phenomenology, and case study. Researchers use miniethnographies to study and observe the culture or social world of a group within a limited period (Saunders, Lewis, & Thornhill, 2015). The use of a miniethnography design does not apply to business-related problems and is not appropriate for this doctoral study. Focus groups are used to encourage interactions between participants to capture preheld views about a subject (Saunders et al., 2015). A focus group design was not appropriate due to the omission of insights regarding respondents' personal thoughts, feelings, and views. Phenomenological designs are used to focus on participants' perceptions and is not approriate for this study. Case study researchers execute empirical investigations to understand a real-world case in depth and within a real-world context (Yin, 2018). The case study is an appropriate choice for this study because strategies to identify and manage CSFs vary and are heavily influenced by project leaders' perspectives and lived experiences.

## Research Question

What strategies do PPP project leaders use to identify and manage CSFs to offset barriers to profitability during project lifecycles?

## Interview Questions

1. What strategies do city project leaders use to identify and manage CSFs to offset barriers to profitability in PPPs?
2. What strategies do you use to establish PPPs and mitigate risks?
3. How have you addressed key challenges to forming and participating in a PPP?
4. What are the measures of success for PPPs within your organization?
5. How do you ensure you reach measures of success for PPPs?
6. How do you identify strategies to manage CSFs to ensure profitability of PPP projects?
7. Many PPPs are long-term projects extending more than 20 years. How do you ensure sustainability over a long-term lifecycle of a project and minimize reliance on contract renegotiations?
8. What additional information that you consider essential to ensure the long-term success of PPPs that I did not ask that you want to add?

## Conceptual Framework

The conceptual framework for this study is CSFs. In 1961, D. Ronald Daniel introduced the antecedent concept of *success factors* to address the challenges business executives faced with extensive amounts of internal information to make decisions. The key proposition behind success factors was that a company's information system should be discriminating and selective and focus on three to six factors to determine success or identify those key jobs that must be done exceedingly well for a company to be successful (Rockart, 1979). CSFs must align with key areas of activity in planning, administration and operations where favorable results are necessary to meet goals (Osei-Kyei & Chan, 2017a). The basic construct of CSFs involves the identification of key areas of planning, administration and operations where things must go right for the business to succeed and areas of activity that need constant and careful attention including checking predetermined critical performance areas (Rockart, 1979).

According to Al-Saadi and Abdou (2016), the identification and management of CSFs increases a project's probability to success and helps achieve the objectives of different stakeholders. The researcher intended to identify and explore CSFs collectively and establish contextual meanings and associate their contributions with successful strategies for PPP projects within the target population of experienced PPP leadership.

## Operational Definitions

The following terms provide context for the study:

*Build-Operate-Transfer (BOT):* Contractual agreement that empowers concessionaires to use public assets for building projects and levy and collect user charges. The government is responsible and accountable for the delivery of service to end-users (Aggarwal & Suklabaidya, 2017).

*Build Lease Operate Transfer (BLOT): This contractual agreement is similar to a BOT except* upon expiration of a lease, the ownership of the project belongs to the public sector (Aggarwal & Suklabaidya, 2017).

*Ex Ante Transaction Costs:* Costs that are precontractual to contract agreement and contributes to a shared understanding by all parties involved in the negotiation of a deal. Ideally, partners create a mutual understanding between themselves and a contract is negotiated (Benaroch, Lichtenstein, & Fink, 2016).

*Ex Post Transaction Costs*: Costs that arise during contract execution and the agreed contractual period. The costs are associated underperformance stemming from technical defects, performance shortfalls, contract noncompliance (i.e., vendor shirking), maladaptation costs such as renegotiation, and contract compliance and monitoring costs (Benaroch et al., 2016).

*Private consortium:* Privately owned firms collaborating together as a single organization to exploit organizational expertise, resources, risk management and to establish effective communication and coordination for a specific project (Verweij et al., 2019).

*Private sector:* The sector in a society that consists of privately-owned institutions and individuals not under direct government control.

*Public-private partnership (PPPs):* A contractual agreement with a government agency (federal, state, or local) and the private sector to deliver a service, infrastructure, or facility for the use of the general public. Each party shares in the risks and rewards in the potential delivery (Aggarwal & Suklabaidya, 2017).

## Assumptions, Limitations, and Delimitations

### Assumptions

Leedy and Ormrod (2015) said that assumptions within a study are factors out of a researcher's control; without them, the research problem could not exist. The main assumption in this study was respondents conscientiously and truthfully answered questions during the interview process. Another assumption was that participants provided information without any personal agenda or gain.

### Limitations

The limitations of a study are those elements over which a researcher has no control (Soilkki, Cassim, & Karodia, 2014). Limitations are the weaknesses in the study. In this study, the focus was on projects in one county located in the southeastern region of the United States. The nuances of this county and i local government may differ in other regions or state boundaries. Additionally, state laws have a significant impact on PPP governances that may not apply to other counties. Moreover, this multicase study involved projects that were either new construction or renovations that had unique and historical meanings to the public and may not be generalizable to other municipalities.

### Delimitations

According to Rovai, Baker, and Ponton (2014), delimitations are necessary to add boundaries to define the scope of a research study. CSFs vary by project type, lifecycle phase, industry, individuals, and organization . A list of rankings of the most frequent CSFs by different categories covering a 13-year period from 1990 to 2013 was used to define the scope of this research study.

The focus of this study was on PPP vertical construction projects in a city within a county in the southeast region of the United States. References to project management standards pertaining to project management processes and knowledge areas comes primarily from the Project Management Institute (PMI), the certifying body for project management professionals. The globally recognized Association for Project Management Group (APMG) PPP Certification Guide is used to identify common practices regarding project management norms.

## Significance of the Study

Ameyaw and Chan (2016) posited that PPPs represent a reform tool for solving inefficiency and the absence of dynamism in the public service domain. Liu, Love, Smith, Regan & Davis (2015) stated CSFs are vital components of PPP because they identify and address key areas of business activity which are necessary to ensure competitive performance towards strategic goals. Thus, the significance of the study is that it identifies important business strategies, processes and practices, and major considerations to inform PPP leaders and project managers regarding how to improve business performance and overcome barriers to business objectives.

### Contributions to Business Practices

According to Ahmadabadi and Heravi (2019), understanding CSFs in context with PPPs could increase the probability of success in terms of project and stakeholder objectives. Project leaders in-depth understanding of common barriers involving PPP construction project success could improve overall profitability. Project leaders may get the value for money by leveraging the recommendations in this study in order to offset barriers to profitability.

**Implications for Social Change**

Potential contributions to positive social change can be both indirectly and directly linked to PPPs. PPPs best meet defined public demands through the allocation of not only resources but also risks and rewards (Wibowo & Alfen, 2014). Indirectly, the use of broad categories of CSFs that include a stable microeconomic environment, transparency, stable political and social environments, and judicious government control are drivers for effect positive social change (Liu, Wang, & Wilkinson, 2016). Elements of a stable microeconomic environment include sound economic policy and stable macroeconomic conditions and are advantageous for both the public domain and businesses. Trust in government is built on transparency which promotes accountability (Mader, Vitters, & Obbagy, 2018). According to Gasco, Martin, Reggi, Pyo and Luna (2018), since the early 2000s governments around the world have created open government data repositories to make government data more accessible and government transparent. PPPs are used around the world, arguably PPP transparency requirements contributed to governments making data more accessible. The requirements for stable political and social environments to ensure PPP success encourages good governance from public officials which arguably creates an environment conducive to business growth and development. The CSF of judicious government control of PPPs involves fighting corruption and benefits both the public sector and privates sectors (Mirela-Oana, Adrian, & Viorel, 2013).

Directly efficacious PPPs can improve public trust, build efficiency, resolve differences, and develop civic capacity wherever PPP are employed (Boyer, Van Slyke, & Rogers, 2016). Stakeholders who exploit CSFs can catalyze positive social change and enhance effectiveness of the public domain by providing both solutions and economic resources to offset shortages in public resources and subject matter expertise on PPP projects. Public and private partners have the option to leverage PPPs to deliver public goods and services to disadvantaged community groups, catalyze societal change resulting from improved efficiencies, and eventually improve the PPP targeted citizen standards of living and viability (Stadtler, 2016). While the focus of this study was the for-profit sector, concepts and procedures could also apply to nonprofit organizations.

## A Review of the Professional and Academic Literature

This section consists of a review of professional literature related to PPPs between private businesses and the public sector. Included in the literature review were topics regarding what specific organizational involvement ensures that business endeavors meet agreed objectives of all stakeholders. This review of literature also included the conceptual framework of CSFs as they are vital to the study. It was necessary to identify and analyze specific barriers to profitability in PPPs for construction projects. PPPs are used for a variety of projects, but the focus of this study was mainly construction projects. Critical analysis, research, and synthesis were used to describe the conceptual framework for this study.

Studying project success without considering the project management perspective can result in less than desirable satisfaction among those seeking guidance (Liu et al., 2015). According to Haponava and Al-Jbouri (2012), researching and understanding construction project management and leveraging process-based activities can increase the comprehensiveness of understanding for many problems in process management (Haponava & Al-Jibouri, 2012). Thus, this literature review includes the standards and activities as promulgated by the APMG PPP Certification Guide and PMI, which aligns with the American National Standards Institute standards . The standards for project management and the project lifecycle framework as recommended by these widely recognized organizations is the starting point to identify and leverage barriers, CSFs, and strategies towards creating value for money or profitability for stakeholders.

The purpose of this study was to explore strategies that some project leaders in PPPs use to identify and manage CSFs to offset barriers to profitability throughout a project's lifecycle. Accordingly, varying definitions of PPPs and CSFs and why they exist are part of this review. The literature review includes information regarding how projects are structured and leveraged to meet the expectations of stakeholders. The researcher used PMI's process groups for a project's lifecycle to frame critical analysis and synthesis to identify salient issues in PPP projects. The literature review and research included identifying CSFs and barriers in project management process groups of initiation, planning, execution, monitoring and controlling, or closing.

Strategies for searching literature involved reviewing books, professional and trade papers, newspapers, project management websites, and dissertations from ProQuest, Google Scholar, ScienceDirect, JSTOR, DOAJ and ABI/INFORM and SAGE Journals. I consulted peer-reviewed journal articles as wells as books on PPPs and business strategies. The literature review included 145 references, of which 6 were published in 2019 (4%), 19 published in 2018 (13%), 27 published in 2017 (19%), 29 published 2016 (20%), and 43 published in 2015-14 (30%).

## CSFs

CSFs are critical areas of activity that require focus to ensure competitive performance towards an organization's strategic goals (Liu et al., 2015; Rockart, 1979). Performance improvement is a focus of process management which is critical to business success (Liu et al., 2015). CSFs are essential for process management success, and identifying and analyzing CSFs according to their importance creates value and helps stakeholders avoid undesirable results in their projects (Almarri & Boussabaine, 2017). Process management involves the application of knowledge, skills, techniques, and systems to measure and improve processes to satisfy requirements (Liu et al., 2015).

In this section, the literature review includes various researchers perspectives on CSFs on different types of projects. Wibowo and Alfen (2014) identified and argued that 16 success factors to include policy continuity, financial transparency, and corruption eradication are top CSFs for infrastructure development. Zou, Knumaraswamy, Chung and Wong's (2014) study on infrastructure in BOT agreements highlighted PPP practioners lack of general understanding of relationship management and its applications to PPP as an important CSF. The researchers Osei-Kyei, Chan, Javed and Ameyaw (2017) identified CSFs such as effective risk management, meeting output specifications, reliable and quality service operations, adherence to time, satisfying needs for public facility/service long-term relationships, partnerships, and profitability as important CSF to all types of PPP. Al-Saadi and Abdou (2016) said the five most important CSFs as identifed in their study on CSF were (a) available and effective regulatory and legal frameworks, (b) proper risk allocation and sharing, (c) clear project outcomes, (d) feasibility studies, and (e) proper project management.

Researchers Osei-Kyei and Chan (2017b) argue ecological conditions influence PPP CSFs in communities where people live and work, and argue constraints regarding these conditions within stakeholder organizations can impact negotiations for a project. Chung and Hensher (2015b) explored risk perceptions of PPP partners for toll road projects and how partners in the PPP react to their partners'efforts to shape risky conditions to mitigate vulnerabilities,

Chung and Henser (2015b) argued that risk CSFs have  significant impact among PPP partners especially their perceptions on risks and use a risk profile index in their study to capture relative influences on frequent dimensions of risk found in PPPs.  Osei-Kyei and Chan (2017) highlighted the importance of efficient and well-structured payment mechanisms as a critcal succcess factor necessary to PPP because procurement delays will hinder project progression.

**Project Management-Based CSFs**

Projects are temporary endeavors undertaken to create a unique product or service or produce deliverables, and can involve single or multiple organizations (PMI, 2017). The PMI is the lead organization in the United States for project management certifications and credentials.  Project deliverables are a unique and verifiable product, service, or capability required to be produced to complete a process, phase, or project.

The PMI's process groups for initiating, planning, executing, monitoring, and controlling are processes to orientate and focus CSFs on mitigating barriers to PPPs. The process groups typically coincide with phases of project construction. The use of project process groups is common in the project management practice, however the project lifecycle, including starting the project, organizing the project, carrying out the work, and completing the project is used interchangeably in project management discussions (PMI, 2017; Rebello et al., 2016). The pre-project work period contains activities such as completion of a needs assessment, establish a business case and the creation of benefits management plan.

The Pareto principle was initially conceived in Italy and was based on the theory that 80% of the wealth in Italy belonged to 20% of the population (Sanders, 1988). The principle evolved into the 80/20 rule, which means that 20% of activity is responsible for 80% of outcomes (Chopra, 2017; Koch, 1997). However, the real value in the Pareto principle is the idea that normal distribution of activity is never 1-to-1, and most distributions are skewed in some form (Smith, 1988). According to Smith (1988), a good example is that 80% of car accidents are caused by 20% of the population. There is an unknown number of CSFs that apply to PPP, thus I used the Pareto principle to identify those CSFs to discuss and selection criteria is the frequency of occurrence in peer-reviewed scholarly journals as reported by Osei Kyei and Chan (2015) in their study.

**Risk Allocations**

Appropriate risk allocation between public and private sectors according to their risk management capabilities is crucial for the success of PPP projects because adequate risk allocation reduces project costs and helps ensures succcesful project implementation (Ameyaw & Chan, 2015; Maslova & Sokolov, 2017). Inappropriate allocation of risks may compromise the project's financial viability or hinder efficient management (Maslova & Sokolov, 2017). Allocating risks to the party best able to manage them is the ethos of the majority of PPP procurement contract practices (Chung & Hensher, 2015a).

Planning risk management is defined as coordinated activities to direct and control an organization's risks (Lehtiranta, 2013). Strategies to identify, allocate, and manage risks depend to a great extent on the type of project, procurement route, and contractual arrangements between participants (Badi & Pryke, 2016). PPPs presents a slightly different approach than traditional procurement because PPPs require incomplete contracts due to the long duration of most PPP deals. Optimal risk allocation lies at the heart of PPP arrangements because poor risk allocation exposes stakeholders to unnecssary liability (Liu & Wilkinson, 2014).

According to PMI standards, project risk management should occur in the planning, executing, and monitoring and controlling process groups of project management (Marion et al., 2016). The PMI recommended planning phase activities such as planning risk management, identifying risks, performing qualitative and risk analysis, and planning risk responses (Marion et al., 2016; PMI, 2017). Typically during the executing phase, risk responses are executed, while the monitoring and controlling phase entails continous monitoring of risks (Marion et al., 2016).

Business case development is a critical success factor of PPPs before the start of any project. Business case development includes  stakeholder considerations for risk management such as the identification of potential risks, recognition of potentially risky conditions in a project, and clarification of risk responsibilities (Chan et al., 2011). The PMI (2017) recommend that business case development include both the identification of risks and a listing of known CSFs. Construction projects are unique and complex and often have high levels of uncertainty or project risks compared to other projects with comparable costs (Perrenoud, Lines, & Sullivan, 2014).

Keers and Fenema (2018) suggested that project management is the activity most at risk because of the many risk factors that require mitigation for the project to have a strong chance of success. For example, Perrenoud et al. (2014) conducted a risk impact study of 266 college campus projects with aggregate value of $243.5M between 2005 and 2011 in the United States. Perrenoud et al. (2014) study results highlighted cost overages stemming from performance and material variances of 3.2% or $7.79M. The top six cost impact areas by percentage of cost found were (a) scope/change decision (37.79%), (b) other (23.77%), ( c) error/omission in design (10.86%), (d) unforeseen impact (9.82%), (e) codes and permits (7.73%). These results highlight common risk areas for construction practioners of similar projects particularly in the preproject work period and during the execution phase.

Another preproject work period consideration that is critical to the economic success and adequate allocation of risks in a PPP is the establishment of a robust framework for partnership. According to Rebello et al. (2016), a good PPP framework minimizes risks that a PPP project will not deliver value for money. The PPP framework should guide governments and private partners in terms of developing a PPP by outlining procedures and rules and ensuring effective public financial management and oversight (Rebello et., 2016). Wang and Zhao (2018) suggested the public sector in a PPP should allocate construction work and corresponding risks such as construction delays and cost overruns to the private sector to reduce the public's exposure to construction risks. Wang and Zhao (2018) recommended allocating project financing responsibilities and risks involving revenue shortfall to the private sector as well.

**Inadequate Private Consortiums**

The agency theory is used to understand relationships between agents and principles in business. The agent is expected to represent the best interest of principles in business transactions without regard for self-interest. The agency theory is used to explain business relationship when there is a divergence in interest between principle, e.g. client, and agent e.g. a project manager interest are different in the execution of a project (Parker et al., 2018). Often agency theory is used to describe the principle and agent relationship when there are conflicting goals and there is evidence of self-serving behavior that is contrary to goals of a business agreement (Parker, Dressel, Chevers, & Zeppetella, 2018). Specifically to the inadequacies of private consortiums, agency theory is the appropriate theoretical lens to explains the potential negative behavior of parties involved in the PPP. Fortunately, Li et.al, (2015) argues under the agency theory behavior-based management efforts could be more effective when inter-firm relationships has a low level of goal conflict and a long-term orientation.

Other critical factors to consider to ensure the adequacy of private consortiums are stakeholder engagement and management. In this study, private consortiums are important stakeholders in a PPP.  Often groups such as construction firms, facility managers, financiers, insurers, consultants, and service operators collaborate in temporary organizations such as consortiums to carry out special projects (Greco, 2015). A consortium, as an organization, then contracts with the public sector and other private firms to share risks and agency concerns (Greco, 2015). Construction projects alone constitute a complex system which involves interactions, collaborations, and negotiations among many stakeholders including designers, contractors, and the general project environment (Molwus, Erdogan, & Ogunlana, 2017). Private consortiums serve as a focal point for synchronizing and managing the complexity of not only the construction project but added considerations of PPPs.

To gain both stakeholder satisfaction and PPP project succcess, effective process management within a project management framework is a critical component of meeting project objectives (Liu et al., 2015). According to the project management standards, stakeholder activities extend across the spectrum of project management processes except in the closing process. Arguably  stakeholder engagement is critical to strengthening a private consortium. CSFs includes identifying all stakeholders in the initiating process group, planning stakeholder engagement within the planning process group, managing stakeholder engagement under the executing process group, and monitoring stakeholders under the monitor and control process group.

The project management cycle addresses stakeholder’s management throughout the project lifecycle.  Molwus et al., (2017) said stakeholder characteristics and project characteristics (SCPC), stakeholder analysis (SA), stakeholder dynamics (SD), and stakeholder engagement (SE) represent four constructs of construction stakeholders CSFs. Cross referencing these constructs to the project management stakeholder tasks identified early of (a) identifying stakeholders, (b) planning stakeholder engagement, (c) managing stakeholder engagement, and (d) monitoring stakeholders reveals concurrence to the critical nature of the activity.

The CSFs for SCPC includes identifying and understanding stakeholders' area of interest in the project, clearly formulating the project mission, and ensuring flexible project organization (Molwus et al., 2017). Stakeholder analysis CSFs involves determining and assessing the capacity a stakeholder has to influence the actions of other stakeholders or the project, determining the level of closeness with the project, appropriately classifying stakeholders to their attributes, and identifying and analyzing possible conflicts and coalitions among stakeholders (Molwus et al., 2017). For stakeholder dynamics, the CSFs orientate on managing stakeholders' changes in interests, influence, relationships among stakeholders, stakeholder attributes, and lastly, managing conflict among stakeholders (Molwus et al., 2017). Finally stakeholder engagement, CSFs include formulating strategies to manage and engage the different stakeholders, developing and keeping a positive relationship among stakeholders, communicating correctly and frequently with all stakeholders, and paying attention to economic, legal, environmental, and ethical issues (Molwus et al., 2017).

## Diminished Political Support

Undoubtedly, public officials are stakeholders in PPPs and require the same project management attention as mentioned for private consortiums. Political support is an enterprise environmental factor which represents conditions, not under the immediate control of a project management team that influences, constraints, or direct a project (PMI, 2017). Enterprise environmental factors are essential elements of the initiating, planning, and executing phases of the project management lifecycle. Political support CSFs are vital to PPPs success and skilled politicians will leverage projects for political positioning.

PPPs as public policy has a direct relationship with the political settings of the host government (Osei-Kyei & Chan, 2015). PPPs are politically volatile, and opposition from elected leaders or the public at large can derail a development process, delay project schedules, or at any time cancel a project long into the development process (Boyer et al., 2016). Political stability and support is critical to achieving success in PPP projects (Osei-Kyei & Chan, 2017). The strong commitment of local governments, private participants, reasonable risk allocation, experienced consortium, capacity building capability of local staff,and adequate financing are factors necessary to maintain political support (Ameyaw & Chan, 2016).

Osei-Kyei and Chan (2017) stated that clear project briefs and design development, appropriate risk allocation and sharing, effective procurement process, long-term demand, clear goals and objectives, environmental impact on projects, and the minimizing of contract variations as crucial factors to PPP success and maintaining political support. Without the necessary political support, approval for public expenditure on public projects would not be granted and diminishes the attraction for investors towards a project (Jacobson, & Choi, 2008; Osei-Kyei & Chan, 2015). Political support for PPP projects is often influenced by public involvement thus the impetus for generating public buy-in to PPPs important to have a success project(Boyer et al., 2016).

**Diminished Public Support**

Accordingly, the public plays a vital role in PPPs and  are arguably stakeholders in PPPs as well as fall within enterprise environmental input factors for project management (PMIe, 2017). Public support activities begin in the initiation phase of the project lifecycle well before a PPP begins delivering service, before the contract award (Boyer et al., 2016). Acceptance and understanding by the public or community consisting of the media, trade unions, civil societies, and other non-governmental organizations play an essential role in ensuring the progress of PPP projects (Osei-Kyei & Chan, 2015). Some researchers posited that public involvement in PPPs can affect the actual outcome of the project (Boyer et al., 2016).

Public involvement refers to a range of indirect and direct activities to solicit citizen input on decision making among elected officials and public administrators (Boyer et al., 2016). Public involvement entails the broad spectrum of government-initiated processes needed to inform or solicit comment from citizens and other relevant stakeholders affected by the PPP (Boyer et al., 2018). Direct involvement includes a range of in-person events such as public hearings, citizen panel, civilian juries, public meetings, or within virtual events such as web-based forums (Boyer et al., 2016). Activities that solicit civilian input in the decision-making process are indirect involvement actions that are employable by PPP management (Boyer et al., 2016).

PPPs involve complicated processes where the pre-contract award phase may average as long as 34 months (Boyer et al., 2018; Reeves, Palcic, & Flannery, 2015). Conversely, the life-cycle of a PPP may extend as long as 30-50 years, and public discontent can lead to protests, service disruption, bankruptcy of a private partner, additional government subsidies, policy changes, or even cancellation of the contract (Boyer et al., 2018; Chen, Hubbard, & Liao., 2013). The length of the tendering process and project lifecycle have an increased probability to draw criticism for an unfair tendering process or questionable business practices (Boyer et al., 2018); thus, activities for improving transparency are vital.

**Lack of Procurement Transparency**

A transparent and competitive tendering process is deemed significantly crucial to a successful PPP, but the literature on how to improve effectiveness and efficiency of the PPP tendering stage is not well documented. Transparency rests on cordial and constant communication between parties and external stakeholders (Osei-Kyei & Chan, 2015). Regardless, procurement transparency activities in project management must occur throughout a project's lifecycle.

Strategies to offset the lack of procurement transparency include varied activities. Researchers posit that governments should set up a robust business case development procedures and methodologies to facilitate transparency and maintain a consistent approach to investment planning and service needs (Liu et al., 2016). In the APMG Guide, there are specific activities listed to tender, award, and sign contracts. The APMG guidebook contents include valuable recommendations for the procurement process for

PPPs because the process is different from conventional procurement. Due to the extensive time required for procurement and intricacies of the PPP processes, bidders must have sufficient time to for proper due diligence, analysis, and assessment of the contract from different perspectives (Rebello et al., 2016). Next, initial interaction with bidders should occur before the tender process launches to inform bidders about the project better but with a balance not to endanger the legality of the process or suffer a challenge that will paralyze the process (Rebello et al., 2016).

Performance evaluation of projection on an ex-post basis, along with regular audits, will serve as meaningful measures to make sure that the tendering process is conducted in ethical manners while assuring the general communities' interests (Liu et al., 2016). Liu et al. (2016) posited the public sector must provide quality tender documentation that is accurate and coherently interpreted by relevant stakeholders. Liu et al. (2016) stated that output specification and commercial principles in the tender documentation are beneficial to developing standardization of documents, policies, guidelines towards a common framework for supporting PPP transactions.

**Project Management**

Effective project management can be a forcing function in meeting business objectives, improving predictability, delivering the right products at the right time, responding to risks, and increasing the chances of success in projects. Researchers have found that high performing organizations across a spectrum of industries completed 89% of their projects, while low performers completed only 36% which could represent significant costs and risks (Johnson, Liu, & Flagiello, 2016). However, project management has challenges as some projects involve a complex set of processes, and the turbulence of the business environment could explain the reason why several of them fail to reach planned objectives (Clerck & Demeulemeester, 2016).

The PMI is the recognized authority for project management professionals and established a framework consisting of five process groups to serve as a basic structure for project management. While the PMI recognizes initiating, planning, executing, monitoring and controlling, and closing as process groups, some scholars offered a slightly different listing of processes for project management. The phases of lifecycle management have three groups of (a) initiation and planning, (b) procurement and design, and(c) partnership (Liu, Love, Smith, Regan, & Davis, 2018). In this case, the initiation phase includes activities such as selection and definition, and pre-tendering work, while the procurement phase pertains to activities such as bidding, contract, and financial close (Liu et al., 2018). The partnership phase contains project design, construction, operations, maintenance, and project handover (Liu et al., 2018). In this study, the PMI's process groups in conjunction with CSFs may serve as vital elements for building a strategy for optimal performance PPP.

**PPPs**

PPPs are a preferred procurement method for governments to provide essential public services and there have been many successes and failures reported in normative literature (Liu et al., 2014). PPPs are designed, organized and contractually structured to meet the requirements of the project and have been in use for several years. According to Babatunde et., al (2015), the concept of using private sector capital to provide public facilities has existed for centuries in places such as the United Kingdom, US, France, Spain. Because of general usage of PPPs in the world, there are many foreign-language publications regarding the formal, legal, and practical aspects of this form of cooperation between the public and private sector (Łakomy-Zinowik, 2017). PPPs are an essential tool in financing public sector investments as economic and financial conditions have challenged the ability of some public budgets to raise adequate financial means and to allocate resources to specific projects (Ileana & Cristina, 2015). There is not a widely accepted definition of PPPs. Some countries use the name private finance initiative (PFI) instead of PPP, but for this study, PPP is used consistently throughout this effort (Badi & Pryke, 2016).

PPPs are a method of collaboration between private business and public authorities to profit and promote economic and social development for the people within a community (lleana, 2015). PPPs are an agreement between the government and one or more private businesses to which the business partners deliver a service in such a manner that the objective of the government aligns with the profit objective of the business (Carpintero & Helby Petersen, 2016). Gansler and Lucyshyn (2016) said PPPs are a contractual agreement between a public agency and a private sector in which the skills and assets of each sector share in delivering a service or facility for public good. T

Hueskes, Verhoest, and Block (2017) posited that PPPs are seen as bundling of various functions into one long-term contract to entice private partners. The idea is to take life-cycle costs into account and think beyond the design stage and build efficiencies that may cost more initially but create savings by lowering operating cost to deliver cost effectiveness over time.  Another version of PPP could have the public sector contract to buy a stream of services rather than an asset, and a private sector consortium decide how to supply those services in line with a service-level agreement and key performance measures (Loosemore & Cheung, 2015). Brinkerhoff and Brinkerhoff (2011) summarized the characteristics of PPPs as jointly determined goals, collaborative and consensus-based decision making, non-hierarchical and horizontal structures and processes, trust-based, and informal as well as formalized relationship, synergistic interactions among partners and lastly, shared accountability for outcomes and results. However, one of the purposes of a PPP is the transfer of risks from the public sector to the private sector (Badi & Pryke, 2016).

In most projects and particular to PPP, the term project delivery system describes the organization of parties involved and the structure necessary to transform goals and objectives into completed facilities (Moynihan & Harsh, 2016). The Associated General Contractors of America (AGC) defines a project delivery method as the comprehensive process of assigning contractual responsibilities for designing and constructing a project. Moynihan and Harsh (2016) see risk management and risk allocation as the critical consideration when deciding a delivery method.

It is not uncommon to use acronyms to refer to delivery methods. Some of the common types of delivery modes include Design-Build-Finance-Maintain (DBFM), Build-Transfer-Operate (BTO), Build-Own-Operate-Transfer (BOOT) and Design-Build-Operate-Maintain (DBOM). The DBFM method is the oldest delivery method system in the United States and is applicable when an owner contracts with a single organization to provide design and construction of a project under a single contract (Moynihan & Harsh, 2016). The traditional delivery method is the Design-Bid-Build (DBB) in which architects and engineers design the project, then design plans are given to the owner who solicits bids from contractors, and lastly, the lowest winning bid builds the project (Moynihan & Harsh, 2016). Design-Build (DB) is a frequent reference to PPP and traditional construction delivery method. For PPPs, the delivery methods are modified to meet the objective of the partnership agreement. Ultimately, the delivery mode is selected according to the degree of sharing of risks agreed upon by the public and private stakeholders. Table 1 includes a sample of delivery methods used in either traditional or PPP procurement, iidentifies the stakeholders who is responsible for project risks, potential fundings sources and the probablity to obtain VFM.

Table 1

*Samples of Delivery Methods and Risk Responsibility*

| Procurement | Delivery Method | Abbreviation | Risk Allocation | Possible Finance Structure | Value for Money Chances |
|---|---|---|---|---|---|
| Traditional | Design-Bid- Build | DBB | Public Responsibility | Public Funds/ Private Activity Bonds | Often less than PPP |
| Traditional | Design Build | DB | Public Responsibility | Public Funds/ Private Activity Bonds | Often less than PPP |
| PPP | Design-Build-Operate-Maintain | DBOM | Public/Private Responsibility | Private Actvity Bonds/TIFIA | Greater than DB, DBB |
| PPP | Design-Build-Finance | DBF | More Private than Public | Bank / Investor Debt | Greater VFM for Public |
| PPP | Design-Build-Finance-Operate-Maintain | DBFOM | Private Responsibiltiy | Private Equity | Better VFM for Public |
| PPP | Full Concessions-Develepent-Rights | | Private Responsibility | Private Equity | Greatest VFM for Public |

## Barriers to PPP

Some of the same barriers to profitability that exist for traditional procurement exist for PPPs. PPPs possess unique barriers that span a project's lifecycle of starting the project, organizing and preparing, carrying out the work and, completing the work (PMI, 2017). The recognition of barriers to PPP is important because project leaders will need to have initial focal points to direct mitigating responses to challenges in their projects.

To gather a list of barriers to PPP that are relevant to this study, the researcher used Osei-Kyei and Chan (2015) annual publication of CSFs trends for PPPs projects from 1990 to 2013. Osei-Kyei and Chan (2015) identified that poor risk allocation, inadequate private consortium performance, diminished political support, diminished public support, and lack of procurement transparency are the most common barriers identified by scholars in the period. Undoubtedly, there are a multitude of barriers and in different combinations that can hinder a construction project's success. This study will build on existing knowledge regarding how to mitigate the aforementioned challenges.

**Poor Risk Allocation**

The nature of PPP projects makes risks an essential factor in project procurement, and most projects involve risks that are difficult to control and analyze (PMI, 2017). There are many types of risks in business, but the risk to PPPs is the chance of something happening that will impact objectives and may either create an opportunity to exceed objectives or pose a threat to the achievement of objectives (Moynihan & Harsh, 2016). PPP contracts for large-scale projects tend to have high risks associated with unpredictable and uncontrollable circumstance that the private sector is not willing to bear (Bae & Joo, 2016). Allen, Carpenter, Hutchins, and Jones (2015) stated that risk factors are much higher than industry standards in construction than it is other industries because other factors such as government funding, demographics, and market trends largely determine demand. Risks may track similar areas such as planning risks, design and construction risks, operating risks, demand risks, residual value risks, other financial risks,and legislative risks. Primary risks to a construction project include the delivery method, contract type, cost management, duration, design, quality, site conditions, material availability, complexity, regulations, insurance, and safety (Allen et al., 2015). Bae and Joo (2016) posited to attract the private sector, local governments often end up with a disproportionate share of the risk. In general, project risk management involves increasing the frequency and effects of positive events and decrease that of adverse events (Allen et al., 2015).

Lakomy-Zinowik (2017) said PPPs are a risk-sharing relationship based on shared aspirations between those in the public sector and private partners involving the sharing of risks and rewards to deliver publicly agreed outcome or public service. Burke and Demirag (2017) defined PPPs as a type ofcooperation between the public and private actors to develop products or services in which risk, costs, and benefits are shared but add that PPPs are better VFM than traditional procurement. Although PPPs allow the public sector to transfer risks related to construction, finance, and operations of projects to the private sector, it also keeps the public sector's budget deficiencies down (Carbonara, Costantino, & Pellegrino, 2014). PPPs can increase the VFM spent providing more-efficient, lower-cost, reliable services, improving quality and promoting economic growth and employment opportunities (Carbonara et al., 2014). Burke and Demirag (2017) said to obtain VFM; a basic rule is the risk allocation should go to the party most adept at managing it, such as the case that a hotel chain manager would be more adept at managing a hotel than a city elected official. Demirag, et al., (2012) postulated that there is an expectation inherent in PPPs that private businesses will manage risks allocated to them because private capital is at risks and financiers will perform due diligence and only allow viable projects to be selected (Demirag, Khadaroo, Stapleton, & Stevenson, 2012). While VFM is usually a predecision assessment to a PPP, it sometimes put too much emphasis on technical and analytical practice and displaces public accountability and responsibility (Chung, 2016). Nonetheless, effective risk management contributes to a project's success and is critical for both public and private parties in PPP projects to obtain objectives (Trangkanont & Charoenngam, 2014).

**Challenges to Private Consortiums**

Consortiums are formed for PPPs to bundle investment and operational tasks and are motivated by possible exploitation of the project economies and future revenues to back current debt and equity investments (Greco, 2015). The delivery methods that consortiums and public officials select determine the degree that the unbundling of public services are given to the private sector (Button, 2016). Thus, whatever is the PPP choice; the public sector agrees to transfer full or partial control over the project to the private consortium within the contractual arrangements (De Schepper, Dooms, & Haezendonck, 2014). In a traditional construction contract, as opposed to PPPs, no questions arise on the allocation of responsibility and accountability for the project stakeholders. Whereas with the PPP and depending on the number of organizations in the consortium, the more participants, the more complex the external stakeholder relationships and challenges for the focal organization to manage (De Schepper et al., 2014). Governance of a PPP requires steering and coordinating by setting up organizational structures, running decision-making processes, and using instruments such as contracts and agreements that are not solely based on the government's authority (Van Den Hurk & Verhoest, 2016). Given the complexity and duration of PPP projects, the costs of preparing, awarding, and executing contracts are on some accounts the main weakness compromising their efficiency (Baker, 2017). Baker (2017) said the more complex the project and greater the duration, ex-ante and ex-post costs are likely to be generated by the opportunistic behavior of partners or unforeseen events.

**Political Turmoil**

According to Gawel (2017), political institutions are both drivers and barriers to PPPs success. Political risk relates to the continuing commitment of political parties to the project and is closely related to reputational risks (Chung & Hensher, 2015a). Gawel (2017) said that if PPPs arrangements serve the interest of the political decision-makers better than conventional public services, decision makers are inclined to support PPP, but when the political net costs are estimated to be higher than the economic net gain, resistance increases. PPPs allow the government officials to pursue a range of opportunistic acts in exchange for votes and are expected to amply the government's interest to demonstrate PPPs are VFM to society at large (Chung, 2016). One problem is politicians make decisions on their political timetable and often are trapped in optimism bias and may omit appropriate appraisals and overestimate expected revenues for PPPs (Bae & Joo, 2016).

Irresponsible long-term contracts often create an atmosphere for political discussions over policy in public forums (Bae & Joo, 2016). Undoubtedly, PPPs could become politically volatile, and opposition from elected leaders or the public at large can derail a development process, delay project schedules, or force a cancellation even after a project has begun (Boyer et al., 2016). Also, PPPs as a public policy for political influence but political debate arises when there is a lack of transparency and accountability in the procurement process (Osei-Kyei & Chan, 2017). According to Osei-Kyei and Chan (2017), opposition parties will try to as much as possible to probe the government on the transparency and accountability of the project, and the pursing political debate could lead to a cancellation of the PPP.

**Public Buy-In**

Public support for allowing the private sector to develop and run public services through developing and issuing policies that facilitate PPPs provisions is critical (Almarri & Boussabaine, 2017). PPP projects have often encountered challenges of political and social nature such as opposition to land acquisition, activism for heritage site protection, and environment pollution (Agarchand & Laishram, 2017). Agarchand and Laishram (2017) stated these challenges could lead to public opposition, over-blown costs, and delays to the projects. PPPs are politically volatile, and opposition from elected officials or the public at large can derail a development process, delay project schedules, or even cancel a project well into the development process (Boyer et al., 2016). Arguably, the role of the community is limited as it may be difficult to involve them during the governance or monitoring of projects; however, they must participate in the entire project governance (Swamy, Tiwari, & Sawhney, 2018). Public involvement refers to a range of activities that solicit citizen input on decisions making among elected officials and on decision making among public administrators using such forums as public hearings and citizen panels (Boyer et al., 2016).

**Transparency and Accountability**

Transparency has many different meanings with financial information (Agyenim-Boateng, Stafford, & Stapleton, 2017). Transparency is an issue that impacts public support to PPPs because a lack of financial transparency can result in acute credit and performance problems  (Wibowo & Alfen, 2014b). Generally transparency is viewed as a necessary part of good governance within organizations (Agyenim-Boateng et al., 2017) Almarri and Boussabaine (2017) postulated that the transparency and accountability of the project and the pursing political debate could lead to a cancellation of the PPP. According to Wibow and Alfen (2014), transparency and accountability are essential to securing and convincing the public that underhanded transactions between private partners and contracting officials are not taking place.  Mirela-Oana et al. (2013) added local budgets are essential to citizens and require transparency as they represent the strategy, planning, and content of a public administration and facilitates the relationship between public budgeting and market requirements, as well as civil society demands and citizen participation.

The literature review included a comprehensive review into the conceptual framework of CSFs as they aligned to offset common barriers to PPPs success.  The research contains evidence that PPPs are complexed but are like traditional procurement practices except in some areas such as duration of the project lifecycle and the number of stakeholders in the partnership. Project management practices plays a key role in the success of PPPs and the risks associated with the partnership requires passing the risks to the parties that are most suited to absorb the realization of the risks. Arguably, the researcher's review of the literature provides substantive content to identify strategies to offset barriers to success in PPPs construction projects in the target area.

The literature review contained a vast amount of information regarding the history, success factors, challenges, achievements, and developments of PPPs and the conceptual framework. However, the literature synthesis includes the recognition that there are many success factors that can influence the outcome of PPPs. Moreover, the adherence to proven project management practices will encapsulate CSFs but each project requires its own particular strategy to be successful. The findings from the literature suggests that among the stakeholders in PPPs, there must be a balance between meetting the needs of the public sector and maximizing the profits of the private business owners.

## Transition

The focus of Section 1 in this qualitative multiple case study involved PPPs' intended purpose and utility, the conceptual framework of CSFs, and salient barriers that may help or hinder reaching project goals and objectives. In this section, I highlighted that understanding the complexity of the contracting process as critical to ensuring that risks are assigned to the parties that are best suited to absorb the consequences of the realization of those risks. Lastly, I provided the recap of the synthesis of the finding derived from the literature review.

Section 2 includes a description of the work required for the study and an explanation of the role of the researcher in the study design. The section contains a description of the research design and method selected to explore strategies PPP project leaders could use to identify and manage CSFs to offset barriers to profitability in projects' lifecycle. Additionally, the section contains an explanation of the population and sampling, methods of data collection, and data analysis. Lastly, the section contains a description of how an acceptable level of reliability and validity is obtained within the study. Section 3 contain study findings.

# Section 2: The Project

Section 2 contains a review of the role of the researcher, the qualitative research method, and the case study design. The selection criteria for participants and population, explanations regarding ethical requirements of research, data collection instruments, techniques, and organization are discussed. Finally, Section 2 examines the reliability and validity of the study.

## Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that project leaders in PPPs used to identify and manage CSFs to offset barriers to profitability throughout a project's lifecycle. The targeted population included both leaders and former leaders of two PPP project teams in the southeast region of the United States with successful experiences in PPPs. Implications for positive social change include the potential to reduce shortfalls in public funding for projects designed to meet public needs in terms of infrastructure, public works, and other civil systems while reducing public debt.

## Role of the Researcher

In this qualitative research study, I was responsible for the data collection process, which included interviewing participants for gathering, sorting, organizing, analyzing, and interpreting data collected. The researcher served as the data collection instrument. Any researcher's cultural and experiential background has biases, values, and ideologies that can affect the interpretation of a study's findings. Yin (2018) said that good case study researchers will strive for the highest ethical standards in terms of being honest, avoiding deception, and accepting responsibility for one's work. To demonstrate due diligence in terms of mitigating personal bias in data collection and for verification, the researcher used techniques such as interview protocols, member checking and review, data saturation, triangulation, and carefully-constructed interview questions. The researcher did ensure the data analysis is mainly inductive, allowing meaning to emerge from the data, rather than the more hypothetical-deductive approach of quantitative research.

The role of the researcher involves adhering to ethical considerations regarding respect, beneficence, and justice for all subjects. The researcher adhered to the spirit of the Belmont Report in the case study to maximize benefits and reduce risks to subjects as much as possible, ensure individuals participate voluntarily, and ensure the distribution of risks and benefits to potential research subjects are balanced and equal. Prior to this study, the researcher never had a relationship with anyone in the study. One possible relationship which existed between the researcher and participants was that the researcher was a student member of the PMI. The researcher was unaware of any participant being a member of this organization, and if any participant was a member, it was coincidental and had no bearing on this study's findings. Lastly, the researcher set aside all personal opinions and experiences and not view data through a personal lens.

## Participants

Participants in this study included project leadership from both the private and public sector who had worked on the PPP for a new sports facility and/or renovated PPP hotel in the southeast region of the United States or had expert knowledge on PPPs.

Specifically, participants met specific criteria to answer the research question, and their selection relied on alignment with eligibility requirements. Participants either had personal experience working with a PPPs or postgraduate academic knowledge on PPPs or project management. Participants' knowledge included a basic understanding of risk management considerations needed for PPPs. Participants were knowledgeable enough to share valuable perspectives to interview questions and provided the researcher with insight into the study. Since the lifecycle of a construction PPP can extend as far as 20 years (Carpintero & Peterson, 2016), participants were exempt from having to experience the entire lifecycle of a PPP. Individuals in the public sector were experienced in PPP and served in the capacity to understand how a PPP is developed, organized and intended to be used. All participants did have 2 or more years of experience with any of the lifecycle phases of a PPP project.

The strategy used to gain access to participants involved identifying organizations whose affiliation to PPP would have a pool of potential participants. Yin (2018) suggested some sources to identify participants include national associations, agencies, and state and local levels of government. The strategy for gaining access to person with authority to authorize use of organizational resources included a review of public documents to identify participants in the PPP and the National Council of PPPs for a list of local members. The strategy for access to public sector officials was not as tricky or complicated as the strategy to access private participants. The inherent nature of public service and transparency obligations to the public provided easy access to public officials. Strategies used included scheduling appointments through telephone calls, emails, and in-person visits. Gaining access to participants required several considerations. First, the researcher was aware that gaining access to participants was a continuing process that extended beyond an initial or single event but required iterative and incremental actions such as following up on commitments.

Establishing and maintaining working relationships with participants requires researcher engagement and participation (Wolgemuth et al., 2014). The strategy for engaging participants included the informed consent form and interview protocols for semi-structured interviews. Researchers should establish trust with research participants and be honest about the intended purpose and possible outcomes of the study (Rubin & Rubin, 2012). In a qualitative study, researchers should establish enough trust with participants so that their data set represents meaningful authentic and rich meanings, experiences, and perceptions (Anderson, 2017).

## Research Method and Design

### Research Method

Qualitative research methods are subjective and involve the views of participants in the study (Smith, 2018). The process is inductive, and patterns or theories evolve throughout the research process (Guba & Lincoln, 1989; Smith, 2018). A qualitative researcher accepts that there are multiple perspectives an event and not just one objective view (Kisely & Kendall, 2011). Qualitative methods help gain an understanding of underlying reasons and motivations and provide insights regarding the setting of a problem and generate ideas for later quantitative research (Park & Park, 2016). The qualitative research method was more advantageous for this study because it involves the subtleties of what is found in information and less on information found in quantitative methods. Anderson (2017) characterized qualitative research by both the importance attached to interpretive, naturalistic, and holistic inquiry and the shared assumptions of qualitative researchers that multiple perspectives exist. Ultimately, qualitative research methods rely heavily on human experiences and observations as opposed to positivism and definiteness.

**Research Design**

According to Yin (2018), a case study use is common in many situations, and it captures the knowledge of an individual, group, organization on a social, political or related phenomenon. The case study involves understanding the dynamics of the topic within settings or context (Saunders et al., 2015). Additionally, the case study involves understanding the intricate complexity and idiosyncrasies of a particular case investigation of an entity deemed worthy of analysis (Park, & Park, 2016). Case studies are used where the case in questions represents an extreme and unique case (Gajendran et al., 2014).

The multiple case study design was selected over other designs because it is methodically appropriate to capture participant perspectives and the cases in question represent unique PPP cases. Additionally, the multiple case designs are skewed to provide replication logic because each case could produce similar or different data and perhaps predictable findings. The researcher obtained data saturation in the study at the point at which no new information or themes emerge from the completion of interviews and case document reviews.

## Population and Sampling

The research design is a multiple case study. The population for this study will comprise of people that best align with the research question by hands-on participation with the cases and proclamations of being subject matter experts on PPPs. Ideally, participants represent leadership from both the private and public sector that are working on the PPP for a new sports facility and/or a renovated PPP hotel in the southeast region of the United States with knowledge on PPPs.

The sampling method was a purposeful selection of the participants based on both the selected criteria and the small sampling (Saunders et al., 2015). A purposive sampling strategy differs from those of probabilistic sampling, seeking not generalization or randomness, but a well-informed selection to maximize the chances of observing the phenomena associated with this study (Serra, Psarra, & O'Brien, 2018). More important, the sampling method provided analytic generalization based on corroboration and advance the conceptual concepts in the study (Yin, 2018). The sample size is not predetermined but was dependent on data saturation during the interview process.

## Ethical Research

Ethical decision making, at its very core, is personal and is an individual struggle (Lehnert, Craft, Singh, & Park, 2016). Lehnert et al. (2016) posited that qualitative methods that seek to uncover meanings, understand the intent, explain behavior, and increase awareness of factors behind decision making are a natural choice. To ensure all choices are ethical and to increase awareness by participants in this study, several steps are taken to promote ethical research by the guidance promulgated by Walden

University's Institutional Review Board (IRB approval number 09-20-19-0667689). Specific measures to promote ethical research included the informed consent form, withdrawal procedures and incentives, retention and protection of documents, and protection of participants and organizational identities.

All participants completed the informed consent form before participation in this study. The consent form covered eight significant parts of consent. The consent form covered the invitation information explaining what to participate in, to what end, how, how long, and for whom. Risks, rights, and possible benefits are topics that are part of the discussion in the consent form. Next, the consent form covered the confidentiality of records, the dissemination of results, and any special conditions for children. Lastly, the researcher provided contact information and copies of the consent form.

Participants had the option to withdraw from the study at any time. The researcher did ask the participants to give notice of their intent to withdraw from the study. Participants had the inherent right to request that material from their interview withheld and the right to review transcripts before published. The incentives for participants in the study include the opportunity to be heard, their opinions to be honored, and the presentation of their experiences to a broader public audience. No other incentives applied to this study.

The confidentiality of the participants occurred in several ways. Throughout the study, participants will be referred to as P for participant along with a number to show their sequence in the interview process (e.g., P1, P2, P3, etc.). All collected business identification information is confidential, and researcher discipline ensured accurate and proper coding and recording of data collected. The final report did not disclose names, organizational names, or organizational titles. The researcher will save collected data for 5 years with a password protected external drive in a locked container to protect the rights of the participants. After 5 years, the researcher will shred the interview notes and delete the files. This Walden IRB approval number, AO667689, is without any identifiable information of individuals or organizations

## Data Collection Instruments

The researcher served as the primary data collection instrument and relied on data collected from semi-structured interviews, documents, and other written materials as recommended by participants. The interview questions were open-ended and structured to build upon and explore the participant's responses to the question by having the participant reconstruct their experience in the topic of PPPs. In this study, the researcher used open-ended questions to encourage participants to provide thorough answers to obtain facts.

An interview protocol was used to execute a procedural level of interviewing. The interview protocol is an instrument of inquiry designed for asking questions for specific information related to the aim of a study as well as conversation on a particular topic (Castillo-Montoya, 2016). Jack and Furgerson (2012) recommended that the interview protocol include a script of what to say before and at the conclusion of the interview, as well as prompts to collect informed consent and prompts to remind the interviewer of the information they are interested in collecting (Jacob & Furgerson, 2012). Accordingly, the researcher followed this recommendation as well as provided the interview protocol in Appendix A.

To enhance reliability and validity, the researcher used activities such as triangulation, transcript review, member checking, and audit trails. Information collected during interviews were used to determine themes to show in the findings. To promote consistency in the findings, the researcher used the NVivo qualitative data analysis software (QDAS). The use of QDAS provides evidence of how the data is manipulated, managed, and represented. QDAS is a resource that enhances transparency, validity, rigor, and trustworthiness of qualitative research projects.

**Data Collection Technique**

There are three basic typologies for interviews: structured, semi-structured and in-depth, and unstructured interviews (Myers, 2013; Saunders et al., 2015). The data collection technique in this study involves semi-structured interviews. The data collection technique will help answer the research question: What strategies do PPP project leaders use to identify and manage CSFs to offset barriers to profitability during project lifecycles? The use of structured interviews requires questionnaires based on a predetermined standardized set of questions and are often used to collect quantifiable data (Saunders et al., 2015). Often, structured interviews have pre-coded answers, therefore, the rigidity of structured interviews is not appropriate for this study (Saunders et al., 2015). Unstructured interviews allow interviewers to use open-ended questions, and allow the interviewees to answer freely about events, behavior, and beliefs in relation to the topic (Myers, 2013; Saunders et al., 2015). Unstructured interviews are also called in-depth interviews and require no predetermined list of questions. In-depth interviews are seen as phenomenological interviewing because the interviewer gains information from assumptions drawn from phenomenology derived from open-end questions. Semi-structured interviews are used in this study since there is a theme in the research, and the order of questions are varied and new questions inserted in the context of the research question. One advantage of semi-structured interviews are participants will receive information about the themes before the interview which adds to the validity and reliability factor by allowing the participant to prepare.

A vital element of the data collection technique is validation. While semi-structured interviews are ideal for data collection, activities such as taking notes, audio recordings, and member checking are essential to validation. While taking notes and audio recordings are designed to capture accurate data input, Harvey (2015) described member checking as a process of bringing ideas back to research participants to confirm their input and to gather material to elaborate on categories. Member checking is also known as member validation (Harvey, 2015). Member checking was completed for all interviews to ensure participants agree that data is captured and interpreted correctly.

## Data Organization Technique

All transcripts generated from the semi-structured interviews are stored filed chronologically. Notes taken during the interviews process have individual folders and have dates with appropriate labeling. Some researchers suggest that the right software will provide an audit trail and increase the rigor of the research study (Sotiriadou, Brouwers, & Le, 2014). The data organization plan included the use of QDAS such as

NVivo to assist in mind-mapping, coding, and identifying themes. The use of qualitative data analysis software aided the thematic content analysis by speeding up the process, enhancing the rigor, and adding flexibility during the data analysis by providing different perspectives (Oliveira, Bitencourt, Zanardo dos Santos, & Teixeira, 2016). QDAS appeal for its potential to make a researcher's sense-making process around data analysis more explicit and thereby more transparent (Paulus et al., 2017).

The researcher’s data collection plan required all data stored on a password-protected personal computer as well as on an external hard disk backup drive for the required 5 years minimum storage period. The paper records storage container is a locked file cabinet. To ensure the confidentiality of the participants, no one will have access to his or her password protected data.

## Data Analysis

The analysis of data collected included the use different perspectives of triangulation. Triangulation involves using more than one source of data and method of collection to confirm the validity and credibility of research data, analysis, and interpretation (Saunders et al., 2015). Turner, Cardinal, and Burton (2015) argue that triangulation generates a better understanding than other validating and credentialing methods of a given theory or phenomenon for qualitative studies.

There are four types of triangulation: data, theoretical, researcher, and lastly, methodological (Abdalla, Oliveira, Azevedo, & Gonzalez, 2018). Data triangulation means collecting data from different periods of time and sources to obtain a more vibrant and more detailed description of the phenomena (Abdalla et al., 2018). Theoretical triangulation refers to what researchers aim to accomplish in the study as it pertains to a theory which may include theory generation, elaboration, and testing (Turner et al., 2017). Theoretical triangulation aims at involving different theoretical approaches from diverse areas of knowledge into the analysis of the same phenomenon phenomena (Abdalla et al., 2018). Methodological triangulation fulfills this requirement using multiple methods of obtaining detailed data about the phenomenon and is commonly used. Interviews, member checking, and the review of literature were methods used in the plan to obtain methodological triangulation.

The researcher used data analysis that will include alpha-numeric labels to protect participant's identity and to protect confidentiality. The researcher used coding to organize data into themes, and eventually analyzing and interpreting the findings of the study using NVivo software to assist with the analytical efforts. The researcher recorded all interviews to ensure accuracy and the proper categorization into themes generated from the data collected.

## Reliability and Validity

According to Saunders et al. (2015), reliability and validity are central to judgments about the quality of research in the natural sciences. Reliability refers to the replicability of the same findings, and validity refers to the appropriateness of measures used, accuracy of analysis of the results, and lastly, generalizability of the finding (Saunders et al., 2015). Reliability and validity are achievable through various techniques such as independent review of transcripts, member checking, and triangulation (Kisely & Kendall, 2011).

**Reliability**

The minimum requirements for reliability are evidence of dependability, consistency, and repeatability of a project's collection, interpretation, and analysis or the ability to obtain the same results if the study is repeated (Morse, 2015). The researcher used overlapping methods such as triangulation, member checking, establishing an audit trail, and using an interview protocol to ensure reliability in this study. Triangulation involves using more than one data source of data and method of collection to confirm the credibility and authenticity of the research data (Saunders et al., 2015). Triangulation is a qualitative research strategy to test validity through the convergence of information from different sources (Carter, Bryant-Lukosius, DiCenso, Bythe, & Neville, 2014). When similar findings or themes emerge from alternative sources and methods, this provides evidence of convergence (Watts et al., 2017). The task involves using two or more independent sources of information (Saunders et al., 2015). The use of semi-structured interviews, literature review, and case study design will aid in the triangulation of data for this study.

Member checking involves giving a summary of my interpretation of the interview or the completed analysis back to the participant to confirm accuracy, obtain additional information, or correct data (Morse, 2015; Saunders et al., 2015). While member checking is also known as member validation, it is the most crucial technique for establishing credibility in research studies (Harvey, 2015). Member checking was used to ensure accurate recording and interpretation.

Audit trails are the systematic documentation of all procedures and data relevant to the study (Liao & Hitchcock, 2018). Audit trails should enable readers to make their judgment about the quality, transferability, and worth of a study by allowing the reader to follow a researcher's decision trail and associate it with his or her conclusions. Notwithstanding, Yin (2018) think audit trails are mechanical, but the researcher believed an audit trail enhanced the validity and trustworthiness of this study. An important aspect of reliability is the reassurance that another researcher investigating the same issue or working the same data set would derive the same meaning as a previous researcher (Ali & Yusof, 2011). Thus, the researcher will leave an audit trail to assist with the methodological process which involves the careful application of choices and research design strategies enacted in the research project.

**Validity**

Credibility, transferability, dependability, and confirmability are essential characteristic to a study to attest to the trustworthiness and plausibility of this study. Credibility entails the accurate description of the phenomenon and the generation of credible claims that are the by-product of a systematic process used in all stages of research (Liao & Hitchcock, 2018). To achieve credibility in this study, member checking, peer debriefing, triangulation, and expert checking were used.

Member checking entailed returning interpretative summaries to participants for verification and confirmation of accuracy and contributes to the credibility of the research (Harvey, 2015). According to Harvey (2015), member checking makes research trustworthy and fulfills the ethical obligation to allow participants the right to reply to information about them. However, member checking of the analysis is not always practical because if the participant does not agree with the analysis, awkwardness will occur (Morse, 2015).

The purpose of peer debriefings is to prevent bias and aid in the conceptual development of this study (Morse, 2015). Peer debriefing is the engaging professional colleagues in analytic discussions and data interpretations as well as external evaluation of research (Liao & Hitchcock, 2018). Theoretically, the debriefing takes place readily, producing qualitative feedback and an optimal learning transfer (Der Sahakian et al., 2015). Liao and Hitchcock (2018) argued that the use of triangulation add credibility to their research should not only converge evidence from multiple data sources, and methods but need to explain when it occurs and when it does not. Accordingly, the researcher did adhere to this requirement during this study. Expert checking involves using outside experts to assess the quality of the study, and the researcher used local project management and experienced construction management professionals for their opinions regarding the content of the study.

Transferability is similar to external validity or generalizability for qualitative research or refers to that which can be transferred to other contexts or settings (Morse, 2015; Saunders et al., 2015). To obtain transferability, the researcher provided full descriptions of the research question, design, context, and findings. Abdalla et al. (2018) posited that a detailed description of the object of research is essential in not only achieving credibility, but it helps in the transmission of both real and examined situations in its surrounding contexts. The use of thick descriptions will facilitate achieving transferability which requires providing details when describing processes and findings. Readers of this study have the opportunity to judge transferability of the study to other settings in which the reader is interested in research.

Confirmability in a research study is established by a qualitative researcher's effort to maintaining objectivity (Abdalla et al., 2018). According to Abdalla et al. (2018), recommends that measures must be taken to assure the conclusions derived come from the experiences of the participants and not the traits of the researcher. To enhance confirmability, the researcher used negative case analysis, triangulation, and member checking. Triangulation and member checking as previously mentioned will address concerns of researcher bias. Negative cases serve as a key to understanding most of the commonly occurring cases especially when they are used in comparison to identify differences between themselves and a current study (Morse, 2015). Liao and Hitchcock (2018) recommended a search for disconfirming evidence after preliminary themes and analysis are complete and, if a negative case is found, it should be recognized and explained, mainly if it influences a modification of themes.

Data saturation is the point at which no new information or themes can be found in data (Boddy, 2016). However, this does not mean that a single case is never enough because data saturation requires two cases or more. According to Saunders et al. (2015), a researcher should strive to conduct interviews until any new information is provided. The researcher used interviews to the point there was redundancy in responses.

## Transition and Summary

The purpose of this qualitative multiple case study was to explore strategies that project leaders in PPPs use to identify and manage CSFs to offset barriers to profitability throughout a project's lifecycle. Section 2 identified the role of the researcher, ethical research guidelines, requirements of participants, research methodology, research design, data collection and organization, data analysis, reliability, and validity. Section 3 include the presentation of findings, suggestions to apply to professional practice, possible implication for positive social change, recommendations for actions, proposals for future research, and lastly, the conclusion of the study.

# Section 3: Application to Professional Practice and Implications for Change

## Introduction

The purpose of this qualitative multiple case study was to explore strategies project leaders in PPPs used to identify and manage CSFs to offset barriers to profitability throughout a project's lifecycle. The research population for this study was professionals from both the public and private sectors with two or more years of experience either investing, managing, or participating in PPP agreements. In particular, two case studies involving PPPs in the southeast region of the United States involving a sports venue and a hotel served as the focal points for this study. Five participants were engaged through interviews and openly answered the interview questions. The researcher conducted member checking by returning transcript summaries to participants for their responses to confirm, disconfirm, or add more information to the analysis.

The findings in this study are based on perspectives of all participants and supported by scholarly literature. The findings included information regarding the complicated nature of PPPs, strategic importance of risk planning, thorough contract negotiations, and the critical importance of having the right project and partners in a long-term agreement. The findings are pragmatic to apply to professional practice and to positively affect social change.

## Presentation of the Findings

The purpose of this study and overarching research question involve identifying strategies PPP project leaders use to identify and manage CSFs to offset barriers to success in project lifecycles. The findings are grouped into three salient themes, which are strategies to identify and manage CSF, establish and manage PPPs, and long-term success for PPPs. Minor themes were further developed from participant discussions and the literature review .

## Theme 1: Strategies to Identify and Manage CSF

The first theme is derived from the diverging and converging efforts by public and private members in a PPP to purse different and common goals. Diverging and converging efforts include the public and private sector's strategies to identify and manage CSF to reach goals. The nature of the minor themes suggests a divergence in objectives or competing goals between the sectors which complicates PPPs. Boyer et al. (2016) argue the more influence the private sector has in shaping the design and delivery of public services, the higher the potential for that service to deviate from constituent interests as represented by the government. PPPs are complicated due to competing goals of creating value for money versus obtaining maximum profits for the private sector. Nonetheless, both sectors are motivated by different perspectives and CSFs. Wegrzyn (2016) argued that the public and private sectors do not share common perceptions regarding PPP success and the private sector assigns lower level of importance to CSFs if impact does affect the private sector objectives. Arguably, a partnership with competing goals requires goal congruence to be successful.

Regarding the public sector's strategy to identify and manage CSFs, participants posited that a public sector goal in a PPP is not driven by profitability but providing value to the public and should include public involvement. The impetus for public involvement gives credence to critical factors such stakeholder management, public and political support calling for public buy-in for PPPs through deliberative activities like town hall meetings or webinars to convene members of the community to familiarize people with the project (Boyers et al., 2016). Good public involvement will improve organizational relationships between the public and PPP partners, and public opinion or demand should be reflected in service provisions plan to reduce opposition from the public (Shi et al., 2016). Boyers et al. (2016) suggested that planned activities with the public to discuss a PPP convey procedural fairness and add to the legitimacy of the project. Participants stated the need for stakeholder engagement as a CSF. Participants suggested that parties in a PPP develop relationships among its members in order to sustain partnerships and deal with the challenges of long-term agreements. Burke and Demirag (2017) identified relationship management as an essential factor in PPPs in the sense that parties should form a relationship rather than a strictly contractual relationship. Burke and Demirag (2017) listed factors contributing to stakeholder relationships such as knowledge and resource sharing, autonomy to make decisions, incentives for objectives, risk transfer, and trust to the extent parties rely on and believe in each other. Thus, it is most important for the public sector to select the right partner. While selecting the right

The private sector's strategy to identify and manage CSFs is developed from participants' insistence that private partners identify risks associated with PPPs. Some of the participants suggested using specialized teams to identify risks and risk registers to facilitate risk mitigation. Ameyaw and Alfen (2017) said that regardless of country or project sector, proper risk allocation and risk mitigation contribute significantly to PPP success. PPP objectives for the public sector should include transferring risks related to construction, finance, and operations of projects to the private sector to relieve the burden from the public sector (Carbonara et al., 2014; Xiong, Zhao, Yuan & Luo, 2017). Thus, risk management is a CSF for the private sector.

The private and public sector members of a PPP must execute risk management with a converging effort in order for a PPP to succeed. Common risks associated with PPP can be identified as either relational and participation risks or systemic and specific project risks (Keers & Fenema, 2018; Xiong et al., 2017). Relational risks refer to the possibility that a partner does not comply with the spirit of cooperation and displays opportunistic behaviors which leads to trust issues concerning misuse of knowledge of partners (Keers & Fenema, 2018). Performance risks involve the possibility intended strategic goals are missed even though cooperation is good among partners (Keers & Fenema, 2018). Performance risks involve capability and control issues such as lack of control, inadequate decision-making capability, and demand instability (Keers & Fenema, 2018). Systematic and specific project risks have subgroups of risks. Systematic risk groups are political, economic, legal, social, and natural risk groups (Xiong et al., 2017). Project risks for the private sector are the risks that jeopardize the project to go over budget and schedules to go past deadlines. Participants recommended leveraging incentives, delivery methods, and levels of control over the project to manage CSF. Since PPP contracts are complex documents written in the context of uncertainty and imperfect information, these contracts lend themselves to opportunistic behavior (Soliño & Gago de Santos, 2017). Soliño and Gago de Santos (2017) encouraged incentives in PPP contracts to motivate private partners to align their goals with public officials to limit moral hazards and perhaps transaction costs. The public sector may also incorporate pernicious incentives for opportunistic behavior (Domingues & Zlatkovic, 2015). While many variables dictate contract negotiations, risks will always be the most relevant variables.

### Theme 2: Strategies to Establish and Manage PPP

The second theme, strategies to establish and manage PPP, is derived from participants' perceptions regarding establishing, managing, and participating in PPPs. In establishing a PPP, participants felt that it was critical that partnerships consisted of the best teams available for the job in terms of expertise, financing, and capacity. Participants also expressed concern that there had to be clear objectives and goals for projects under consideration.

The participants were adamant that in establishing a PPP key partners must provide proof of financial stability and resources prior to joining the PPP. Participants said this requirement was a critical success factor to establish a PPP. Participants thought it should be a mandatory requirement that potential partners provide proforma financial statements and evidence of their operational and financial strength. It is not uncommon for private firms to take on significant investments to fund PPP activity during initial stages of a PPP. However, when making considerations for selecting partners or teams in a PPP, Danau and Vinella (2015) warned that private investment reliance on debt could be problematic to a PPP since projects highly-leveraged with more debt than other financing methods tend to be vulnerable to default. The ability to fund and sustain project activities is an important criterion for both establish and manage a PPP. For PPP in which private partners intend to fund certain aspects of a project, Danau and Vinella (2015) argues that project financing should consist of a mix private funds of loan debt, credit lines and private investment.

The participants in the case study expressed sincere concern about having clear objectives and goals for the PPP. This is essential for several reasons because the delivery method and financing methods are derived from the goals or objectives of the organization. P4 and P6 raised the prospect of using a PPP as a tool to obtain other goals and objectives beyond building structures. The participants expressed that sometimes the public sector partners will not make decisions that make business sense but is for the greater good of the community. This is similar to Laomy-Zinowik's (2017) example of a BOT contract where a local government needs financing for a project, and a private investor gets a concession for constructing and exploiting an element of public construction. After the construction is completed, a private entity gains profits from exploiting it. As with the case studies, the goals were not only to provide a professional sports venue for the local community and expand the capacity for visitors to stay in the local area but change negative perceptions about work and lifestyle in the county. PPPs should be viewed from different perspectives. According to Węgrzyn (2016), PPPs can be seen as a specific construction project, project delivery reform, government policy, part of the strong and capable private sector in a mixed economy, and part of a modern governance task. As previously mentioned, goal congruence is necessary with PPPs in order to achieve goals and objectives.

Discussions involving risks and public acceptance or buy-in are challenges listed by participants in the case studies. However, contract negotiations for long-term projects are an additional challenge worthy of being mentioned. Part of the challenge with PPP contracts is that, in practice, they are incomplete to the extent it is not possible to anticipate all future scenarios for any given contractual arrangement over an extended period such as 20 years or more (Domingues & Zlatkovic, 2015). PPPs regularly face significant challenges because of changing circumstances that were not anticipated in the planning phase, which may cause a project to exceed its budget and timespan (Demirel, Leendrtse, Volker, & Hertough, 2017). In some instances, service operators, facility managers, insurers, and consultants legally establish a new company or special purpose vehicle (SPV) to carry out the project (Greco, 2015). According to Greco (2015), SPVs may rely on a web of contracts aimed at various tasks, risks, costs, and revenues among all private partners. Potentially, these circumstances complicate contracting efforts.

## Theme 3: Strategies for Long-Term Success for PPPs

The third theme involved strategies for long-term success for PPPs. The minor themes are related to measures of success and secondly, considerations to have long-term sustainment for PPPs. The theme follows the same methodology as the previous two themes and strategies to address the uncertainty of project performance.

Measures of success are subjective to each stakeholder's perspective (Davis, 2016; Davis, 2018). Micro and macro methods are used to evaluate time, cost, quality, performance, safety, and factors of whether the end-users are satisfied with the results, respectively (Davis, 2016). Key performance indicators are seen as identified quantifiable critical success factors to achieve organizational goals and therefore, measures of success (Davis, 2016). Key performance indicators, such as earned value management are used to monitor project conditions during the life cycle of a project (Eshghi, Mousavi, Antucheviciene, & Mohagheghi, 2019). One other popular method to measure success is a balanced scorecard. The balanced scorecard is a framework to measure performance from both a financial and non-financial standpoint (Singh & Sethi, 2017). Some balanced scorecards give a balanced view of financial, internal business processes, learning and growth, and customer satisfaction (Davis, 2016).

Participants in the case studies offered various measures of success that matched one or more methods. Four out of five participants indicated that end-user acceptance is the dominant method for the measure of success in the case studies, and half of the participants viewed profits and financial indicators such as the internal rate of return as the next best method. According to one participant, a minimum tax value clause is in the contract for the case study, and the private sector must pay the local government if the minimum tax value is not obtained. Incentives are a measure of success as key performance indicators and have a causal relationship in which the former has a causal relationship to the latter (Crane, Koch, & Wei, 2018).

The participants contributed to the findings that a willingness to engage partners and mutual commitment among partners are two critical considerations for long-term sustainability. Three of the participants expressed the importance of partners willing to work through conflict during the long-term of the partnership. The participants felt that litigating through disagreements would put a negative strain on the long-term partnerships, whereas working to have a mutual understanding is preferred. Chung (2016) identified the inability of partners to work through conflict as a relational risk. Chung (2016) stated it takes the public sector's willingness to accept responsibility and risks, its reciprocity in handling contract ambiguities, and the ethical stances of both partners contribute to mitigating relational risks.

Some academic scholars have converging views regarding mutual commitment among partners in a PPP. Padma, Rosa, and Antonio (2017) suggested that there needs to be trust between the partners forged by strong two-way communications. Padma, Rosa and Antonio (2017) believed good communication builds trust between the parties and is a prerequisite for increased commitment. Benítez-Ávila, Hartmann, Dewulf, and Henseler (2018) offered that in the PPP context, relational norms should emphasize the need to openly discuss and involve different perspectives for addressing project issues given the diverse nature of varying organizational logics and tacit concern of public transparency.

Table 2

*Strategies to Identify and Manage CSF*

| Participant | Public Sector | Private Sector |
|---|---|---|
| Participant 1 | X | |
| Participant 2 | | X |
| Participant 3 | X | X |
| Participant 4 | X | X |

| | | |
|---|---|---|
| Participant 5 | | |

*Note*. X represents frequency contribution to theme

Table 3

*Strategies to Establish and Manage PPPs*

| Participant | Establishing PPP | Challenges to Forming PPP |
|---|---|---|
| Participant 1 | | X |
| Participant 2 | X | |
| Participant 3 | | X |
| Participant 4 | X | |
| Participant 5 | | |

*Note*. X represents frequency contribution to themes.

Table 4

*Strategies for Long-Term Success for PPPs*

| Participant | Measures of Success | Long-Term Sustainment |
|---|---|---|
| Participant 1 | | X |
| Participant 2 | X | |
| Participant 3 | X | |
| Participant 4 | | |

| | | |
|---|---|---|
| Participant 5 | X | X |

*Note*. X represents frequency contribution to themes.

## Applications to Professional Practice

Business practices can be enhanced by the findings in this study. PPPs are promoted as alternative procurement methods to provide public services and have been used both successfully and unsuccessfully for several decades (Ahmadabadi & Heravi, 2019). The findings in the study are indicative that PPPs are complicated. PPPs require thorough risk planning, insightful contract negotiations, and a strong partnership to endure challenges during the long-term relationship. The application of critical success factors to address these concerns are applicable to business practices.

It is well recognized that many factors may affect project performance or project success; however, due to various constraints, it makes sense to focus on the most critical success factors (Zuo et al., 2018). The use of critical success factors is practical to integrate into business practices because they play a crucial role in enabling and smoothing the process of integrating sustainability into project management practices (Banihashemi et al., 2017). Furthermore, scholars such as Ameyaw and Chan (2016) and Osei-Chan (2017a) argued CSFs are needed for PPPs to contribute to a notable level of project success. Lastly, PPP project leaders should form teams of qualified and experienced project professionals to explicitly discuss critical factors for the PPP in all phases of the lifecycle of the project.

## Implications for Social Change

Public and private stakeholders leveraged PPP opportunities to not only improve the economic opportunities in the city and increase the tax values of affected properties, but to add a new entertainment venue to the city. The projects studied are tools to recruit businesses and business professionals to the city as well as change the perceptions of the city as having fewer entertaining options in the region. Thus, profitability is essential but is a shared objective of the PPP.

Arguably, PPPs' successful execution may increase economic and social value to their communities. However, each PPP is unique to the public sector that originates the project so CSFs may vary in importance to each project. While the findings for this study are unique to this study, they should encourage businesses to participate in the PPP and support their community. Businesses that leverage the findings will increase the probability their PPP efforts lead to successful outcomes.

## Recommendations for Action

The results from this study should be shared with business and public sector project leaders engaging, considering participation, or researching PPPs. Businesses need to pay attention to the results to be aware of the critical considerations to increase their probability of success when pursuing this business opportunity. The results of this study can be disseminated through professional forums on PPPs, professional conferences, and professional training events for PPP participants.

The recommendations for this study lie in identifying CSFs, both positive and negatives, identifying risks with PPPs and stakeholder engagement. Studies are available on identifying critical factors affecting PPP implementation, development, and management of PPP projects (Osei-Kyei & Chan, 2015). The first recommendation in this study is that organizations should review the different lists of CSFs that pertain to their unique project endeavor to establish a baseline of critical success factors. PPPs have been widely applied in infrastructure sectors such as transport, education, healthcare, water, and wastewater treatment, and CSFs literature is available for review. PPP leaders should develop and use project teams of qualified and experienced PPP professionals to identify CSFs for all phases in a project lifecycle. Ideally, there are five elemental phases of a project lifecycle that require CSF identified include prework, starting the project, organizing and preparing, carrying out the work, and completing the project (PMI, 2017). The prework phase may include research on the project and stakeholders and a review of lessons learned in previous projects. Intuitively, the other phases are understandable but require thoughtful consideration to identify those activities that must be done correctly for the project to succeed.

Next, the tendering process is a key critical success factor for selecting competent firms with sound technical solutions for the proposed project. If the public sector is having difficulty finding qualified partners, they should leverage to private investors the opportunity for market entry in areas often restricted to the public sector or access to public resources and the sharing of risks. For businesses, tenderers should submit information on business qualifications, as well as, technical and financial proposals. The tendering process inputs and outputs should be used not only to select the best partners but contribute to the risk assessment and mitigation planning. It is recommended that project leaders leverage the tendering process to have meaningful dialogue on the purpose and goals of the PPP. Stakeholders must have a clear understanding that when practical, the public sector's best interest supersedes the profitability of the project.

There are no recommendations on whether direct negotiations, competitive negotiations, or competitive tendering are best for PPPs because of the uniqueness and circumstances surrounding each project. However, it is highly recommended during the contract negotiations phase; considerations are made for uncertainties, i.e., potential risks, or opportunities to avoid either exploitation of opportunities or mitigation of losses. The long-term sustainability of a PPP depends heavily on how stakeholders respond to unforeseen challenges; thus, thorough contract negotiations are recommended. Participants in the study highly recommended that PPPs include individuals with credible prior PPP experience on their teams to ensure proper planning considerations occur.

It is highly recommended that stakeholder engagement is included in the strategy for PPP planning and execution activities. The use of town halls, public forums, local television and radio mediums, and other meeting venues should be used to engage the public sector on PPP plans and activities. It is recommended that the use of citizens on advisory committees will enhance the acceptance of PPPs.

## Recommendations for Further Research

The current study used a qualitative method and a multiple case study research design to draw conclusions from experiences of perceptions of experienced PPP participants. The qualitative method was perfect for capturing the personal perspectives from participants about their PPP experiences. However, a quantitative study using hypothesis testing could further examine the dependent and independent variables of critical success factors such as risk identification to determine the intensity of the relationships and influences of CSF on the success of PPP.

The scope of this study was limited to identifying strategies to offset barriers to PPP success using CSF in a small region of the United States. Future studies may explore strategies on CSF for interstate PPPs as the United States' road and bridge networks are aging and becoming obsolete. As the interstate infrastructure continues to age, the state and the federal government will seek to leverage the private sector to burden share in repairing, improving, and maintaining the lines of communication. Business leaders will assess the body of knowledge of PPPs for the best strategy for unique projects.

The tendering process is critical for PPPs. There is little academic literature on both how to improve the effectiveness and efficiency of the PPP tendering stage and which method of tendering is best for PPP success. As previously mentioned, direct negotiations, competitive negotiations, or competitive tendering are methods to select partners for PPPs. Also, a quantitative study to understand the relationship between the tendering method and contract renegotiations will assist PPP leaders with valuable insight to the process.

## Reflections

During this study, I was able to research and learn about a procurement method in which I had no prior experience in the subject. This lack of knowledge on the subject limited my biases on the subject and allowed me to be open-minded about data collection and research on the subject. Several times during my career, I have been fortunate to work on a variety of projects but none to the magnitude of a sports venue or refurbishment of a vintage but exclusive hotel. The experience of this study gave me the serendipity of recognizing why the private sector would want to participant in PPP when the risks may limit the return on investment. During the data collection phase, I become keenly aware that investors sometimes will take risks to penetrate markets or to maintain market share even when financial models may reveal nominal profit available. I also became informed that some PPPs' opportunities offer the private sector a venue to invest a large sum of money that is not always readily available to the private sector. For instance, a toll road, sports stadium, or a water treatment plant could cost millions of dollars, whereas many other investments are for completed lesser amounts. Lastly, this study has allowed me to contribute to the body of knowledge regarding PPPs.

## Conclusion

This study explored strategies that project leaders in PPPs use to identify and manage CSFs to offset barriers to profitability throughout a project's lifecycle. The participants perceived that PPPs are often complicated and risk planning, thorough contract negotiations, and having a robust private consortium are top key critical factors to offset barriers to success. While public-private partnerships are ventures that provide the private and the public sectors the opportunity to collaborate on any type of project ranging from infrastructure to public utility to public health, it is essential to have goal congruence during the endeavor. Otherwise, competition among public and private sector goals will challenge the PPPs effectiveness and efficiency.

For the business sector, a PPP provides private stakeholders the opportunity to invest large sums of resources into otherwise unavailable projects. Additionally, PPPs provide the opportunity for market penetration that may only be available by traditional procurement methods. Businesses want to improve the probability they will get a return on investment, and critical success factors bolster the odds of this success. This study confirms that PPP project leaders should identify those critical factors necessary to succeed in these unique projects and incorporate those measures into their strategic project plans to ensure they meet their organizational goals in PPPs.

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# Appendix A: Interview Protocol

Things to remember:

Ensure recording devices are charged,
Collect the signed consent form,
Take notes during interview,
Maintain eye contact,
Turn off ringer on cell phone,
Ask probing questions,
Keep interview focus on research topic,
Be genuine and show interest in what participants are saying,
Do not interrupt participants and show I am listening carefully.

Introduction: Greetings:__XXXXXX_________Thank you for taking time out of your busy schedule to participant in my study study to address strategies for identifying and managing Public-Private Partnerships' critical success factors to offset barriers to profitability in a projects' lifecycle. I invited you because of your either Public-Private Partnership ( PPP) or project management leadership or experience from either the private or public sector .

Again, I want to emphasize this study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one will treat you differently if you decide not to be in the study. Even though you are about to participant in the study now, you can still change your mind later. You may stop at any time.

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as <u>fatigue</u>, <u>stress,</u> or <u>becoming upset.</u> Being in this study would not pose risk to your safety or wellbeing.

The study's potential benefits are the betterment of PPPs. PPPs could become more profitable if barriers to profitability are mitigated. Potentially there is a higher probability for local and state governments to deliver their required public service with the optimal cost.

As mentioned in the consent form, any information you provide will be kept confidential with the exception of criminal activity. Criminal activity can include financial fraud, theft, criminal negligence, tax evasion, work/residency regulations, or other crimes that do injure or harm persons. If the research procedures reveal these types of crimes, I have an obligation to report this information to the appropriate authorities.

I will not use your personal information for any purposes outside of this research project. Also, I will not include your name or anything else that could identify you in the study reports. Data will be kept secure by a secure drive that is password protected. All notes, transcripts,
and diagrams will be locked in secure container. Data will be kept for a period of at least 5 years, as required by the university.

After this interview I will synthesize the interview and provide you a copy of my recap to verify that I captured your perspective correctly in my notes and recording. Do you have any questions? I know your time is valuable so let's begin.

| NOTES: Follow Up Questions: | 1. What strategies do city project leaders use to identify and manage CSFs to offset barriers to profitability in PPP |
|---|---|
| | 2. What strategies do you use to establish the PPP and to mitigate risks? |
| | 3. How have you addressed the key challenges to forming and participating in a PPP? |
| | 4. What are the measures of success for PPP within your organization? |
| | 5. How do you ensure you reach your measures of success in a PPP? |
| | 6. How do you identify strategies to manage CSFs to ensure profitability of PPP projects? |
| | 7. Many PPPs are long-term projects extending more than 20 years. How do you ensure sustainability over a long-term lifecycle of a project and minimize reliance on contract renegotiations? |
| | 8. What additional information that you consider essential to ensure the long-term success of public-private partnerships that I did not ask that you want to add? |

| | |
|---|---|
| Wrap Up | . Thank you so much taking time out of your busy schedule to participant in this study. As I mentioned I will provide you a copy of my interpretation of your answers for you to verify that I captured your perspective. I will send you the document by email and you may respond if you like or you are not required to do so. However, I definitely would like you to make corrections if necessary If you have concerns later, you can reach me by email or call me and my information is on the consent form. Again, thank you for your participation. |