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A FRAMEWORK OF THE VALUE CREATION PROCESS IN PUBLIC-PRIVATE PARTNERSHIPS (PPPs): A PERSPECTIVE OF UGANDAN PROJECTS

A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS OF THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN THE

FACULTY OF COMMERCE

OF

RHODES UNIVERSITY

BY

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AUGUST 2025

Abstract

Governments worldwide have adopted Public Private Partnership projects (PPP projects) as a tool to create value for stakeholders in society, amidst funding constraints. Under the PPP arrangement, the government, representing itself and the general public, partners with the private sector and delegates part of its responsibilities to the private partner, while at the same time leveraging shared resources to deliver public products and services. Both partners, therefore, invest heavily in this partnership to deliver products and services in different sectors of the economy, thus creating value for stakeholders.

Evidence through a review of literature shows that whereas many countries have adopted PPPs as a mode of project delivery, in some contexts PPP projects have successfully created value for stakeholders, while in other contexts, they have failed. Generally, PPPs are attributed to improvement of service delivery and stakeholder satisfaction. Therefore, this failure is attributed to barriers within the current practices of the projects within the phases of the PPP Project Lifecycle (PPP-PLC) which hinder the value creation process. These failures have far-reaching effects which have over time been reported as public unrest, riots, project stagnation, project termination, project breakdowns and heavy losses. And, in some economies, the PPP mode of project delivery has been disbanded altogether. Yet, despite stakeholders' efforts to improve the value creation process, little is known about how successful PPP projects have over time within some economies created value while others failed within the same economy and outside. A number of justifications have been theorised about their failure and success in value creation. However, there is no framework developed to guide project stakeholders through the phases of the PPP-PLC to successfully create value. **The study therefore set out to develop a best practice value creation framework for PPP projects by answering the MRQ: "How is value created in PPP projects in Uganda's economy?" The aim of this thesis therefore is to examine how value is created in PPP projects in Uganda's landscape with the goal of developing and validating a best practice value creation framework that addresses the barriers, leverages the drivers and incorporates current and best practices across the PPP-PLC in the creation of value.**

The study, underpinned by Public Value Theory, examined PPP projects, from the Ugandan perspective to answer this research question. The study, guided by research sub questions adopted a qualitative research method to collect and analyse data from sixteen (16) participants from among PPP projects in Uganda. Using a purposive sampling technique, the study selected participants from among the stakeholders of PPP projects. The sample population was drawn from among project managers and end users who were directly involved in the PPP projects. The study adopted a cross-sectional time horizon to collect and analyse data. To collect data, the study used the interview technique that allowed the interviewer to interact directly with the participants. The participants were interviewed through Key Informant Interviews (KIIs) using a semi- structured interview guide. The interviews were conducted through different interview modes including, online, face-to-face, and by telephone. The study collected and analysed data concurrently until point of saturation. The collected data was analysed using Atlas. Ti-24 software in line with the research sub-questions and research propositions. The study thus made a theoretical contribution by presenting a best practice value creation framework for PPP projects. Underpinned by the PV theory the study made theoretical contributions by aligning projects and resources to stakeholder needs and expectations in the creation of value.

Keywords: Public-Private Partnerships, value creation, stakeholder satisfaction, public value theory, project life cycle, commitment, efficiency, collaboration, risk management, dispute resolution, communication, engagement, sustainability, current practices, best practices, drivers of value creation, drivers of value creation, barriers to value creation, best practice frameworks, frameworks as management tools.

Acknowledgements

Alhamdulillah. All praise and thanks be to Allah, the Almighty. It is by His divine will, mercy, and guidance that this journey has come to its completion.

This PhD was not walked alone, and I am deeply grateful to the many people who have stood by me.

To my supervisors, Professor P.D. Rwelamila and Professor Nhlanhla Cyril Mbatha. You have been there at every step of the way. Your guidance, patience, mentorship, unwavering support, belief in my work, and intellectual rigour shaped this research in unimaginable ways. Thank you!

To my loving husband Rashid Ssali, my number one champion, and my dear children, Ridhwan, Taufiq, Khaleel, Iman, and Yusra, thank you for your patience and love and for providing a peaceful environment for me to succeed. To my wonderful mother, Hajat Nabikindu Hawah, my cheerleader, even when she fell sick, she still checked on me daily, pushing me forward with her encouragement. Mama, your dream has come true. To my father, Hajj A.N.K Bawonga, whose pride in my journey has been a silent but apparent and potent source of motivation. My siblings, especially Dr Hamidah Nsereko and Dr Jamidah Nakato, set the pace for me and told it to me straight. I cannot take you for granted. My brothers, Swad, Fagil, Muzammil, and Muhammed, you collectively made sure I did not disappear into a world of books and deadlines. And Assoc. Prof. Nsereko, I appreciate the support.

To my fellow PhD student Shakilah Nagujja, my PhD companion with whom I was reminded that I was never alone in this pursuit.

To MUBS management, I am grateful and indebted to you for the financial support and investment in my career growth. I appreciate the opportunity you availed me and the push throughout the years. To my Strategy and Projects team, I could not have asked for a better group of colleagues to carry the load with.

And thank you to all who supported me in big and small ways, sent prayers, checked in, encouraged, and celebrated with me, my participants, and the language editors. This achievement is as much yours as it is mine.

Abbreviations

ABS	Asset Backed Securitisation
AfDB	African Development Bank
BLTM	Build Lease Transfer and Maintain
BLTM	Build Lease Transfer and Maintain
BOO	Build Own Operate
BOOT	Build Own, Operate and Transfer
BOT	Build, Operate and Transfer
DBFO	Design-Build Finance Operate
DBFOM	Design, Build, Finance, Operate, Manage
DBOT	Design-Build, Operate and Transfer
ECP	Electricity Connections Policy
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EPEC	European PPP Expertise Centre
ICRC	Infrastructure Concession Regulatory Commissions
ICT	Information and Communications Technology
JTC	Jurong Town Corporation
JV	Joint Ventures/ Partial Divestiture of public assets
KCCA	Kampala Capital City Authority
MoU	Memorandum of Understanding
MRQ	Major Research Question
NLRPP	New Legal Regime of PPP
OM	Operations and Management Contracts
P	Research Proposition
P(3)	Public Private Partnership
PABs	Private Activity Bonds
PAP	Project Affected Person
PFI	Private Financing Initiative
PLC	Project Lifecycle
PM	Project Manager
PPDA	Public Procurement and Disposal of Public Assets
PPP	Public-Private Partnership
PPP Unit	Public Private Partnership Unit
PV	Public value theory
SPV	Special Purpose Vehicle
SQ	Sub question
TENT-T	Trans-European Transport Networks
TIFIA	Transportation Infrastructure Financing and Innovation Act
U	User
UNRA	Uganda National Roads Authority
USD	United States Dollar
USE	Universal Secondary Education
VfM	Value for money

Glossary

Best Practices	The exemplary, promising or successfully demonstrated practices that produce superior results and are selected through a systematic process (Jarrar and Zairi, 2010: 735)
Concession	Time granted by the government to collect user feed from the end user and end user cost for usage of the infrastructure facility (Cui, Feng and Zhang, 2019: 7).
Framework	A framework is a customisable skeleton of an application for a developer (Johnson, 1997: 39)
Phase	Milestones of a project lifecycle are represented in smaller portions to achieve distinct goals.
PPP project arrangement	Relationships cemented by contracts, which regulate the structure and operations within it, fostering agreement between the public and private partners (Osei-Kyei and Chan, 2021: 2)
Private Partner	A legal entity that tenders for, finances, develops, and operates a public entity (Osei-Kyei and Chan, 2021).
Project Lifecycle	The start and end of a project (Keshta, 2022: 399)
Public Partner	Public authorities creating and implementing PPP policies, as well as those procuring the PPP (Naser Chowdhury, Chen, Tiong and Chen, 2011: 247).
Public Private Partnership	A long-term contractual agreement between public agencies and private partners that involves risk sharing at various stages of facility design, construction, finance, operation, and maintenance (Casady, Eriksson, Levitt and Scott, 2020: 162).
Stakeholder	Any group of individuals who can affect or are affected by achieving the organisation's objectives.
Subsidies	Any government assistance towards supporting consumers to purchase goods and services at a lower price (Good, 2024: 2).
Tariff	Price of the user charge in user-pay projects that may be fixed by the authority by the private partner under caps predetermined rules (APMG International, 2024). This term is often interchanged with the word *"toll."*

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CHAPTER ONE: GENERAL INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

Governments worldwide are increasingly pressurised to deliver infrastructure that addresses societal needs. However, due to financing gaps, limited expertise, and resource constraints, governments often struggle to meet these expectations of society. Further, the growing populations aggravate the situation, as the growing population's needs more often far exceed the financial resources available from traditional sources of funding public infrastructure development (Mofokeng, Alhassan and Zeka, 2024:1029). To address this, governments progressively turn to PPPs to deliver infrastructure in various sectors, including healthcare, education, and transportation (Kang and Vedlitz, 2025:2). Through PPP projects, governments delegate their role of developing public services to the private sector through partnerships (Buso, Moretto and Zormpas, 2021:2).

Literature indicates that globally, the PPP model is widely adopted and used in delivering of infrastructure within various sectors of the economy, including sectors of energy, water, sanitation, telecommunications, education, and health (Fabre and Straub, 2023:2). At the heart of PPP projects is a clear and compelling objective: value creation. This is the primary motivation behind the adoption of PPP projects (Li, Yuan, Liu, Ke & Jia, 2022:1). According to Porter (2010:2477), value creation revolves around outcomes relative to costs defined by the consumer.

PPP projects have gained traction due to the potential they have to create value for their stakeholders (Castelblanco *et al*., 2024:1). Cepparulo, Eusepi & Giuriato (2024: 192), define PPPs as,

> *"…long-term cooperative risk-sharing agreements between a public entity and a private partner for financing, building, and operating a public infrastructure together with a significant component of private finance."*

In the context of PPP projects, value is centred around delivery for the consumer, citizen, and end user. Under this arrangement, the public sector, represented by government, depends on the PPP setting to benefit from private sector actors' support towards the implementation of public policies (Wang, Xiong, Wu and Zhu, 2018: 293). The public sector, comprising the government, its agents, and the general public, plays a crucial role in delivering public value. Benington (2009: 236), argues that value to the public means the effort and skill by humans invested towards providing services to the public. Twizeyimana and Andersson (2019: 175), elaborate that defining public value through social value and well-being, increased trust and confidence in government, ethical behaviour and professionalism, open government capabilities, administrative efficiency, and improved public services.

Within the private sector, the absence of government and its failure to be involved towards meeting public needs presents an opportunity to create new business ventures (Kurniawati and Kustulasari, 2020: 162). According to Cobanoglu and Della Corte (2021:2), a private sector consists of,

> *"… a service or industry offered or owned by a person or an independent, commercial enterprise rather than by the state."*

In the context of PPPs, the role played by the private sector is crucial to improving investment efficiency and, in the long run, in improving the operating performance of government assets, which rely on government concessions (Chauhan and Marisetty, 2019: 564).

The partners, both public and private partners, have distinct roles that are based on mutual advantages, characterised by trust, openness, fairness, and mutual respect (Jamali, 2004: 418). For governments, selecting projects to pursue and developing projects involves making them attractive to private investors, protecting user and taxpayer interests, securing legitimacy and curbing corruption (Jooste and Scott, 2012: 155).

Typically, PPP projects combine project resources from both sectors through a contractual commitment aimed at creating value for stakeholders in crisis-ridden economies (Liu, Wang and Guo, 2021; Chung and Hensher, 2018). The ability of the public and private sectors to collaborate enables the project to deliver infrastructure projects that promise innovation and increased efficiency within the public sector sphere while deferring payments to the private sector to the future (Cepparulo *et al*., 2024: 193).

PPP projects are critical for economic survival, as they inherently possess value-creating mechanisms within their Project Life Cycle (PLC), directly impacting the quality of life of societies, empowering economic activities and supporting community income generation (Arimoro and Arimoro, 2015: 113). Due to the uniqueness and large size of projects, PPPs extend operations through phases, with their PPP-PLC typically spanning 25 to 50 years or longer (South, Eriksson and Levitt, 2018: 65).The long lifespan of PPPs fosters sustainability practices, where partners share resources and collaborate to mitigate risks during uncertain events (Tian, Fu, Xu and Sun, 2022: 2). A Special Purpose Vehicle (SPV) represents partners of a PPP project. This shell company acts as a conduit for actors' responses, with networks comprising relationships between the public procurer, private provider, constructor and operator, and legal advisors and financiers (Stafford and Stapleton, 2022: 951). Within this partnership, partners leverage resources like efficiency, expertise, and capital from the private sector, and it is the role of the public sector to provide social responsibility, public accountability, and a regulatory framework (Alizade, 2024: 34). The following section presents the study's research context.

1.2 The Research Context

Globally, countries like the United States of America (USA), the United Kingdom (UK), Spain, Portugal, France, South Africa, Türkiye, and Uganda have adopted PPP projects as a mode of service delivery. Their governments have enacted robust regulatory frameworks to accommodate private sector activities within their economies, resulting in heavy private sector investments in those countries. World Bank Report (2023: 2), reports that private sector participation in infrastructure delivery within different economies totals to USD$86.0 billion worldwide, with regional breakdowns as follows: USD$51.4 billion in East Asia and the Pacific, USD$4.2 billion in Europe and Central Asia, USD$15.8 billion in Latin America, USD$2.9 billion in the Middle East and North Africa, USD$8.2 billion in South Asia, and USD$3.5 billion in Sub-Saharan Africa. The heavy investments indicate a wide adoption and commitment towards PPP projects, demonstrating a need for PPP project delivery within the different economies.

Further, the increasing need for infrastructure is evident in the rising number of heavy investments, from 260 projects in 2022 to 322 projects in 2023 (World Bank Report, 2023: 3). In developing countries, PPP projects have delivered more than 5,000 infrastructural projects worth over US$1.5 trillion (World Bank, 2016: 14). This has been linked to a reduction in global poverty from 37.46% to 9.07% between 2011 and 2017 (World Bank, 2022: 29). The infrastructure developed through PPP projects attracts foreign direct investment, leading to job creation, bolstering of trade and commerce, and development and upgrade of infrastructure as an essential driver of economic progress (El Kawam, 2023: 6).

Value creation as a concept in PPP projects is not new. Testorelli, Tiso and Verbano, (2024: 1), defines value creation as:

> *"... to promote the creation of value for project stakeholders in practice, through the management of negative and positive risks, providing a perspective on sustainability orientation of projects."*

The PPP-PLC is value creating in nature, and evidence shows that the PPP-PLC is inherently value-creating in nature through the phases of project identification, procurement, design and implementation, operation and maintenance, and the transfer phase. Liu *et al*. (2021: 2), argue that there are three primary stakeholders for whom PPP projects create value, and these are represented under two primary partners: the public (consisting of the government and the general public, including the end user in the community) and the private partner. The public sector initiates a project to a particular phase, and the private sector takes it up to a specific phase to achieve project objectives (Almeile, Chipulu, Ojiako, Vahidi and Marshall, 2024: 696).

During these phases, partners invest resources jointly and engage in a range of value-creating processes integrated within the PPP-PLC phases to achieve set objectives. Value created by PPP projects manifests in various forms, ranging from economic, political, social, functional, emotional, ecological, technological, sustainable, aesthetic, safety, and intellectual, depending on the worth that the recipients place on the product or service created (Martinsuo, 2020: 2; Zeithaml, Verleye, Hatak, Koller and Zauner, 2020: 2). Value creation is inherent within and throughout the phases of the PPP-PLC and the project's lifespan. Figure 1.1 illustrates the concept of how value is created through the phases of the PPP- PLC.

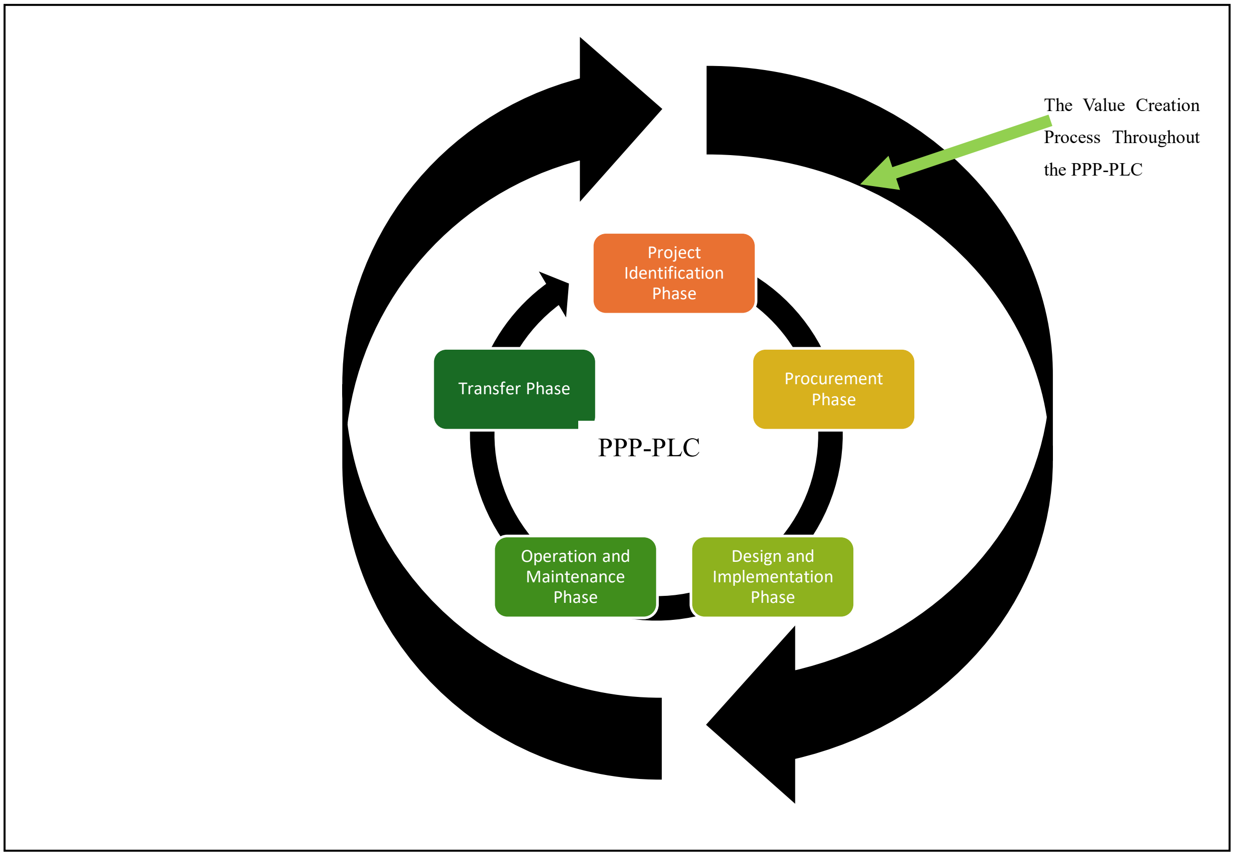


Figure 1.1: How Value is created through the phases of a typical PPP-PLC

Source: *Constructed by author*

Figure 1.1 illustrates how processes within the PPP-PLC phases create value and further shows that the value creation process occurs during the project implementation at the different phases. Several phases within the PPP-PLC have value creating processes for stakeholders. The diagram is inspired the five phase PPP-PLC model drawing from two key studies by Bao *et al*. (2018: 3); South *et al*. (2018: 63). However, this model extends beyond the phases by illustrating how the PLC transitions from one phase to the next. In doing so, the model emphasises the continuity and interdependence of value creation activities across the PPP-PLC. As illustrated in the diagram, the process starts with the project identification phase. At this phase, the stakeholders identify projects by conducting feasibility studies to establish project viability. Further, at this phase, stakeholders, represented mainly by the government or its entities and agencies, develop concept notes and feasibility studies to confirm the need for a PPP arrangement. Once the project is viable for PPP arrangement, the government proceeds to the procurement phase, where the private sector is chosen through competitive bidding processes.

The most competent partner is selected through rigorous processes, and a contract is signed with partners establishing their roles clearly while catering for stakeholder expectations. The project then proceeds to the design and implementation phase, where partners follow the contract to deliver infrastructure or develop innovative products and services that meet the needs of stakeholders. At this stage, if it is, for instance, construction, the project develops physical infrastructure like roads or constructs hospitals, depending on the mode of delivery agreed upon. There are a lot of exhibitions of knowledge and skills by the private sector and a need for resource transfer from partners and other stakeholders. The resources may be in the form of knowledge, funding, or land, depending on the nature of the project. The project then proceeds to the operation and maintenance phase, where projects deliver to consumers, communities, or end users in exchange for tariffs in case of user-pay projects. It may also include infrastructure upgrades, depending on the nature of the project's contract, but most importantly, this phase generates revenue for partners, especially for the private partner or investor.

The project then proceeds to the transfer phase, where assets are transferred, and these may be in the form of infrastructure or knowledge or skills from the private to the public sector. The assets must be transferred to be in good condition as per contract. At this point, an evaluation is conducted to gauge how the project performed per the contract terms of reference. Furthermore, the government or a third party assesses the impact of the project on the economy or society and measures how sustainable the project is, all of which inform the government on potential future PPP projects and provide direction on any future policy decisions to support PPP activities. Throughout the PPP-PLC, value-creation by stakeholders is influenced by many factors that may fall within or outside the sphere of the PP-PLC. These may present as barriers which projects must overcome to ensure value creation for all stakeholders.

From the onset of the phases of the PPP-PLC, partners strive to create value for stakeholders from the start of the PPP-PLC phases, with each phase building on the one before it, with partners investing resources to deliver value for stakeholders. PPP projects are essential because of the value-creating nature of their PLCs, which has pushed governments worldwide to enact legal frameworks to promote PPP activity. These frameworks ease the launch of PPP activities, allowing countries to tap into private sector resources to fill infrastructure gaps.

In Asia, Bangladesh has enacted policies to support PPP projects in sectors such as energy, telecommunication, gas, and transport (Anwar, Xiao, Waqar Abas and Ali, 2024: 184). Similarly, China has liberalised its policies to enable social capital engagement in various domains in partnership with the government (Li and Wei, 2024: 1).

Research indicates that China has a unique PPP model which has, over the years, facilitated the implementation of over 13,228 PPP projects globally and that this investment totals over USD$ 3.33 trillion (Wang *et al*., 2024: 1). Furthermore, that the country has thus far invested heavily in more PPP projects world over than any other country, using a unique PPP model (Jones and Bloomfield, 2020:829). This shift in focus from traditional infrastructure delivery to other sectors, such as energy and telecommunications, reflects the evolving nature of PPP policies. Also, Malaysia has successfully delivered 151 projects using the Private Finance Initiative (PFI) model, totalling RM 124.29 billion (Ahmad, Ismail and Zakaria, 2024: 594). The evidence points to the major contributions of PPP projects world-wide for stakeholders.

In Europe, the UK pioneered the implementation of two PPP types, namely the Private Finance Initiative (PFI) and Private Finance 2 (PF2) that were introduced between 1992 and 2018 (Biziorek *et al*., 2023: 2778). PPPs can improve economies in developed and developing countries, as evidenced by the implementation of over 700 projects in various sectors of the UK economy, which has set a standard for other countries. Russia, for example, has implemented several profitable projects in the transport sector, which have contributed to the development of roads, motorways, and infrastructure (Cobanoglu and Della Corte, 2021: 5). In East Africa, Uganda has made significant strides in implementing PPP projects, as it has constituted legal reforms and invested heavily in PPP projects, incurring substantial debt to address the annual US$ 400 million infrastructure deficit (Ogwang and Vanclay, 2021: 14). Although Uganda’s PPP program is still in its infancy, compared to other countries such as the UK, where such projects have been established for centuries, the government has attracted significant private sector funding, particularly in the energy sector, leading to an increase in PPP projects (World Bank, 2020: 57).

To support PPP activities, the Ugandan government has amended the PPDA Act, empowered the Office of the Auditor-General, approved the Partnership Act, operationalised the PPP Unit towards the development of PPP projects, and passed the Roads Act (16), (Duarte, Muthumanickam, Simpson and Morrow, 2023)(Office of the Auditor General Uganda, 2020: 10). As a result, private sector investments in Uganda, totalled US$426 million in 2017, equivalent to 1.3% of the country's GDP (Uganda Bureau Of Statistics, 2019: 3; World Bank, 2017a: 11). Furthermore, the government of Uganda has borrowed approximately US$19.54 billion from bilateral, multilateral, and private entities to invest in infrastructure development, equivalent to 47% of Uganda's GDP (MOFPED, 2022: 3). Currently, Uganda has 28 PPP projects worth over US$1.9 billion, which reached financial closure between 1990 and 2017, distributed across various sectors, including energy, tourism, health, agriculture, transport, climate change, water, and business (Meyer, Eberhard and Gratwick, 2018: 87; World Bank Group, 2017: 20). Despite government and private sector support and the value-creating mechanisms inherent in the PPP-PLC, PPP projects in some countries and sectors are not effectively creating value for stakeholders. The study presents the statement of the problem in the next section.

1.3 Statement Of The Problem

PPP projects have attracted a lot of attention due to their high failure rates, which are characterised by project breakdowns, premature termination of project contracts or delays in project progress (Liu, Sankaran, Ke and Song, 2024: 266). The consequences of the PPP project failures are far-reaching and have affected various stakeholders over the years. For instance, in the United Kingdom, despite the heavy investments in PPP projects by the year 2025, projects valued at £188.35bn were terminated. There was political opposition and claims of inefficient management of assets when the government took over the projects (Shu, Smyth and Haslam, 2024: 364). Similarly, India launched a five-year investment in PPP projects worth USD $1trillion, however many PPP projects remained underdeveloped or unawarded, leading to delayed project delivery and an estimated 77.3% cost increase for 238 infrastructure projects (Nallathiga, Shaikh, Shaikh and Sheik, 2017: 1). China witnessed a rapid growth in PPP projects between 2015 and 2017, followed by a decline, prompting an inquiry into the stagnation of PPP projects and the suspension of some of the PPP projects by the Ministry of Finance (Li and Wei, 2024: 2). Globally, the (World Bank Report, 2023: 3), reports a decrease in Private participation in Infrastructure (PPI) from US$91.3 billion in 2022 to US$86.0 billion in 2023. Researchers attribute these failures to various factors, including the public sector's inability to afford projects, public protests, and political opposition, which can lead to demands for termination of contracts (Soomro, Li and Han, 2022: 2074).

Furthermore, researchers highlighted the underperformance of PPP projects, particularly user-pay projects, which have reportedly failed to manage stakeholder expectations, thereby falling short of public support (Castelblanco, Asce, Guevara and Asce, 2024: 1). The failures in PPP projects are attributed to poor planning, under-estimation of costs, operational performance failures and opportunistic behaviour of the private partners (Wang, 2009: 780).

In Uganda, the context of this study, the government reported substantial losses in 2017, worth US$300 million annually, attributed to existing inefficiencies in infrastructure (World Bank, 2017b: 22). Further, Uganda's PPP projects are reportedly plagued by stakeholder dissatisfaction, a flawed regulatory framework, accumulated debt, infrastructure deficits, and public outcry, all of which affect the country's ability to achieve middle-income status by 2040 (Al Yaqoobi and Ausloos, 2022: 8; Kisitu, 2018: 83; Song, Hu and Feng, 2018: 2). In addition, researchers confirmed that there were challenges that existed within PPP projects, arising from self-interest that increased partner opportunistic behaviour and posed a risk to both the public and private partners together with the stakeholders (Stafford and Stapleton, 2016: 381).

However, in some contexts, PPP projects succeeded in value creation but failed in others. The variations called for examining the processes within PPP projects that restrained some projects from creating value and drove other projects to create value for stakeholders.

1.4 The Research Gap

Extant literature highlighted the persistent issues that plague PPP arrangements, particularly the risk of failure to create value. This risk manifested in different PPP projects in various ways, for example, as failure to realise value for money, termination of concession agreements, suspension of contracts, and a halt in project activities (Lee and Kim, 2024: 5).

A concerning aspect in PPP projects is the dominance of powerful partners in project activities, especially funding, which influences the decision-making process and, therefore, excludes end users from the strategic decision-making project and, ultimately, hinders their influence in the service delivery, which contributes to challenges (Henjewele, Fewings and Rwelamila, Pantaleo, 2013: 12).

But, despite the importance of addressing these issues, research on PPP projects over time primarily focused on other aspects of PPPs like as risk management, critical success factors, financing investment, climate, procurement processes, economic viability, and concession durations among others (Li and Wei, 2024: 2).

Whereas these studies were critical, they overlooked the importance of value creation for stakeholders. Researchers like Brogaard (2019: 618), explored the concept of value creation within the context of PPPs but focused on the competencies of participants, collaborative processes, structural characteristics, and business contexts. Consequently, existing research emphasised and focused on discrepancies in stakeholder matters like their expectations, public dissatisfaction, financial crises, rising private financing costs, and pressure from civil society organisations.

For PPP projects to tackle the issue of failure to create value, it is critical to deliberately incorporate value-creating mechanisms into each phase of the lifecycle. Grossi, Vakkuri and Sargiacomo, (2022): 578; Malacina *et al*., (2022: 16); Vecchi, Cusumano and Casalini, (2022: 386), suggested that the enhancement of value creation for users may result in elevated levels of user satisfaction by introducing concepts such as outcome-based contracting or the establishment of performance indicators for procurement. Value creation in PPP projects is, therefore, important.

Despite its importance, existing research has overlooked the examination of the detailed processes and mechanisms involved in PPP value creation. Moreover, while empirical studies have documented the significant investments by PPP projects world-wide, the knowledge gap in empirical studies on PPP concepts remains (Zhou, 2024: 3). Many studies have explored the enablers and constraints of value creation in PPPs but often neglect the dynamics of interaction between the participants or stakeholders that drive value (Priharsari, Abedin and Mastio, 2019: 765). *The link between the value creation process, the stakeholders and PPP-PLC remains unexplored.* Nallathiga *et al*. (2017: 10), emphasise that each phase of the PPP project has unique requirements that must be satisfied to ensure project success. *The focus therefore should be on how projects create value for stakeholders through the phases of their lifecycle. This study, therefore, sought to address this gap by exploring the detailed processes and mechanisms of value creation* *within PPP-PLC.* The study developed a best practice value creation framework aligned with stakeholder interests to ensure sustainable value creation throughout the PPP-PLC.

1.5 Theory Underpinning This Study

Existing research on value creation within diverse contexts, including procurement, governance, innovation, risk management, and collaboration, has been underpinned by various theories such as marketing, public administration, management, and stakeholder theory (Osborne Madeline Powell, 2022; Bacq and Aguilera, 2021). In the context of PPPs, studies have employed stakeholder, principal-agent, and game theories to examine the complexity of stakeholder relationships and the shift of power from the public to the private sector (Moore and Vining, 2023: 268; Wegrzyn and Wojewnik-Filipkowska, 2022: 5; Villani, Greco and Phillips, 2017: 878).

Despite the large amount of theoretical and empirical work on PPP projects, the Public Value (PV) theory has been largely overlooked in understanding the value creation process. The present study aims to bridge this gap by applying the PV theory to analyse and explain the value creation process of PPP projects. The research contributes to the extant literature by providing insights into the current and best practices within the PPP-PLC through the lens of the PV Theory.

The PV theory, developed by Moore in 1995, provides a foundational perspective on how government enterprises create public value that satisfies public demands for accountability. This theory emphasises the role of managers in government, guiding their activities towards performance measurement for improved performance (Moore, 2012). According to the PV theory, governments leverage design systems, resources and assets entrusted to their offices to ensure that the private sector and government jointly provide responsive services to users and citizens, as is the case with PPPs (Benington and Moore, 2010: 4). The PV theory highlights the responsibility shared between the public sector, policymakers, managers in government entities, and the community, ensuring operational possibility, political viability and securing societal legitimacy (Osborne Madeline Powell, 2022: 635). The theory posits that government is primarily accountable to its citizens as the sole provider of public value, especially infrastructure products and services. However, in times of profound economic, ecological, political, and social challenges, the government may solicit private sector support and collaboration to provide public services at a cost, as is the case in PPP projects (MacLean and Titah, 2022: 24; Esposito and Dicorato, 2020: 1). In a typical PPP, the public partner (government), private partner, and end-user in society are primary stakeholders who leverage their resources, participate, innovate, make decisions, and collaborate in differing ways to create value for stakeholders (Menezes and Vieira, 2022; Callens, Verhoest and Boon, 2021; Song, Sun and Fan, 2020).

Using the PV theory, this study explains the concept of value creation in PPPs, which transcends single individuals, organisations, society, regions, belief levels and ecosystems, linking the needs and imaginations of stakeholders and translating them into goals that the project defines in a way that stakeholders deem valuable (International Federation of Accountants, 2020: 5; Vakkuri and Johanson, 2020: 4; Priem, Wenzel and Koch, 2018: 6).

In this effort, partners' collective expectations and stakeholders play distinct roles throughout the PPP-PLC, collectively driving demand, fostering creativity, and promoting innovation to achieve shared goals (Pejnović, 2022: 251). The study establishes that current and best practices in a typical PPP are crucial for creating value for stakeholders. Practices such as partnership, participation, dynamic decision-making, and innovation are vital for promoting partner commitment to investing in a PPP and creating synergy necessary for partners to provide opportunities that create value for stakeholders jointly (Tapaninaho and Heikkinen, 2022: 2738; Zhang, Yuan, Zhao, Cheng and Li, 2022: 1).

This study aims to develop a best practice value creation framework for PPP projects to create value for all stakeholders. The following section presents the research methods adopted by this study to collect and analyse data to achieve the main research goal.

1.6 Research Design And Methodology

This section delivers an overview of this study's research design, methodology, and methods, focusing on how they contributed to the extant literature and supported the study to achieve the main research goal: **To develop a best practice value creation framework for PPP projects.** A comprehensive examination of the research design, methodology and methods is provided in Chapter Four.

Guided by Saunders, Lewis and Thornhill (2019: 130)'s research onion, this section outlines the research philosophy, approach, methodology strategy, time horizon and techniques that informed the research process. A research philosophy serves as the foundation of a research process, using a research paradigm to underpin crucial judgments and provide a researcher's sense of truth, reality, and knowledge (Coates, 2021; Basias and Pollalis, 2018; Ragab and Arisha, 2018). The research questions informed the study's adoption of a qualitative approach and an interpretive paradigm for data collection and analysis. The study employed a non-probability sampling method, precisely using the purposive sampling technique to select a representative sample from the total population of stakeholders. According to Dolores and Tongco (2007: 154), purposive sampling ensures validity when the sample represents the population. For this study, the unit of inquiry comprised stakeholders of PPP projects in Uganda, including project managers and project end users. The unit of analysis was PPP projects in Uganda. The sample was drawn from a population of twenty-eight (28) PPP projects in Uganda, as cited by Spector (2019: 131); World Bank (2019: 20). Using the purposive sampling technique, the study selected participants based on their role in the PPP value creation process and experience.

This study adopted a cross-sectional time horizon to collect and analyse the qualitative data at a single point in time. Data was collected from the sample through interviews, a technique that allows the researcher to interact directly with participants to gather in-depth insights into the phenomena under study (Khan and Puthussery, 2019: 3; Almalki, Mohammed, Al-Hanawi and Al-Hanawi, 2018: 15).

A semi-structured interview guide (KII) was used to conduct the key informant interviews (KII). The development of the interview guide began with identifying information to be collected using the research questions and research propositions. These served as the blueprint for the interview questions. The blueprint thus encompassed various aspects of the study context (Sadan, 2017: 61). The interviews were conducted using multiple interview modes: face-to-face, online, and telephone conversations. Each interview lasted about one hour to minimise participant fatigue. They were scheduled based on participant convenience for inclusivity and to ensure that there were minimal disruptions to their individual commitments. Peasgood *et al*. (2023: 10), agreed that the different interview modes, such as online and face-to-face interviews, are widely used because of their convenience and ability to establish a stronger personal connection with the participants.

This approach enabled an in-depth investigation of the experiences of PPP project managers and project end users as stakeholders to gain insight into the activities undertaken during the value creation process. The research sought to capture their experiences and perceptions about the value creation process within the PPP-PLC phases.

The data collected from the interviews included the researcher's notes and audio recordings. The recordings captured both the verbal responses and the contextual details like the time of the interview, the setting in which the interview took place, and the research participants' non-verbal behaviour (Zahle, 2021: 104). The study collected data until the point of saturation was reached. According to Fusch and Ness (2015: 1409), researchers conduct interviews to collect data until they reach data saturation.

In qualitative research, saturation is the criterion to determine when to discontinue data collection and analysis (Saunders *et al*., 2018:1894). Saturation is achieved when the analysis of subsequent interview transcripts shows no new themes or patterns, indicating that the similarity in findings is as a result of having collected sufficient data needed to address the research questions (Asadul Islam and Mazyed Aldaihani, 2022:9). For this study, data collection ceased once saturation was reached, and no further insights were gained. The target population was 28 participants from 28 PPP projects in Uganda, and the study aimed to collect data from the target population until the point of saturation. The study reached data saturation at 16 KII with participants when no new themes emerged from additional interview transcripts. Out of the 16 KII, 13 were project managers, and three (3) were project end users. Participants were drawn from diverse sectors, including energy, transportation, agriculture, and health. Out of the 16 interviews conducted, eleven (11) were face-to-face, three (3) Zoom interviews and two (2) telephone interviews. The researcher recorded the interviews using an audio recorder. Data was stored using the Rhodes University Microsoft 365 cloud storage, and the files were password encrypted.

The audio recordings of interviews were transcribed verbatim as data were being collected, and analysis was conducted concurrently until saturation. The data was analysed using thematic analysis, supported by Atlas-Ti 24 software. Data from transcripts was coded and analysed to identify themes and patterns (Hitchcock and Onwuegbuzie, 2022:8). The analysis focused on both the audio recordings and the researchers' notes; thereafter, the data was dismantled to distinguish between themes and concepts. These concepts were then categorised based on their relevance and content (Nkundabanyanga *et al*., 2022:11). This approach identified patterns in stakeholder perceptions, challenges, and best practices, forming the foundation for developing a best practice value creation framework for PPP projects, presented in Chapter Seven.

This study was guided by a main research question (MRQ) and research goal, which informed the data collection and analysis process. The nature of the interview questions, especially in qualitative studies, is that they are often broad and open-ended, designed to allow for an in-depth exploration and understanding of phenomena under study (Cao Thanh and Thi Le Thanh, 2015:26).

The MRQ is: **How is value created in PPP projects in Uganda's economy?**

The research goal is: To **develop a best practice value creation framework for Public-Private Partnership (PPP) projects.**

Derived from the main research question, the sub-questions (SQs) guiding the investigation included,

SQ1: What *is the potential of PPP projects to create value for stakeholders?*

SQ2: What *are the current practices within PPP projects in Uganda that create value?*

SQ3: What *are the barriers to value creation within PPP projects in Uganda?*

SQ4: What *are the best practices within the PPP-PLC that create value for stakeholders?*

SQ5: What *is the relationship between current and best practices within the PPP-PLC in the creation of value for stakeholders*

The sub-goals of the study as derived from the research goal include:

a) To examine the existing knowledge on PPP projects to gain an understanding of the drivers and barriers of the value creation process in PPP projects.
b) To explore current practices in Uganda and global best practices of value creation in PPP projects that address the challenges identified.
c) To develop and validate a best practice value creation framework that addresses the challenges of PPP projects identified from the study.

In line with the research goal and research question, the study developed a research conceptual framework guided by the research propositions presented in Table 1.1.

Table 1.1: Sub-Questions (SQ) and Research Propositions (P)

Research Sub-Questions (SQ)	Research Propositions (P)
SQ (1): What is the potential of PPP projects to create value for stakeholders?	P (1): PPP projects have the potential to create value for stakeholders through the Project Life Cycle (PLC).
SQ (2): What are the current practices within Uganda's PPP projects that create value for stakeholders	P (2): Current practices within Uganda's PPP projects can create value for stakeholders
SQ (3): What are the barriers to value creation within PPP projects in Uganda?	P (3): There are barriers to value creation within PPP projects in Uganda.
SQ (4): What is the potential of best practices within PPP-PLC to create value for stakeholders?	P (4): Best practices within PPP-PLC enhance value for stakeholders.
SQ (5): What is the relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders	P (5): There is a significant relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders

Guided by these research questions and propositions, this study presents a research conceptual framework (Figure 1.2). This framework illustrates the relationship between the research propositions and informed the data collection and analysis process. The purpose was to achieve the major research goal of developing a best practice value creation framework for PPP projects. The research conceptual framework was grounded in the PV theory, which provided a theoretical foundation for understanding value creation in PPP projects.

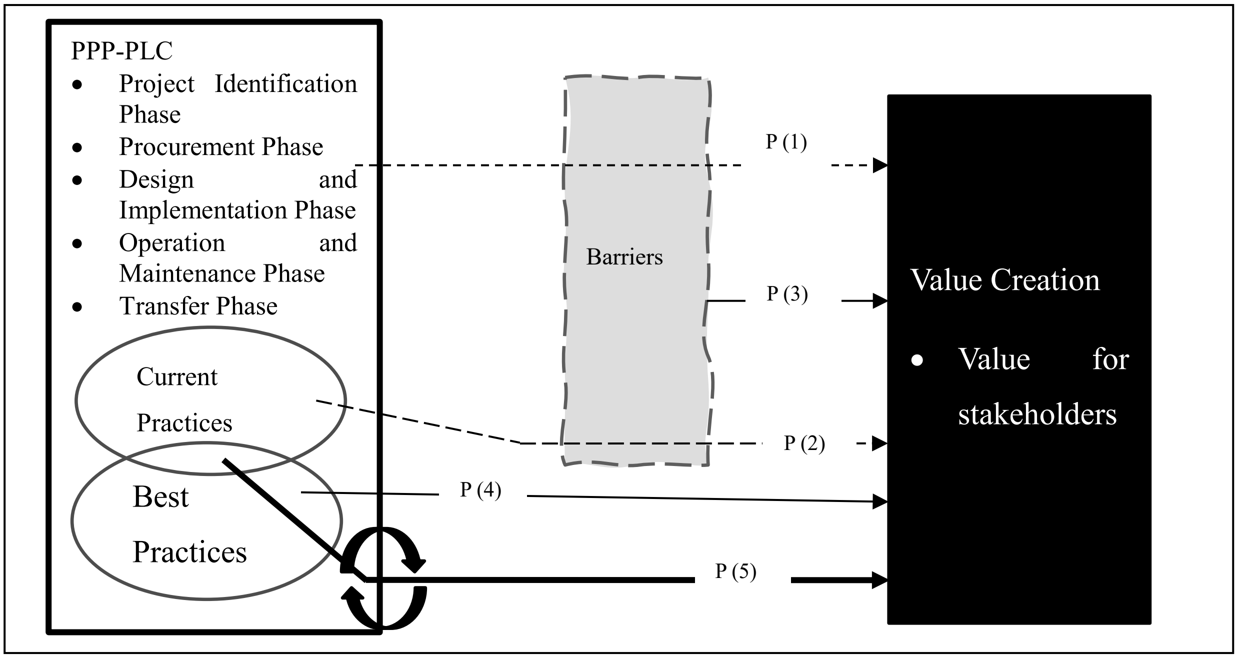


Figure 1.2: Research conceptual framework

Source: *Constructed by author*

Figure 1.2 presents a research conceptual framework, which guided the study, illustrating the relationships between the concepts and how the research propositions were derived to link concepts with each other. The conceptual framework showcases the key elements influencing value creation. It draws inspiration from the logic of the PPP-PLC in PPPs and the value creation literature. Further, the framework is inspired by and grounded in the PV theory, which emphasises the creation of value for stakeholders by the public sector. At the centre of the framework is the concept of value creation, which is the primary focus of this study. The framework illustrates the occurrence of value creation practices throughout the PPP-PLC, which comprises several phases, from project identification to procurement, design and construction, operation and maintenance, and transfer. The framework also identifies the five key factors that influence value creation in PPP projects: current practices, barriers to value creation, best practices, stakeholder engagement and public value outcomes. The framework is built around five research propositions:

According to the Figure, research proposition P (1) suggested that PPP projects have the potential to create value for stakeholders through the PPP-PLC. On the other hand, P (2) posits that current practices within Uganda's PPP projects create value for stakeholders. Further P (3) acknowledges that there are barriers to value creation within PPP projects in Uganda. P (4) proposes that best practices within PPP-PLC enhance value for stakeholders. Finally, P (5) suggested that there is a relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders. To answer the MRQ, this study set out to prove or disprove the research propositions (P (1)-P (5)).

The conceptual framework, therefore, illustrates the connection between the research propositions and suggests that proving or disproving them guides stakeholders in the value creation process. This research conceptual framework thus provides a theoretical foundation and guide for this study to answer the MRQ by addressing the SQs through data collection and analysis.

1.7 Ethical Considerations And Data Management

Ethical considerations are crucial in studies involving human participants. When humans are used as study participants, care must be exercised to ensure that they are protected (Rani and Sharma, 2012: 45). There is no other way of obtaining truth and solving real problems without ethics in research (Hasan *et al*., 2021:1). Conducting research responsibly requires that participants voluntarily engage in the study with full awareness of its purpose, procedures, and potential benefits (Gajjar, 2013: 12). The researchers must also be competent in evaluating risks related to the study. This study collected data using a semi-structured interview guide to guide the Key Informant Interviews (KIIs). In adherence to ethical standards, the study obtained ethical clearance (APPENDIX II), from the Rhodes University Human Ethics Standards Committee (**Review Reference Number 2023-7172-7535**), through the Ethical Review Applications System before primary data collection. To observe ethical standards, additional permissions, such as the gatekeeper permissions, were secured from the PPP-Unit of Uganda's MoFP&ED.

Lomet, Ooi, Su and Tsotras, (2009: 5), emphasised the importance of data management principles, the failure of which compromises the integrity of the research. Strict data management protocols are important to a study in safeguarding data integrity, ensuring participant anonymity and maintaining trust.

Data storage procedures included securely storing audio recordings from online, telephone and face-to-face interviews. All recordings were anonymised in compliance with confidentiality standards and stored on password-protected encrypted hard drives. This study backed up the file onto an institutionally provided online backup system via Microsoft 365, following Rhodes University's institutional policies.

1.8 Importance Of The Study And Its Contribution

This study proved research propositions in line with the SQs, thereby gaining insight into the barriers that hinder the value creation process and the current practices and best practices within PPP projects that also create value for stakeholders. The data was presented and analysed in line with the adopted PPP-PLC, and these formed the building blocks for the development of the best practice framework, which was the study's contribution.

Further, the study contributes to the growing body of knowledge on PPP-project, extending beyond what is known of the typical PPP model to understanding the PPP-PLC from the perspectives of the different sectors and how diverse value is within the different sectors. In addition, the traditional focus of stakeholders of PPP projects was on aspects of value for money, efficiency, effectiveness, and success, among others; the study has proved this to be a narrow scope and presented a lens through which PPP projects can be assessed using elements of value creation.

Ultimately, the study contributes to the literature by presenting the best practice value creation framework for PPP projects in Chapter Seven, which is scalable, adaptable within different sectors, and fit for purpose.

1.9 Limitations And Delimitations Of The Study

This study, like others has limitations that influence its processes and outputs and these include:

i. The study was conducted in Uganda, and focused on PPP projects that were operating within Uganda's existing legal framework. Even though the findings offer insights into other developing countries within similar PPP contexts, the framework may not be directly transferable to different contexts without appropriate adaptation. This geographical delimitation was a deliberate methodological choice to maintain focus and depth, but it also limits the study's external generalisability.

ii. The study set out to, and addressed a complex and evolving concept around value creation in PPPs, within a specific timeframe, using cross-sectional data collected from stakeholders. Yet given the nature of the study and the long-term and dynamic nature of PPP projects, the study was only able to present a snapshot in time but not fully capture how the value creation processes evolves over the entire project life cycle nor respond to shifts in stakeholder needs.

iii. A validation exercise was conducted, and this involved four experts to establish the degree of appropriateness, degree of objectivity, replicability, applicability, reliability and suitability of the framework for PPP projects. However, a comprehensive empirical testing of the framework was not conducted, therefore the framework has not yet been applied or tested in real-world PPP settings. This represents a limitation that future research should address by conducting extensive field-based applications to strengthen the framework.

1.10 Structure Of The Chapters

This thesis is organised in an order of eight Chapters, each Chapter addressing a specific aspect of the research. The structure is as follows:

Chapter One introduces the study, providing the introduction, background of the study, the research context, statement of the problem, and research gap. It also outlines the theory underpinning the study and summarises research design, methodology and methods, ethical considerations, and data management. Additionally, it highlights the importance of the study, its contributions, limitations, and delimitations, and concludes with the Chapters' structure as they appear in the thesis.

Chapter Two reviews the literature on value creation in PPP projects across the different continents, with a focus on the concept of value and how it is created within different economies, and finally, focuses on the Ugandan context.

Chapter Three explores the theory and practice of frameworks as management tools. This Chapter presents how studies developed their own practice frameworks. Through a thorough review of the theory of framework development, the study derived a checklist to guide framework development for this study and future studies.

Chapter Four presents the study's research design and methodology. This Chapter discusses in detail the research framework, techniques, tools, philosophies, paradigms, and approaches that the study employs to collect, analyse, and interpret data to answer the MRQ. It further details the steps taken by the study in the inquiry.

Chapter Five presents the empirical data collected by the study from the field and from the sample population using the research design and methodology adopted. It used text, diagrams, Tables, and Figures to present the data aligned with the SQs and research propositions to address the MRQ.

Chapter Six presents a thorough examination and reflection on the results of the study and their implications. It identifies emerging patterns, uncovers deeper meanings, and facilitates comparisons with other studies. This Chapter discusses the concept of the value creation processes in PPP projects by synthesising the results of the data collected from the study in line with the SQs.

Chapter Seven achieves the major research goal by presenting a best practice value creation framework for PPP projects as a significant contribution to knowledge. Drawing from the literature review in Chapter Three, this Chapter offers a practical illustration of the study's efforts to establish the best practice framework. Further, the Chapter presents a validated framework in diagram form.

Chapter Eight wraps up the study by summarising the key findings, offering recommendations, and discussing the achievement of its major research goal. Furthermore, the Chapter reflects on the study's contributions and proposes areas for future research exploration.

CHAPTER TWO : THEORY AND PRACTICE OF VALUE CREATION IN PPP PROJECTS

2.1 Introduction

This Chapter presents a comprehensive review of literature on value creation within the PPP-PLC in line with SQs. The main focus is to explore the concept of value creation in PPP projects, to understand how these projects create value for their stakeholders. The overarching goal of this study is to develop a best practice value creation framework for PPP projects. To achieve this, the study presents an overview of the conventional procurement methods, the history of PPP projects, the reasons why governments adopt PPP projects, the PPP-Project Life Cycle (PPP-PLC), different PPP arrangements, value creation in PPP projects, drivers of value creation in PPP projects, the barriers of the value creation process in PPP projects, theoretical perspectives of the PV theory, theoretical and practical perspectives of PPP-Project set-ups in both global and Ugandan contexts, key issues emerging from the literature review.

2.1.1 Overview

Governments of both underdeveloped and developing countries constantly face funding challenges that have proved a hindrance to their ability to meet the pressing needs of society (Nguyen and Islam, 2024: 2). Their needs, which are basic in nature but fundamental to sustainable development, require governments to develop effective strategies to fulfil the needs of citizens who are also stakeholders in society (Awad, Bartlett and Conaldi, 2020: 197). Among the needs of society, is infrastructure, which encompasses fixed installations, such as roads, bridges, water systems, information technology and energy systems (Irons, 2023: 3).

There are many definitions of the term “infrastructure”. Kanoi, Koh, Lim, Yamada and Dove (2022: 1), define it in big material terms, using terms like dams, buildings, roads, among others.

Chenger and Woiceshyn (2021: 178), define infrastructure in technological terms as a technological system that provides essential services. On the other hand, Khumalo, Choga and Munapo (2017: 38), define infrastructure as a set of systems necessary for a community's proper functioning. For purposes of this research, this study adopts the definition by Khumalo *et al*. (2017:

38), as it presents infrastructure as all-encompassing of systems and facilities and serves well for the context of this study. Infrastructure supports daily life, facilitating the movement of goods and, services and information across urban and regional areas (Jayasena *et al*., 2024: 1).

In developing countries, the demand for strong infrastructure is driven by investments in real estate, communication, transport, utility development and increasing population. In developed countries, the focus is on upgrading of ageing infrastructure, integrating advanced technology, and supporting industrialised economies (Gupta, 2020: 1).

Beyond infrastructure, governments are responsible for providing the public with a range of essential goods and services (Davies, MacAulay and Brady, 2019: 119). To bridge the gap between service demands and available resources, governments enact frameworks to support the operations of policy makers, service providers and citizens (Elayah, Al-Sameai, Khodr and Gamar, 2023: 3). The frameworks support the efficient delivery of not only infrastructure but also other critical services within the sectors of ICT, energy, water, transport, and sanitation, which create much-needed circumstances for socio-economic development (Maciulyte-Sniukiene and Butkus, 2022: 1).

Globally, the need for well-developed infrastructure continues to rise. By 2030, an estimated USD 57 Trillion will be required to close the infrastructure gap, the failure of which shall limit the economic growth and development potential of economies (Gundes, 2022: 68). High-quality service provision remains a key responsibility of the government, yet due to limitations in expertise and finances, it opts to collaborate with the private sector to ensure high-quality, affordable, and efficient service provision for citizens (Silva *et al*., 2022: 2). Engagement of private sector through conventional public procurement and PPP projects are some of the strategies adopted by the government (Abdul Manaf, Martadha Mohamed and Harvey, 2022: 1).

A PPP is a long-term contractual agreement between public agencies and private partners that increase private participation and risk-sharing in various stages of the PLC, including facility design, construction, financing, operations, and maintenance (Casady, Erikson, Levitt and Scott, 2018: 162). By nature, a PPP is a partnership between the public and private sector who are the major partners and engage in a long-term relationship where the public partner, through its agencies, facilitates service delivery to meet societal needs (Zhou *et al*., 2022: 4). To understand the concept of PPP, it is important to define the partners in this partnership. There are many definitions of the concept of a private partner in PPP projects. For research purposes, this study adopts the definition by Osei-Kyei and Chan (2021: 8), who defines a private partner as,

> *"... a legal entity that tenders for, finances, develops, and operates a public entity."*

This definition qualifies the private partner as a finance developer whose capabilities extend to operating facilities in a public sphere. This definition fits well with the current study on PPP projects.

Further, for research purposes, this study adopts the definition by Rwelamila, Fewings and Henjewele (2015: 5), on a public partner. The researchers define the public partner as,

> *"... taxpayers, user of public facilities such as roads or sewers, the government, the commissioning department such as the prisons service or those impacted by the operation of such services…"*

The definition adopted encompasses the diverse stakeholders within the public that are affected by the project, not only the government. In the context of PPP projects, this definition also covers the public sector, a representative of the general public in the value creation process of PPP projects. However, in some instances the general public may not be directly involved in the project. The definition of stakeholders varies and in a value creation process, these may be impacted or affected. For purposes of this study, the study focuses on affected stakeholders and impacted stakeholders.

According to Castelblanco, Guevara and De Marco, (2024: 2), impacted stakeholders are,

> "*…organisations or individuals who are affected by the performance of the PPP in a direct ways, including project users and local communities*."

On the other hand, interested stakeholders are:

> "*…individuals or organizations that actively provide opinions and participate in the project, such as environmental advisors and consultants, lenders, bidders and local governments*."

The private partners solicited under either conventional public procurement or PPP methods are all typically selected through procurement processes. Public procurement contracts account for an average 13% of GDP in OECD countries and can be the single most important source of revenue for some sectors, including health, research, construction, and transportation (OECD, 2023: 2). The products and services delivered can range from stationery, cleaning services, and operations, to infrastructure (Malacina *et al*., 2022: 16). Well governed, public procurement fosters public sector efficiency, builds citizens' trust and is a means of financing and supporting project delivery (Tarkhanova, Shikhov and Lazutina, 2019: 200). Governments continuously revise their procurement systems to ensure efficiency and the best value for taxpayer money. However, public procurement is a high-risk area because of the financial interests at stake, the volume of transactions and the close interaction between the public and private sectors. For large infrastructure projects however, the public partner, represented by government agencies, is generally unwilling to finance project activities directly due to its limitations. Instead, the public partner purchases the services provided by the private entity or subsidises the project (Wang *et al*., 2024: 2037). The shift of risk has led to the adoption of PPP projects as a strategic procurement model for project delivery.

The next section presents PPP projects.

2.2 Public Private Partnerships (PPP) Projects

PPP projects are long-term contractual arrangements with agreements between public or government agencies and private partners who are a source of social capital. The partners design the arrangements to foster private sector participation and distribute risk to the partner that is most able to manage it at the different phases of the PPP-PLC (Casady *et al*., 2020: 162). Over time, the partnerships have garnered a lot of interest over time due to their nature, allowing for collaborations between governments and the private sector to address complex policy challenges and improve public service delivery. All the while, the partnership benefits both the public and private sectors, and from the private sector, the public benefits with resources and expertise (Mishra and Shah, 2023: 2).

2.2.1 The definition of PPPs

The definition of a PPP remains a subject of debate. And, despite significant academic and practical engagement with the concept since the 1980s, there is no universally accepted definition of a PPP. Table 2.2 presents an overview of various definitions of PPPs and how the concept has evolved from the 1980s to the 2020s.

Table 2.2: Definitions of PPP concepts from 1980s-2020s

Year	Author(s)	Definition and progression of the PPP concept
1980s	Karita Ann Zimmerman, (1985: 8)	*"…Collaborations among business, government, non-profit organisations and residents through which resources, risks and skills can be pooled. Partnerships are necessary when Projects that benefit all parties cannot be completed without joint effort."*
1990s	Crosslin (1991: 16)	*"… are contractual arrangements whereby private companies are involved in the financing, ownership, and, sometimes, operation of public facilities."*
2000s	Leiringer, (2006: 306)	*"A PPP project is an arrangement between the public sector and private entity investors and businesses (the Private entity) whereby the private entity on a non-recourse or limited recourse financial basis provides a service under a concession for a defined period that would otherwise be provided by the public sector."*
2010s	(Raisbeck, Duffield and Xu, 2010: 346)	*"…is the use of private finance, which introduces project finance rigour to the purely physical dimension of construction and operation of infrastructure facilities."*
2020s	(Sherratt, Sherratt and Ivory, 2020: 1086)	*"PPPs are joint ventures in which the private entity works in partnership with government bodies to deliver public sector Projects with the intention to deliver them more quickly, efficiently and with better value for money."*
2020s	Casady, Erikson,	*"… long-term contractual agreements between public agencies and private partners that increase private participation and risk-sharing*

	Levitt, and Scott (2020:162)	*in various stages of the PLC, including facility design, construction, financing, operations, and maintenance…."*

Source: Author (s)

Table 2.2 presents an overview of the evolution of the concept of PPP through time, spanning from the 1980s to 2020s. According to the Table, early definitions in the 1980s primarily emphasised the partnerships progressing from informal to formal collaborations requiring the pooling of resources, contracting arrangements, finance, ownership, operation, risk sharing, concessions, joint long-term contractual agreements, and service provision. The subsequent definitions throughout the years show the dynamic nature of the concept of these partnerships with key elements throughout the dynamic environments. These elements collectively shape the fundamental principles of the terms and inform practical implementation. This study explores the concept of PPPs, necessitating a comprehensive definition that captures both theoretical and practical dimensions of partnership success.

For purposes of this research, the study adopts the definition by Casady, Erikson, Levitt, and Scott which emphasises critical aspects of (i) the long term- extended duration of a PPP agreement or PPP contract, (ii) shared responsibilities between the partners, and (iii) the conditions that need to be in place to support a successful partnership throughout the PPP-PLC. Given that PPP projects typically extend over long durations, understanding the dynamics of the PPP-PLC is crucial for evaluating how the projects create value over time.

In the next section, the study discusses the history of PPP projects and how they have evolved over time.

2.3 History Of PPP projects

The origins of PPP projects trace back thousands of years, motivated by governments' need to deliver quality, efficient and accessible products, and services for society. Although contemporary PPP projects are associated with modern governance, historical evidence suggests that similar models have existed for centuries. PPPs as a structured approach to public service delivery have deep historical roots dating as far back as the Middle Ages (800AD- 15th Century) when medieval states granted concessions to entrepreneurs in exchange for political and financial support (Bachaka and Sani, 2021: 147). In France, for instance, King Louis VI granted Parisians a concession for commodity transportation. These arrangements later expanded to include infrastructure projects such as roads and bridges where investors collected tolls as a return on investment. Similarly, in the Roman Empire, more than two thousand years before the modern era, private entities managed networks of postal stations under five-year contracts awarded through competitive bidding by municipalities, complementing the empire's vast road system (PPIAF, 2009: 1).

In the 17th century, the United Kingdom formalised a PPP-like model when parliament passed the 1664 Act, allowing justices to raise funds for road maintenance and upgrades. The Act authorised the implementation of three tollgates on a specific road section, enabling the contracted company to recover its investment over 21 years before returning the road to the government at no additional charge (Tshombe and Molokwane, 2016: 306). Despite these historical precedents, some scholars argue that PPPs in their contemporary form are new phenomena.

Li (2024: 468), contends that PPPs are a modern approach that emerged as part of neoliberal economic policies influenced by Hayek's neoliberal economic thinking and the post-World War II international order. This perspective frames PPPs as a deliberate shift toward private sector involvement in public service delivery, shaped by economic liberalisation and globalisation. Between 1990 and 2020, Europe experienced a sharp rise in PPP adoption when structured PPPs were introduced. This was more following the Maastricht treaty which limited public borrowing and introduced fiscal rules as part of the stability and growth pact (Hall, 2010: 7). In 2008, however, the global financial crisis significantly affected PPP affordability, slowing down PPP activities.

Over the past forty (40) years PPPs have increasingly become a preferred approach for, governments worldwide in executing projects across sectors such as energy, water, environment, health, education, transport, and others (Wang and Zhao, 2018: 293). Today, they are widely accepted as a strategic public tool, challenging existing routines associated with conventional procurement approaches to modify investment in infrastructure procurement (Zhang, Leiringer and Winch, 2024). The reasons why governments prefer PPPs as a procurement method are presented in the next section.

2.4 The Public Private Partnership PLC (PPP-PLC)

The concept of a PPP-PLC is well established within the field of project management as projects typically operate within a lifecycle. The term PLC is widely used to explain behavioural and structural aspects of projects, highlighting the start and end of the PLC (Pinto and Slevin Dennis, 1988: 68). At its core, a PLC defines the start and end points of a project, providing a structured framework for managing project activities (Keshta, 2022: 399).

In the context of PPPs, the PLC, the typical PPP-PLC differs from conventional PLC primarily due to the extended duration and complexity of activities involved therein (Aranda-Mena and Vaz-Serra, 2021: 74). Unlike traditional projects that may last only a few years, PPPs are long term, usually spanning ten (10) years or more depending on the nature of the partnership agreement.

The phases of a PPP-PLC span from project identification to transfer phase (Bachaka and Sani, 2021: 152). A typical PPP- PLC begins at project identification and extends through project maturity, culminating in the agreed-upon termination or ending at the transfer phase. Between the two end points of PLC, lie critical phases that define the engagement of capable partners and the implementation of the project.

The PPP-PLC is fundamentally structured as a business model, which, according to Ritter and Lettl (2018: 1), is:

> *"... how an actor is positioned within a value network or supply chain and how business turns inputs into outputs while fulfilling its goals."*

This business model is unique to PPP projects with the public sector initiating the projects. Public sector has a goal of delivering high-quality products and services to its citizens as per its mandate, while ensuring value for money (VfM) for all stakeholders involved in the PPP-PLC (Hoeft, Pieper, Eriksson and Bargstädt, 2021: 1). This partnership is not a linear process but rather developed in sequential form, which involves approvals at different phases before the project can proceed to the next phase. All phases have outputs, and the outputs of one phase feed into the next phase as inputs while ensuring that the project remains structured and systematic in how it progresses until the end. The inputs may include the stakeholders, the financial resources, the technical expertise, or the managerial efficiency, while the outputs, which are realised at the end of a phase, manifest in the form of products and services, for example, the number of completed buildings (Sun, Liang and Wang, 2019: 4). The partners are actors, and they are involved in an interconnected network where collaboration and resource addition are essential for project delivery. The partners involved are not merely sources of resources but are rather, strategic partners with capabilities to deliver products that the government could not provide alone (Gavurova, Mikeska and Huculova, 2020: 61).

A number of distinct features characterise a PPP-PLC, primarily of which is how it relies on the long-term contract agreements. The contracts are bundled and wholesome, integrating several complex activities which may range from design, construction, financing, operation, and maintenance within a single framework (Warsen, Greve, Klijn, Koppenjan and Siemiatycki, 2020). The contracts typically ensure that risk allocation, performance monitoring and value creation mechanisms are embedded across all project phases.

Deng (2021: 525), corroborates this perspective, emphasising that a typical PPP-PLC is characterised by design, build and maintenance, and financing. To provide a structured understanding of the PPP-PLC, researchers have proposed various categorisations of the phases as presented in Table 2.1.

Table 2.1: Comparative analysis of the PPP-PLC phases, according to different scholars

Author	Number of phases	Phases
(Casady *et al.*, 2018: 63)	Four (4)	• Identification phase • Procurement phase • Design and construction phase • Operate/maintain phase

Rwelamila *et al*. (2015: 222)	Four (4)	• Project Identification phase • Business case development and close financial phase • Design and construction phase • Operation and maintenance phase
Bao, Chan, Chen and Darko (2018: 3)	Six (6)	• Project identification • Preparation • Procurement • Implementation • Transfer • Post-Transfer
Babatunde, Perera and Adeniyi (2019: 336)	Four (4)	• Development phase • Construction phase • Operation phase • PLC phase
Sari, Irawan, Wibowo, Siregar and Praja (2023: 4)	Four (4)	• Initiation • Design • Construction • Closing

Source: Author (s)

In Table 2.3, the study presents the perspectives of the different scholars about the phases of a typical PPP-PLC. A review of these perspectives reveals that, while researchers classify PPP-PLC phases differently, there are commonalities in their structural organisation. South *et al*. (2018: 63), argue that the PPP-PLC is divided into distinct phases based on key milestones, with specific activities and involving different stakeholders whose roles vary across the lifecycle. Some studies identified only four (4) phases, while others extended the classification to six (6) phases with variations in specific activities, nomenclature, and stakeholder engagements.

For purposes of defining value within the PPP-PLCs, this study adopts a five phase PPP-PLC model drawing from two key studies by Bao *et al*. (2018: 3); South *et al*. (2018: 63). This classification is selected for its comprehensive representation of PPP processes and its applicability in evaluating value creation within PPP frameworks. Figure 2.2 presents the proposed PPP-PLC that this study adopts.

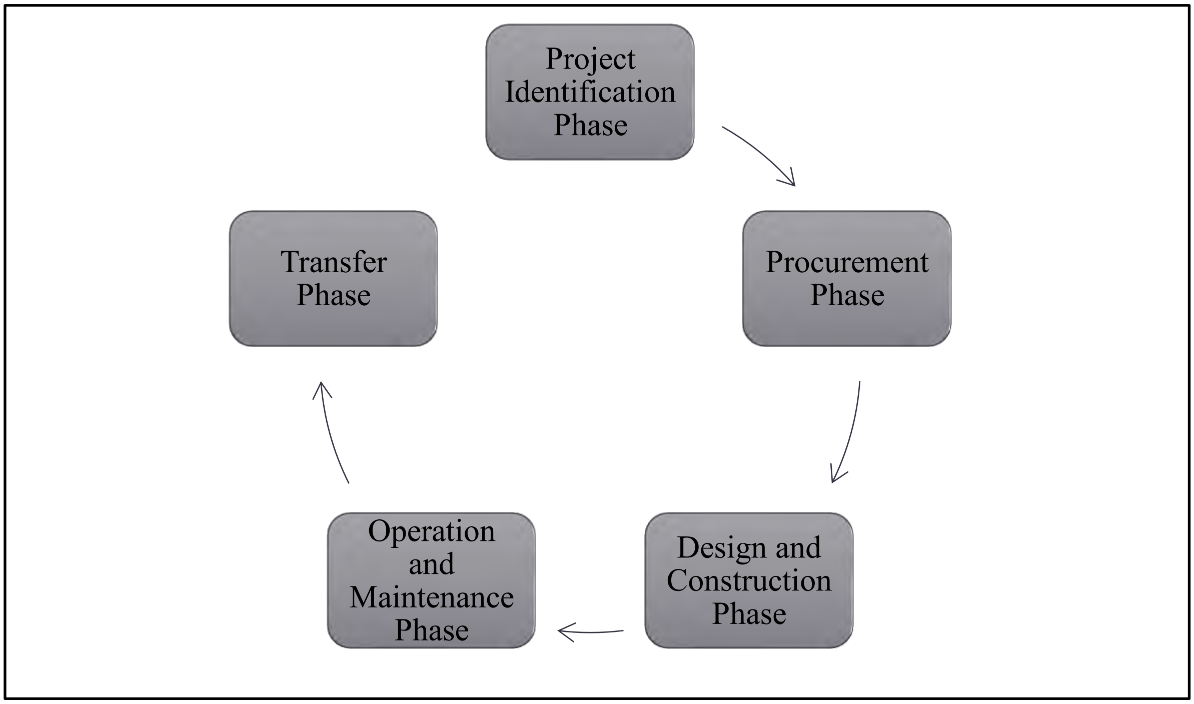


Figure 2.1: Phases of a typical PPP-PLC

Source: Bao *et al*. (2018: 2); South *et al*. (2018: 63)

Figure 2.1 illustrated the typical PPP-PLC which this study adopts from here on. The PPP-PLC has five phases which start at the (1) project identification, (2) procurement, (3) Design and Construction, (4) Operation/Maintenance, and ends at (5) Transfer.

The next section provides a detailed explanation of what is contained within the different phases. The first phase is the project identification phase as adopted from South *et al*. (2018: 63). This phase begins with initial idea generation and extends to the publication of the request for proposal (RFP). The second phase starts with the issuance of an RFP by the project sponsor, proposal evaluation, negotiations to contract award and financial closure. Phase three is the Design and construction phase, which encompasses both the design and construction process, ending with the commissioning of the project. The fourth phase is the operate and maintain phase commences with the award of a concession and depending on the nature of the contract, incorporates scheduled upgrades by the private sector, repairs and revenue generating activities. The final phase is the transfer phase as adopted from (Bao *et al*., 2018: 7). This phase involves a transfer of generated assets back to the government and this phase therefore signifies the official shift in the responsibility of operations from the private partner to the public sector which is usually represented by government. The next section provides the details each phase.

2.4.1 Project identification phase

Project Identification phase, also referred to by some researchers as the initiation or project development phase marks the beginning of the PPP project. At this phase, the public sector is motivated to pursue improved service delivery driven by national strategic plans (Ramolobe, Khandanisa and Ramolobe, 2024: 3). The initiators of the project articulate the strategic context considering political judgements and investment needs while acknowledging future dynamics, technological advancement, and infrastructure requirements (Coyle, 2022: 225).

A fundamental aspect of this phase is that stakeholder engagement, particularly involving citizens who are primary beneficiaries of PPP projects. Citizens possess both power and responsibility, necessitating active participation in decision making to ensure project's legitimacy and effectiveness (Lin, Man-Fong Ho and Qiping Shen, 2018: 554).

However, the public sector ultimately determines whether to invite private sector participation and providing business opportunities to the private entities (Nisar, 2007: 4). This collaboration requires the government to align its interests with those of its constituents while engaging relevant community segments to ensure project success (Boyer and Van Slyke, 2019: 259). Furthermore, strategic plans developed at this phase define key performance indicators related to cost, quality and time, serving as benchmarks for project implementation (Sari *et al*., 2023: 1).

This phase consists of several key steps including like pre-project studies, feasibility assessments, risk management analysis, value for money analysis, team organisation, project design and pre-tendering (Kim and Thuc, 2021: 7). At this stage, the government assesses the financial, technological, legal, and risk-related aspects of the proposed project to determine the roles and capacities required from the private partners (Bachaka and Sani, 2021: 152). Additionally, regulatory frameworks are established, ensuring discipline and effective governance among partners and stakeholders (Obosi, 2021: 219).

2.4.2 Procurement phase

This phase is a critical component for a PPP during which the public entity initiates the tendering process to select a private partner. This phase establishes the foundation for competitive bidding and transparent procurement (Kopańska, Osinski and Korbus, 2024: 2). At this point, private partners are engaged through expression of interest, request for qualifications, proposals, bidder selection, and commercial or financial close; all mandated to ensure competitiveness and transparency (Casady and Baxter, 2020: 3).

Upon completion of the tendering process, government awards a concession contract to the successful bidder. In some cases, a Special Purpose Vehicle (SPV) is established with the project sponsor and the vehicle takes over the active role in the project management (Campanella, Serino, Nelli and Graziano, 2018: 22). Through the SPV, negotiations take place regarding infrastructure quality, concession periods (time granted by the government to collect user fees from the end user), and the end users cost for usage of the infrastructure facility (Cui *et al*., 2019: 7).Risk to manage (Sharafi, Sadegh Amalnick and Allah Taleizadeh, 2021: 1).

Contracts should balance between flexible and fixed terms to cope with changes that occur during the PLC and facilitate actors in future negotiations (Wang, Wang and Zhang, 2022: 739). Clarity in contract terms is key to enable partners to avoid partner opportunistic behaviour that may stem from unclear definition of contract terms (Willems *et al*., 2021: 3). Standardised PPP contracts facilitate efficiency, saving time while enabling the government to leverage the private sector expertise and resources effectively (ISER, 2019: 34). The contract awarded facilitates the collaboration, enables execution of work, payments and tracks key performance indicators (Edwards *et al*., 2023: 1). Upon award of contract by the public partner, the private partner commences the design and construction activities in line with the awarded contract.

2.4.3 Design and construction phase

This phase marks the beginning of implementation of the PPP project activities involving delivery of products and services with both partners working together. During this phase, the private partner primarily provides leadership as they are now exhibiting their capacity to bear risk and leverage the resources for which they were sourced. On the other hand, the public sector provides the much-needed oversight and support as per contract terms to ensure that the private sector and its agents comply with contract standards. This period is critical to the PPP project as it requires participation, integration, and commitment from all partners, and if it is a construction project, to finalise the technical designs, which are architectural and structural, requiring engineers, architects, and other experts in the field (Duarte *et al*., 2023: 1).

The private partner at this time is expected to cooperate in the delivery of infrastructure, should not pledge, mortgage, or transfer government property, and should instead be obliged to maintain and improve the objects of the cooperation to provide public infrastructure (Surachman, 2024: 83). This phase often culminates in activities that lead to the completion of infrastructure that other stakeholders will consume during the operation and maintenance phase.

2.4.4 Operation and maintenance phase

Following design and construction, the project enters the operation and maintenance phase, during which service provision commences and infrastructure is utilised. The key activities of this phase include tariff operationalisation, service quality monitoring and payment administration (Cruz and Sarmento, 2021: 15). Partner performance is key during this phase since it involves all stakeholder involvement in different tasks of the project (Kim and Thuc, 2021: 6). It is important to rely on internal management practices that foster equal treatment, mutual accountability, and transparency (Sheppard and Beck, 2020: 5).

As the partnership continues to thrive at this phase, partners use internal management activities that manage interactions between themselves as partners and the environment within which the project survives (Casady and Baxter, 2020: 1169). Contracts continue to serve as guiding documents ensuring adherence to project objectives (Chesbrough, Lettl and Ritter, 2018: 7). At the same time, there is a notable dynamic at this phase which is a power shift wherein the public entity assumes greater control while the private sector influence diminishes and there are reduced chances of contract termination. The concession period nears its end, the private partner undertakes maintenance, final inspections, and operational assessments in preparation for project transfer back to government (Wang and Zhang, 2019: 3).

2.4.5 Transfer phase

The transfer phase represents the final phase of the PPP-PLC wherein the private partner formally hands the project to government. This transition is a process which has a number of key elements such as operational risk mitigation, technological handover, environmental compliance, asset condition assessments and financial sustainability planning (Bao, Chen, Martek, Chan and Jiang, 2023). The transfer phase in essence extends from the time of contract termination to potential re-negotiation with the existing private partner or to retendering of the project to either with the incumbent concessionaire or a completely new private entity altogether, that will then assume operational control of the handed over assets (Cruz and Sarmento, 2021: 24). According to Bao *et al*. (2023: 2), the transfer phase has five steps which include the preparation for the transfer process, overhaul of assets, assessment, and test of the assets to test their condition, performance of the transfer and performance of post transfer procedures. During this phase, the ultimate objective of the partners is to ensure that the facility handed over is maintained in quality condition and that it is sustainable enough for continued service provision beyond the previous PPP-PLC arrangement.

There are many types of PPP arrangements that public and private partners enter into to undertake a PPP project. The next section presents a the drivers and justification for the adoption of PPP projects.

2.5 Drivers For The Adoption Of PPP Projects

In an era where governments face declining revenues and budget constraints, PPP projects are the saving grace for governments as a strategic public procurement method. They support government entities in the delivery of affordable and sustainable infrastructure across different sectors leveraging resources that belong to them as stakeholders (Isolana, 2021: 40; Kisitu and Costa, 2019: 90). Unlike traditional procurement approaches where partners rely heavily on government financing, in PPP projects partners contribute and benefit from the resource pool that includes expertise, innovation, and financial resources for public service delivery. (Ojiako *et al*., 2023), contend that construction projects should not be procured conventionally, except by PPPs. The rationale for governments adopting PPPs varies across different contexts aligns with the need for product and service delivery. The financial crisis of 2008 was critical to both developed and developing countries as it affected public finances and awakened public sector interest in the PPP model as an alternative to bridge the expanding funding gaps and promote economic growth by developing infrastructure (Petrunenko *et al*., 2021: 794). In response, many countries enacted regulatory frameworks to attract and increase private sector investments within their economies.

2.5.1 Comparative Justifications/ Motivations for PPP Adoption

The rationale for adopting PPPs varies across national and institutional contexts. Table 2.1 illustrates the broad justifications commonly cited by the different studies about why governments from developing and developed countries have over the years adopted PPP project mode of delivery. The Table presents a comparative summary of the contextual motivations across the different countries and types.

Table 2.2: Motivation for adoption of PPPs by Developed and Developing countries

Developed Countries	Developing countries
Provision of integrated solution for infrastructure	Huge infrastructure deficit
Solving the solution of public sector budget constraints	Rapid urbanisation growth
Reducing public money tied up in capital investments	Relieving government of budget deficit
Tapping into private sector expertise and financial capabilities	Innovation and risk sharing offered by PPP policy
Better project technology and economy	Forcing governments to accept loans with strict conditionality
Greater public benefit	Global support for PPP infrastructure
Public sector avoidance of regulatory and financial constraints	Poverty alleviation
Public sector saving in transactional costs	Urbanisation
Providing innovative solutions for public infrastructure	

Source: Leigland (2018: 103); Osei-Kyei and Chan (2018: 404)

Research conducted within different countries and contexts have identified a range of motivations behind the adoption of PPP projects as a model for delivery. The motivations vary depending on national priorities, capacity, environment regardless of whether the country is developed or under developing. Table 2.2 presents a summary of the justifications highlighting the different factors that influence this choice.

Table 2.3: Justification for adoption of PPPs according to different studies

Justification	**Author**
• Shift away from conventional procurement methods • To outsource necessary technology and resources • Higher quality products and services • Convenient ways for citizens • Enhanced decision making • Performance innovation and • Expanded market	(Liu, Yang and Zheng, 2020: 223–224)
• Private sector competence • Resources capacity • Competitiveness • Enhancement of sustainable development • Alleviation of poverty	(Schomaker and Bauer, 2022: 284; Torchia and Calabrò, 2018: 105; Agarchand and Laishram, 2017: 642)
• Value for money • Timeliness • Within Budget • Better capacity • Quality product and service delivery	(Palcic, Reeves and Siemiatycki, 2019: 107; Leigland, 2018)
• Innovation • Competition • Combined benefits • Competitive bidding • Reduced transaction costs • Flexible negotiation • Allocation of risk between public and private sector	(Li and Wang, 2023: 1)
• Involvement in the private sector • Reduced costs • Saved time • Government gets a solution to budget deficits • Higher quality products	(Sharafi *et al*., 2021: 10)
• Collaboration between public and private sectors • To provide social and economic infrastructure • Bridge the infrastructure gap with private sector know-how	(Ojelabi, Fagbenle, Afolabi, Tunji-Olayeni and Amusan, 2018: 1)
• Resources of the private sector including material capital, technology, and human resources	(Zhou *et al*., 2022: 4)
• Engagement of different parties as stakeholders (shareholders, grantors, off-takers, input suppliers, construction contractors, project companies, insurers, operators, and government or public authority).	(Abdel Rashid, El-Mikawi and Baha, 2019: 334)

Source: Authors

The Table presents the different factors that push governments worldwide to adopt PPP mode for infrastructure delivery as presented in the next section. The key concepts are explained in the next section.

2.5.1.1 Infrastructure deficit

Infrastructure deficit poses a challenge for governments, especially for countries which are striving to promote economic prosperity, create jobs and achieve inclusive growth across the different sectors. Governments recognise that they require to maintain the existing infrastructure and develop new capacity facilities and that this requires a dedicated revenue stream (Fouad, Matsumoto, Monteiro, Rial and Sakrak, 2021: 1; Clark and Hakim, 2019a: 2). They are therefore committed to investing trillions of dollars in infrastructure over the next years (Appiah, Onifade and Gyamfi, 2022: 392). However, even though the governments recognise that with infrastructure development comes urbanisation, which is a pathway to sustainable development, they also acknowledge that the resources they possess are constrained. Investment in infrastructure contributes to faster economic growth over time (Miller, 2017: 53).

Therefore, investments in infrastructure are important as they are an asset attract class in the attraction of private sector investments within the economy (Spohr, Wikström and Eriksson, 2021: 2). This deficit of infrastructure and the constrained resources attracts need to both the public and private sectors to partner through PPPs to develop infrastructure.

2.5.1.2 Private partner resources and abilities

Traditionally, the government used conventional public procurement, which focuses on funding the projects directly by government as the source of income while the private sector or other entity delivers the infrastructure. However, in contrast, with PPP projects, the activities of the project include both the private and government, and they extend beyond just financing to the actual infrastructure development in sectors of ICT development, smart city development and healthcare, among others (Biygautane and Clegg, 2024: 9). Therefore, the ability of PPP projects to be dynamic in their activities to match the dynamic environment makes them even more valuable to governments since governments are always on the lookout for modern ways of delivering public services even amidst budget constraints.

The primary driving factor for embracing PPPs is the majorly the resource constraints of the public sector, which resources, more often, are what the private partner possesses. Resources include the finances, innovative ideas, and technical capabilities that can enhance facility development (Owolabi *et al*., 2020: 12). In developed countries, the public sector, through governments, issues bonds with debt securities under the state to attract investors (Shuliuk, Kolomyychuk and Petrushka, 2024: 69). In other countries like China, Asset-Backed-Securitisation (ABS) is one of the other funding methods, which involves financial security backed by the infrastructure project's future receivables like user fees or government subsidies (Lu *et al*., 2019: 2).

Usually, when the public and private sectors partner, they bring onboard a mixture of resources which they would not have had if they were to execute the projects independently. The partner resources deficit in one sector and their availability in the other sector attract the public and private sectors towards the partnership, as the partners invest resources and incur substantial financial costs over a long period but remain focused on public satisfaction in the delivery of the project (Gao and Zhao, 2020: 6).

2.5.1.3 Private partner efficiency

Efficiency of private partners supports projects to avoid waste, inefficiency, and shortages (Balcilar, Uzuner, Nwani and Bekun, 2023: 10). Typically, private entities are known to contribute greater efficiency and innovation to project delivery, as they excel at managing processes, implementing new technologies, and optimising the efficiency within operational activities that may lead the entity to save on costs significantly (Akinsulire, Idemudia, Okwandu and Iwuanyanwu, 2024: 2316). Some researchers argue, though that it is the negotiation that private partners have which affects the optimal investment threshold thereby tagging a cost to private sector efficiency (Buso *et al*., 2021: 2).Other researchers contend that the involvement of the private sector brings with it the practical insights and innovations that opens projects to a possibility of sustainable practices that promote responsible resource management within industries and can align programs with market needs and technological advancement (Li and Wei, 2024: 2). Private entities therefore play a huge role in supporting governments to leverage private capital cost-effectiveness and efficiency in the delivery of publicly owned infrastructure (Hussain and Siemiatycki, 2018: 1122). The public sector, therefore, sources the private sector to leverage its efficiency in project development.

2.5.1.4 Return on investment (ROI)

Investors carefully calculate ROI before they take on a decision to invest in a project (Xu, Liu, Cheng, Gao and Chen, 2019: 1). Usually, the private sector assesses the financial resources they can mobilise and the expected profit necessary to meet their obligations (Shuliuk, 2021: 78).

Returns by nature may be both clear and obvious or not directly expressed (Guo, Chen, Luo and Martek, 2024). ROI may present in the form of profits that may be returned in shorter periods so that the private sector gains back investment and reinvests to generate more returns. When combined with superior risk management and resource allocation, projects may yield higher financial returns than traditional public procurement methods. Therefore, a higher possibility of ROI attracts the private sector to invest in PPP projects.

On the other hand, ROI is shaped by how the government allocates operations, manages existing projects, and finances new projects (Abdel Rashid *et al*., 2019: 332). In PPP projects, ROI can be enhanced by leveraging the private sector creativity and efficiency, leading to reduced costs and improved service delivery. However, researchers caution that the high uncertainty and complex projects can drive up the costs, making investment decisions more challenging, especially where projects require high sophistication (Buso *et al*., 2021: 2). Typically, PPPs generate revenue through user fees, thereby aligning this more of delivery with a finance-based approach (Olojede, 2024: 256).

2.5.1.5 Risk sharing

But due to the long-term nature and complexity of infrastructure projects, the nature of PPP projects challenge governments. Therefore, through the PPP model of project delivery, the government delegates the finance and risk management role to the private partner (Štěrbová, Halík and Neumannová, 2020: 52).

In addition to the private sector, the project may involve a number of stakeholders from the government, specialised companies, banks, the community, non-government organisations, the media, and researchers. However, each partner or stakeholder transfers resources to the arrangement, and risks are shared for outcomes varying from financial, economic, social, and environmental (Abdou, 2024: 325).

Even with the risks, and the complexity of the project, the stakeholders still need to collaborate (Solheim-Kile and Wald, 2020: 6). PPP projects allow stakeholders to collaborate, achieve their objectives, and share the risks in return.

2.5.1.6 Lifecycle approach

In a PPP process, the government typically commissions a project, and, over the duration of its lifecycle, compensates the private partner, often referred to as the concessionaire, for delivering the agreed upon product and or services (Ojiako *et al*., 2023). The compensation structure is usually performance-based, ensuring that the payments are aligned with the contract and in line with quality and efficiency throughout the PPP-PLC. Therefore, integration of the different phases facilitates better risk management, ensuring that risks like financial and market risks are delegated to the partner most able to manage, usually more burden goes on the private partner, while the government retains those risks that involve policy implementation, government guarantees and comprehensive risk allocation frameworks (Raharja, Hadiyanto and Maryono, 2025: 1)

The lifecycle approach thus ensures that public and private parties leverage resources and that each phase of the lifecycle is sustainable beyond just infrastructure (Hoeft *et al*., 2021: 1).

2.5.1.7 Operational efficiency

Related to partner efficiency is operational efficiency. By nature, PPP projects have well-structured contracts that allocate risk appropriately and to the partner best positioned to manage it. As a result of this shared responsibility, the private sector gains the freedom it needs to make decisions and the government can rely on private sector expertise and control (Ojiako *et al*., 2023). These dynamics foster project efficiency, reducing bureaucratic delays in processes and ensuring timely project completion.

Uniquely, the private sector leverages its major resource of mitigating risks. PPP projects are typically associated with heavy risk during their implementation. In most arrangements, the private sector presents a capacity to manage the risk assigned to it, all while maintaining efficiency. However, despite this capacity to manage risk, the private sector cannot execute a PPP project independently or in isolation. Therefore, it instead also sources and engages multiple stakeholders from within the private and public sector, and these may include financial institutions, contractors, and tech advisors to collaborate and deliver the project (Quan and Solheim, 2023: 1).

The justifications for adopting PPPs presented in this section indicate how broad PPP project impact is on maximising benefits for the public. The implications align closely with the principles of Public Value theory, which emphasizes the delivery of outcomes that are o value to society, legitimate in the eyes of the public, and sustainable in the use of public resources. The motivations further indicate that PPP projects contribute to not only as the financial or operational dimension, but are also as a mechanism for creating public value. Thus, Public Value theory as presented in Section 2.13 provides a suitable conceptual lens for assessing the effectiveness and justification of PPP adoption across different sectors.

The next section present PPP project arrangements and the level of partner involvement per arrangement.

2.6. PPP Project Arrangements

PPP projects are characterised by a contractual arrangement where government authorises the private sector to finance, develop and implement infrastructure projects through a competitive bidding process. Whereas the private sector assumes responsibility for project execution, in this arrangement, government retains an oversight role, acting as supervisor and monitor throughout the PPP-PLC (Wojewnik-Filipkowska and Węgrzyn, 2019: 5). Further, in this arrangement, the partners have responsibilities. They gravitate towards each other because of the resources they bring to each other including, mobilising finances and technical resources necessary for the delivery of public infrastructure (Promma, 2022: 22).

A typical PPP arrangement brings together multiple private sector players from the private sector, including developers, consultants, contractors, suppliers, financial institutions, and infrastructure asset operators, but with each partner comes a unique contribution to support the unique role they play (South *et al*., 2018: 63). When the resources they bring onboard are leveraged by other partners, the project as a whole is more in position to generate more opportunities as it progresses, while at the same time ensuring delivery of objectives in an efficient and effective manner. When partners intend to deliver projects, they structure an arrangement to the specific needs of stakeholders within the context or the environment they operate within (Pratici and Mcminn Singer, 2021: 1468). Through these arrangements, the partners assign themselves responsibilities to deliver as per the contract terms, timelines, and available resources. There are a number of PPP arrangements world over, and their nature varies with function, timeline, industry, the environment within which they operate, and as a reflection of the diverse frameworks that govern their operations (George, Fewer, Lazzarini, McGahan and Puranam, 2024: 11). The arrangements are designed in such a way as to clearly define their structures, to formalise their activities over the duration of the contract term. Within these arrangements, are key stakeholders who play a major role in shaping the operations of the designed PPP arrangement. Furthermore, the arrangements are also governed by financial flows, such as subsidies, tariffs, and the duration of the contractual period, all of which are determined through stakeholder negotiations and the existing regulatory frameworks (Sharafi *et al*., 2021: 12). Given the variations in public needs, different governments within different contexts adopt different arrangements to facilitate infrastructure development within their economies. The types of arrangements are highlighted in Table 2.4.

Table 2.4: PPP Arrangements and their descriptions

PPP Arrangement	Abbreviation	Description
Concessions		The public sector grants concessions to the private entity to deliver services at a fee paid by the concessionaire (private entity) for the rights
Private Financing Initiative	PF1 andPF2	Private partners utilise debt and equity finances to pay capital costs towards the completion and management of public Projects
Design-Build Operate and Transfer	DBOT	The private entity has the responsibility to develop, finance, manage and operate a facility
Design, Build Finance Operate Manage	DBFOM	Private entity manages the asset on top of other responsibilities and obligations. The public partners transfer all risk to the private partner.
Build Operate and Transfer	BOT	Private entity finances, owns, operates the facility before transferring the ownership to the government
Build Own Operate and Transfer	BOOT	The private entity finances own, and renders services for several years then transfer the facility to the government
Build Lease Transfer and Maintain	BLTM	Same as BLT but finances the facility to build and leases the facility from the public sector before transferring assets back to the public sector. However, there is an obligation to the private entity to maintain the facility
Design-Build Finance Operate	DBFO	The government specifies what it wants to deliver to the private entity, then designs and builds, finances operate and provides services that derive from it.
Lease/Affermage		Assets are already in existence, and no longer necessary to invest finances by the private entity
Operations and Maintain	OM	The public sector outsources service provision to the private entity, and payments made directly to the private entity from end users

Source: Requena, Vanhuyse, Agerström and Nilsson, (2021: 2); Vecchi, Casalini, Cusumano and Leone (2021: 61); Akpoghome and Nwano (2020: 490)

According to Table 2.4 there are different PPP arrangements that governments engage private partners through to deliver-projects. The Table provides a description of the different arrangements, highlighting the level of public and private participation within the arrangement as well as the nature of the activities undertaken. Whereas in some arrangements, government commissions a project, and over the duration of the contract, pays the concession holder for the resultant service, in other instances a PPP may involve government commissioning the project and providing revenue or debt guarantees to the concession holder but payments to the are made directly by the users. There are also other arrangements that may involve both scenarios (Ojiako *et al*., 2023).

The next section provides a concise overview of the various types of arrangements outlined in Table 2.4. However, this study focuses on value creation within a typical PPP-PLC, regardless of the specific arrangements undertaken by a sector, this overview therefore only offers context for understanding the different arrangements involved.

2.6.1 Concessions

A concession refers to the period during which a private sector is granted to design, execute and operate infrastructure project to attain revenues according to services provides, aiming for a win-win (Castelblanco, Mangano, Zenezini and De Marco, 2024: 1). The concessionaire is awarded a period according to the contract. Hadi and Erzaij (2019: 1238), argues that the concession period is determined by the type of partnership, the number of partners, complexity of the construction activities that relate to the project, economic life, life of the project facility, structure, initial capital investment for the concessionaire and volatility of revenue when operating in the future. During the concession period, which is usually a *"user-fee-based contract,"* partners negotiate to balance interests as the concessionaire recoups investments and operating costs (Vecchi *et al*., 2021: 64). Upon the expiry of the concession period, assets, including those purchased by the concessionaire, revert to the public partner and these include assets purchased by the concessionaire (World Bank, 2024: 1).

2.6.2 Private Financing Initiatives (PFI)

Private Finance Initiatives model has two forms, PF1 and PF2. PFI advocates for the assembly of many actors with different roles throughout the phases of the long-term PFI contract, all contributing towards the achievement of VfM in PFI projects (Ahmad *et al*., 2024: 595). Due to reduced government use of the PFI, in 2008, government introduced the PF2 in 2012 in the UK, to address PFI's shortcomings. However, researchers argue that PFI and PF2 are fundamentally the same (National Audit Office, 2018: 4). Both models were designed in such a way that the private sector is engaged in all aspects of the infrastructure's development and its risks. The public sector, however, does not pay for the asset during construction, but once the asset is operational, the public entity pays a monthly fee, also known as a unitary charge, to the private sector (HM Treasury and Infrastructure and Projects Authority, 2023: 3).

2.6.3 Design-Build Operate and Transfer (DBOT)

The Design-Build Operate and Transfer (DBOT) engages the private partner in designing the facility, building, and operating of a facility on behalf of the public sector. BOT is similar to DBOT except that in this case, the private partner is not involved in the facility's design.

2.6.4 Design-Build Finance Operate and Manage (DBFOM)

The Design-Build Finance Operate and Manage (DBFOM) engages the private partner in the infrastructural facility's design, construction, finance, and operation (Verweij and van Meerkerk, 2020: 287).

2.6.5 Build Operate and Transfer (BOT)

The Build Operate and Transfer (BOT) is the most traditionally common PPP worldwide. This type of project is made up of parties including the host country, public institutions, lenders, insurers, sponsors, consultants, concessionaire, contractors and sub-contractors, suppliers, and users (Aladag and Isik, 2018: 175). In this arrangement, the public sector contracts the private partner to construct and operate a project for a determined period before turning ownership to the public partner (Uner, Çavuşgil and Çavuşgil, 2018: 79). Facilities handled under this kind of arrangement are more often infrastructure projects, usually a toll road, bridge, tunnel, power plant, oil refinery, pipeline, port, or airport (Vassileva and Ignjatijević, 2020: 3). At the end of the project, once profits are recouped and the concession period ends, the asset is transferred back to the government as per the contract.

2.6.6 Build Own Operate and Transfer (BOOT)

Under the Build Own Operate and Transfer (BOOT), private partners have total ownership, responsibility, and revenue from the project during the stipulated partnership duration. The public partner transfers ownership to the private partner throughout the partnership duration, which is quite common, especially for toll roads (Requena *et al*., 2021: 2).

2.6.7 Build Lease Transfer and Maintain (BLTM)

In the Build Lease Transfer and Maintain (BLTM), the private partner builds the facility and leases the facility to the public entity for a specified concession period. During this concession period, the private partner maintains the facility and the public partner pays the private partner a fixed rent for the facility (Ahmad, Ibrahim and Minai, 2018: 3).

2.6.8 Design Build Finance Operate (DBFO)

In the Design-Build Finance Operate (DBFO), the public entity retains ownership of the facility. However, the public partner leases it to the private sector to design, build, finance, and operate over the concessionary period. Contrastingly, a Joint venture arrangement is shared ownership of an asset by both the public and private partners (Yakubov, 2021: 259). In joint ventures, partners integrate each other's complementary resources to improve each other's competitive position (Jin and Wang, 2021: 232).

2.6.9 Lease/ Affermage

The Lease/ Affermage arrangement, on the other hand, is the temporary transfer of ownership rights to the private partner to operate and maintenance of the infrastructure facility that is already in existence. Still, the operator is paid a lease fee to the public partner (Sani, 2021: 73). A contract signed under a PPP arrangement determines the nature of public and private partner relationships and the private partner's scope in delivering the project objectives. When conceived right and under the right conditions, PPP arrangements result in essential benefits to the government, private sector, and the citizens (Palaco, Park, Kim and Rho, 2019: 9). PPP contract arrangements are related to the level of private partner participation. The level of involvement ranges from low to high level, as illustrated by the World Bank (2019b: 1).

2.6.10 Operate and Maintain (O&M)

The O&M is a contractual arrangement in which the public entity retains ownership of the facility and only engages the private partner in the operation and maintenance of the asset, and engages subcontractors who specialise in maintenance (Petrunenko *et al*., 2021: 797). This type of PPP leverages the capacity of the private sector in asset management. In this arrangement, the private partner is expected to exhibit high technical standards to O&M the facility. This kind of arrangement involves engagement of the other stakeholders from among the end users and therefore there is market competition which requires that the private sector delivers cost effective products and services to the consumers (Rahman, Miraj and Andreas, 2019: 2).

The next section discusses the concept of value and its definitions from different contexts.

2.7 Value, The Concept And Definitions

Value creation as a concept involves the integration of resources to align to entities, actors, processes, and practices within that context (Dehling, Edvardsson and Tronvoll, 2022: 19). It is about the delivery of mutual benefits, ensuring that businesses retain resources, sustain partnerships, and maintain legitimacy to satisfy the stakeholders (Freudenreich, Lüdeke-Freund and Schaltegger, 2020: 5). Historically, PPP projects have created value by mostly balancing between the need for efficient, and procedurally sound services that involve citizen engagement in the public service for development and making of policies (Mazzucato and Ryan-Collins, 2022: 345). To understand the concept of value creation, it is important to understand and reflect on the concept of value.

The next section explores the concept of value.

2.7.1 The concept of "value"

The term "value" originates from the Latin word *"valere,"* meaning "worth" (Porter, 2010: 2477).

Traditionally, the term means satisfaction, worth, and customer-centricity, and these define and mean value. There are many definitions of value, according to literature and for purposes of the context, the study adopts the definition by Kähkönen and Lintukangas (2018: 983), who define value as,

"...the surplus between total profits obtained and total sacrifices incurred."

The definition of value adopted by this study within context captures the obtaining of profit and appreciates the sacrifices incurred by partners in creating this value, which indicates that for value to be, everyone should benefit from the endeavour.

Essentially, value, as a concept stems from the minds of individuals, and is a complex and multifaceted notion. It is often revealed through their subjective preferences within a given context, adding an intellectual challenge to its understanding (Straton, 2006: 402). It is a complex concept that is usually influenced by dimensions of competition, conflicting interests, and subjective perceptions (Ang and Biesenthal, 2017: 297). Value being dynamic and context-dependent, may indeed vary based on the experiences of the consumer as well as the specific product or service in question. This variability keeps the audience engaged in the exploration of value (Zeithaml *et al*., 2020: 2). Day (2002: 22), emphasises that value is central to consumer especially their decision-making as it involves both the producer and recipient of value. In essence, from a producer's perspective, value is the ultimate goal of product and service development. (Dembek, York and Singh, 2018: 1608), argue that producers aim to generate high-quality products and services for consumers, thereby creating value. Producers invest resources into activities that generate outcomes deemed valuable (Martinsuo and Klakegg, 2019: 6).

Value is categorised in different types, including functional, emotional, environmental, and social dimensions. Other categorisations include economic, technological, altruistic, and political value (Martinsuo, 2020: 3; Nishimura and Fukuda Ken, 2019: 4; Wojewnik-Filipkowska and Węgrzyn, 2019: 1; Khan and Mohsin, 2017: 1).

2.7.2 Types of value

Value is subjective and lies in the eyes of the consumer. Therefore, it depends on how the recipient of the consumer perceives it. It can therefore be presented differently using different dimensions for different contexts for a specific user. The constant factor here is that it originates from individual preferences. To understand the concept, it is important to understand the circumstances under which value may be appreciated.

The next sections present the different dimensions of value.

2.7.2.1 Functional value

Value may be functional depending on how it is used. This kind of value may stem from the values of the consumer, which are tagged to other value dimensions such as technology or performance (Kato, 2021: 2). Functional value involves aspects related to its usability, uniqueness, and quality in relation to the context. Han, Wang, Zhao and Li (2017: 185), argue that functional value is associated to money, performance, and convenience.

2.7.2.2 Emotional/Aesthetic/Symbolic Value

Value is also measured as emotional arising from interactions between users and brand. The interactions may include aspects such as the levels and nature of engagement, satisfaction, and trust (Mingione, Cristofaro and Mondi, 2019: 18). Also, it may be related to the design and fun of the product or service (Kato, 2021: 2). This value type is closely related to aesthetic and symbolic attributes of products and services.

2.6.2.3 Ecological/Environmental value

Ecological value is related to the effective management of natural resources and environmental sustainability within the society. It encompasses issues to do with benefits derived from the surrounding ecosystems, caters to issues of food production, water supply, and climate regulation within the society of interest (Sabadash and Denysenko, 2018: 273; Kim, 2016: 3).

2.6.2.4 Social value

This dimension focuses on the broader societal impact, including benefits to the community, future generations, and research capacity (Doloi, 2018: 3; Gokten and Gokten, 2017: 162). Doloi (2018: 3), describes social value as a function of parameters that have more to do with community satisfaction. This type of value is aimed at delivering cost-effective solutions with minimal risk to the public sector (van den Hurk and Siemiatycki, 2018: 1). In the context of PPP projects, the concept of social value guides stakeholders and investors in identifying investment opportunities and markets, enabling them to achieve their return on investment faster by directing resources to projects which are worthwhile to the investor (Joseph II, 2013: 1).

2.6.2.5 Economic value

Economic value is often regarded as self-serving and perceived as influenced by an individual's size of income, resources, and any surplus that the user may have. In the context of PPPs, this type of value caters to situations where organisations allocate resources that support it to maximise returns. This value is reflected in the efforts that the consumer makes decisions based on rational utility calculations and the optimisation of benefits (Lackéus, 2018: 15). It sums up the price one is willing to pay to access products and services.

2.6.2.6 Technological Value

Technological value is derived from the use of advanced technologies during value creation. Consumers expect organisations to provide technologically responsive and personalised solutions, utilising data-driven technologies such as artificial intelligence and big data (Chen and Srinivasan, 2024: 1619; Scutella, Plewa and Reaiche, 2024: 73).

2.6.2.7 Altruistic/Philanthropic Value

This dimension of value is motivated by empathy and can be described as promotion of another's welfare (Van Der Wath *et al*., 2020:575). It encompasses selfless, pro-social behaviour and ethical considerations. It involves collaboration and mutual recognition of strengths among partners (Windsor, 2017: 77). It can be defined as an act of doing good for the benefit of others without the need to reap rewards (Tokay and Argan, 2017: 860). It usually presents itself as a need to protect the defenceless and vulnerable.

2.6.2.8 Political value

This value is deemed as added to the public realm employing stimulating and supporting dialogue within the public sphere, and encouraging active public participation, while also engaging citizens (Benington, 2009a: 237). Political value has links to civilisation, and it may manifest in different ways, for example, in the advocation for the creation of a peaceful climate among the people and other issues (Kallos and Trasnea, 1982: 188).

This section presented the different dimensions of value. Understanding them enables studies in the context of value to appreciate them. The dimensions are subjected to different lenses depending on the context. According to Scutella *et al*. (2024: 76), value is only appreciated when it *is "in-use"* or *"in context"*. (Marsilio and Mastrodascio, 2024: 2), argue that it is multifaceted, especially requiring active collaboration between the users and producers. Huang (2020: 23), asserts that value is embedded in products and services before consumer interaction. Contrastingly, Kaur, Nirankari and Padhiana (2020: 1022), insists that value is defined by individual intellect, standards, and perceptions. Value is key to aligning producer offerings with consumer expectations and behaviour (Liu, 2021: 1). Understanding who benefits, from whom, when, are key to value creation.

Understanding the concept of value creation is crucial, as it is a key aspect of this research.

The next section presents a detailed discussion of value creation and its definitions.

2.8 The Concept Of Value Creation And Its Definitions

Value creation can be defined as an outcome of, changes to, and resources that turn products and service delivery into results from an organisation's processes (Chenger and Woiceshyn, 2021: 177). Testorelli *et al*. (2024: 1), on the other hand defines value creation as:

> *"...to promote the creation of value for project stakeholders in practice, through the management of negative and positive risks, providing a perspective on the sustainability orientation of projects."*

Largely, value creation links people's goals to their imagination by defining what they, society and their institutions deem valuable and then connecting these, to products and services (Vakkuri and

Johanson, 2020: 4; Priem *et al*., 2018: 6). Over the decades, the definition of value creation has evolved as presented in Table 2.5.

Table 2.5: Evolution of the definition of value creation

Year of development of the concept of value creation	Authors	Definitions and progression of the concept of value creation
The 1980s	Baker and Wruck (1989)	*"...decentralising decision making."*
The 1990s	Seth (1990)	*"...taking strategic actions to make optimal use of the firm's productive resources in the presence of environmental constraints and opportunities."*
The 2000s	Russell-Bennett, Previte and Zainuddin (2009)	*"...incremental change to the market."*
The 2010s	Chesbrough *et al*. (2018)	*"...an actor engaging in a resource-deployment process and the perceived benefits of that process outweigh the perceived sacrifices."*
2017	Priem *et al*., (2018: 2)	*"...consumer's expectations of the benefits they will receive from a purchase, represented by willingness to pay."*
2019	Freudenreich *et al*. (2020)	*"...creating multiple outcomes, each of which is perceived to be valuable in different ways by its recipient stakeholders".*
2022	(Miller, 2022: xiii)	*"...process that enhances social action by generating an increase in benefits and satisfaction in addition to other rewarding outcomes."*
2024	Testorelli *et al*., (2024)	*"...to promote the creation of value for project stakeholders in practice, through the management of negative and positive risks, providing a perspective on the sustainability orientation of projects."*

Source: Author (s)

Table 2.5 presents how researchers have interpreted the concept of value creation over time. The evolution reveals a broadening of the concept showing the incorporation of the different elements like decision making, optimal resource use, incremental change to the market, perception of benefits outweighing the cost, willingness to pay, and stakeholder perception of value. These definitions collectively indicate all the important dimensions of value creation. There are numerous definitions of value. This study aligns more closely with Testorelli *et al*., (2024)'s definition, as it addresses the project context relevant to this research. It further concurs with the view that projects inherently involve costs that materialise as risks, which may be either positive or negative in nature, yet invariably impact stakeholders. In the context of PPP projects, risk requires strong consideration, as it serves as a key that motivates private sector participation, particularly during the initial stages of engagement.

Value creation arises as surplus gain from an investment, relationship, trade, or transaction (Windsor, 2017: 76). Organisations leverage their assets, relationships, and interactions to create value for both individuals and the organisations themselves (Mason, Iacuzzi, Zamparo and Garlatti, 2024: 401). They invest an integration of capital, resources, and connections to create value (International Federation of Accountants, 2020: 4). Among the resources are stakeholders, who, when prioritised, shift power from the producer as the source of competitive advantage to stakeholder interests. Stakeholders of the value creation processes can be internal (employees) and external (partners, up and down the value chain) (Biloshapka and Osiyevskyy, 2018: 167).

Regardless of the nature of stakeholders, the basic principle of creating value for stakeholders is mutual alignment and integration of multiple stakeholders in goal achievement (McArthur, Zerjav and Edkins, 2017: 5). PPP projects have a number of stakeholders who collaborate on a project to create value for themselves and others.

The next section presents the concept of value creation within the context of PPPs.

2.9 The Concept Of Value Creation Within The PPP project Context

In the 1980s, partnerships between the private and public sectors garnered attention in the context of management and public administration, with special focus on structures, the process, and their effectiveness (George *et al*., 2024: 11). The concept has advanced over the years, adopting diverse terminologies, which range from value engineering, value management, to value creation (Green and Sergeeva, 2019: 638).

Chung and Hensher (2018: 354), argue that value creation stems from the shared-value dimension, from sharing strengths like funding and risk management by the private entity and legitimacy by the public sector in producing societal public benefits. However, from a management perspective, Erk (2020: 24), perceives the concept of value as focusing on achieving value intended to optimise the benefits and costs of projects. Value engineering on the other hand involves reducing overall project costs by identifying and eliminating unnecessary expenses (Selim, Meetkees and Hagag, 2017: 10368).

Value engineering and value management are only different versions of value creation within different contexts. The concept of value creation is measured by other studies using dimensions of project success Osei-Kyei and Chan, (2021: 15); Liang and Jia, (2018: 7) and value engineering (Selim *et al*., 2017: 10370) among other dimensions.

In PPP projects, value creation focuses on fulfilling the expectations of all key stakeholders. The primary stakeholders of a PPP are public (buyers), private (suppliers), and end users (consumers). Malacina *et al*. (2022: 2), assert that stakeholders are incredibly significant and stress the significance of understanding value to a stakeholder, which is crucial for a project's success. Stakeholders on the other hand encompass all categories of beneficiaries and partners, incorporate issues of social capital, government, and consumers (Liu, Wang, *et al*., 2021).

For this study, the terms end user and consumer will be interchangeably used to mean the primary beneficiary in society, individuals or entities that directly utilise goods or services provided by the PPP project. In a PPP project, stakeholders include the public and the buyers. This group typically consists of government entities collaborating with private contractors to deliver goods that meet the needs and demands of the public and government itself (Malacina *et al*., 2022: 2).

Historically, government is responsible for providing infrastructural products and services and selecting suitable procurement methods to ensure that these are delivered effectively and within budget (Khudhaire and Naji, 2021: 3). It is the role of government to procure quality, sustainable products and services that benefit stakeholders, citizens, and meet their satisfaction while at the same time improving the state of public facilities for economic development (Yurdakul and

Kamasak, 2021: 223). The significant investment requirements and inherent risks that characterise infrastructure projects necessitate governments engaging the private sector partners to share in the burden, which spans different facets, while delivering the crucial infrastructure projects for public consumption. The dynamic environment in which these activities are executed is marred with persistent financial constraints, delays, inefficiencies, and cost overruns. For this reason, governments are increasingly getting reluctant to shoulder these burdens alone in addition to other responsibilities. By nature, in traditional procurement of infrastructure, the cost and risk of infrastructure delivery, including procurement, consulting, engineering, design, and maintenance, were solely borne by the government (Osei-Kyei and Chan, 2018a: 14). Due to the complexity of infrastructure development, the process requires a collaborative approach involving multiple partners for design, manufacturing, installation, and operation (Liu, Clegg and Pollack, 2024a: 3). This does not mean that traditional procurement has yet been completely phased out in the delivery of infrastructure as it remains prevalent, particularly in developing economies (Ogbeifun, Auta, Zwalda, Mbohwa and Pretorius, 2018: 28). Rather, it means that the limitations of traditional procurement bring out the need to compare it with PPPs to appreciate PPP role in infrastructure delivery and value creation. In large infrastructure delivery, PPP project delivery is adopted. Three primary stakeholders of a PPP project benefit from project value. Figure 2.2 illustrates the beneficiaries of PPP project value.

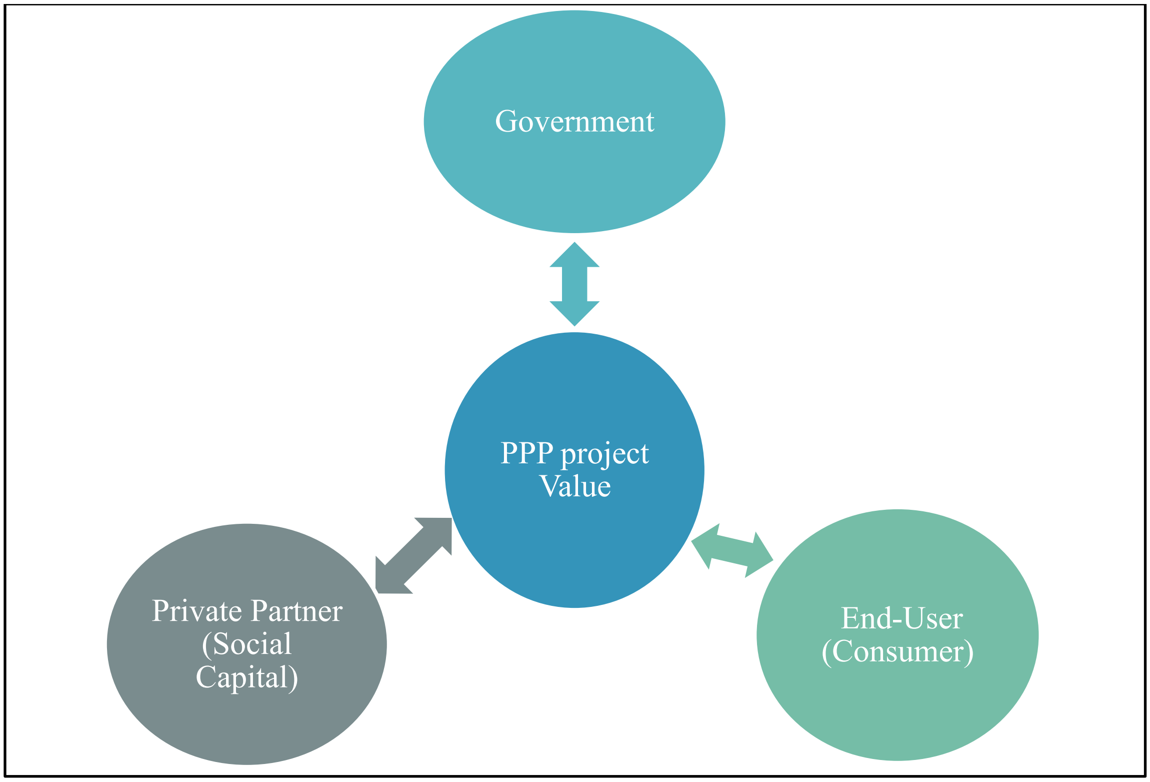


Figure 2.2: Beneficiaries of the PPP project value

Source: Adopted from Liu *et al*. (2021: 2)

Figure 2.2 presents the key beneficiaries of a PPP project and project value. At the centre of the PPP project is its project value, with benefits stemming from the collaboration between the three stakeholders (government, private sector, and end-user). Therefore, all three stakeholders contribute to the project value and benefit from it. In the context of PPP projects, thus, to achieve meaningful value, the project must align with the perceptions and expectations of its stakeholders, to ensure that the project meets its value creation goals.

The next section presents what constitutes value to the government, the end user, and the private sector (also known as social capital).

2.9.1 Value to government

Government is held accountable and is required to deliver to citizens and other stakeholders. It is also often blamed when a project fails. And, among the expectations of value by the people from the project is the delivery of Value for Money (VfM). VfM is among the factors that governments consider when choosing a competent private partner. It involves delivery of high-quality products and services at lower or equivalent costs using innovative, efficient, and effective means (Vecchi *et al*., 2022: 387). According to Manta, Panait, Hysa, Rusu and Cojocaru (2022: 864), it is important for government to implement policies that drive fairness, transparency, and competition and safeguard against discrimination while promoting cost-effectiveness in project management. So, to appreciate value to the government, the public party has to deliver durable and quality products and services, which the end users should easily access (Hodge, Greve and Boardman, 2017a: 278). Since government represents stakeholders and citizens in society, its needs in essence represent the needs of itself and others, which are referred to as public value (Rukanova *et al*., 2023: 2). Ojasalo and Kauppinen (2024: 188), argues that public value is discerned through individual expressions of satisfaction and is a coherent set of understandings fashioned under democratic political processes, consumed collectively by citizens. Thus, conflicting individual values and understanding of public values shape preferences for public service delivery (Piatak and Jensen, 2023: 948). Government therefore seeks to source and collaborate with competent private sector partners who can bridge gaps in budget and expertise, as such a partner brings the much-needed experience in managing PPP projects while minimising the financial burden on the government (Jones and Bloomfield, 2020: 834). Furthermore, the government sets out to source a competent private partner that is in a position to maintain demand and support them in saving face, reputation, and image, among others.

2.9.2 Value to the end users

In a PPP relationship, the fulcrum of balance is the end user (Luo, Li, Wu, Li and Bi, 2022: 1). The terms end user and consumer in this study are used interchangeably to mean the same concept. To the end user, value is goods and services that generate satisfaction to them (Malone, McKechnie and Tynan, 2018: 1). According to Toriola-Coker, Olalekan (2018: 79), this may involve the provision of peace of mind, equal access and good service, prevailing regulation compliance environment, and improvement of quality of life, and community engagement measure benefits to the end user. Individuals within the society are instrumental in determining value, and the focus should be on the individual first and then the broader society (Wang, Teo and Janssen, 2021: 11). Nenonen, Storbacka and Windahl (2019: 261), argues that value is also determined by a consumer's willingness to pay for what is offered by a business in the market (Chesbrough *et al*., 2018: 937). Since end users are crucial to the success of PPP projects, their satisfaction hinges mostly on receiving high-quality products at reasonable prices, despite the inherent challenges in aligning diverse interests (Ndiaye, 2018: 395). Furthermore, value to them is practical consideration of the end user through engagement, which ensures fair tariffs, maintains community involvement, supports project sustainability, manages expectations, and risks, and reduces delays and disruptions.

2.9.3 Value to social capital (Private Sector)

Social capital in PPP projects is the private sector entities continuously investing in new markets to provide infrastructure. PPP projects enhance market opportunities for the private sector and act as social capital by investing in new markets to develop quality public products and services (Deng, 2021: 525). Consumers of these products and services have needs, some of which are basic albeit dynamic. Social capital links with lucrative markets, assesses the viability of a project and invests depending on the profit they expect from the engagement within that economy (Zhou, Xu, Xu and Barnes, 2020: 12). Social capital expects to attain future project markets, and in the regulatory framework, have more preferential policies which are also pleasing to government (Liu *et al*., 2020:3). Favourable government policies or regulations are important to private sector during their execution, as they reduce ambiguity and reduce risks associated with PPPs thus attracting private sector partners and secure project financing (Vu, Sandanayake and Zhang, 2023: 395). This is because a concessionaire undertakes responsibility to form a viable and profitable financing plan that ensures that the necessary funds are available to develop and operate the facility. So other actors, including lenders, such as banks, financial institutions, and bond holders, who may finance through loans, are involved (Aladag and Isik, 2018: 175). Consequently, favourable regulatory frameworks are essential for attracting investment to the private sector (Kang, Mulaphong, Hwang and Chang, 2018).

However, all the private entities are involved in PPP projects primarily because they are motivated by a return on investment. This requires that the private party engages in activities related typically to construction, financing, and operation within the phases of the PPP-PLC (Zhang, Yu and Zhang, 2020; Du, Wu and Zhao, 2018: 1). By engaging in the activities, they consequently bear risks proportional to their expected returns on investment (Jayasuriya, Zhang and Jing Yang, 2019: 3).

The expected profit is usually realised through two major types of payment mechanisms (i) government-funded payments also known as unitary payments. where government provides predetermined payments based on the volume of services offered or the number of users served, and the private entity is responsible for making the asset available and ensuring the service is provided (Cepparulo *et al*., 2024: 192), and (ii) user-funded tariffs or in user charges models, the private entity recoups its investment through fees charged to end users (Wang and Ma, 2019: 8). In user charged models, the viability of user-charge mechanisms depends on a stable demand for the product or service. When the public partner grants a concession period to the private entity, the entity operates and collects user fees to recover the initial investment, which is valuable to them. In both kinds of models, there are different perspectives on what constitutes value for the partners and stakeholders in the PPP. Table 2.6 presents the diverse measurements of value in PPP projects, according to the different researchers between the years (2015-2020).

Table 2.6: Measures of PPP value by different studies (2015-2020)

Author	Measures
Liang and Jia (2018: 7)	Benefits to end user, benefits to the public partner, benefits to the private partner, preparing for the future
Chung and Hensher, (2018: 354)	Private sector competence in risk management, legitimacy, public sector factors (public sector policies and mitigating controls)
Brogaard (2019: 21)	PPP experience, mutual trust, size of the partnership
Osei-Kyei and Chan, (2018b: 187)	Capacity building and training, project viability, proper planning, good feasibility studies, stakeholder consultation and engagement, transparency and competition, available financial market, appropriate risk allocation and sharing
Erk (2020: 107)	Quality of the assets, processes to mobilise them, governance
Selim *et al*. (2017: 10370)	Customer requirements, quality of products and services, cost of resources, systematic process approach, continuous improvement

Source: Authors

Table 2.4 shows the different measures that researchers adopted on the dimensions of value. The measurement of PPP value varies across studies, with different scholars conceptualising and operationalising the concept with emphasis to its distinct aspects. For example, Liang and Jia, (2018: 7), focus on benefits to key stakeholders and future preparedness, while

Chung and Hensher (2018: 354), highlight private sector risk management and public sector legitimacy. Brogaard (2019: 21), emphasises experience, trust, and partnership size as key value determinants. Osei-Kyei and Chan takes a broader approach, considering factors like capacity building, feasibility studies, stakeholder engagement, and financial market conditions. Erk (2020: 107), assesses PPP value based on asset quality, mobilisation processes, and governance, whereas Selim *et al*. (2017), focus on customer needs, product quality, resource costs, and continuous improvement. Together, these perspectives offer a comprehensive view of how PPP project value is defined and assessed. The aspects or measures are therefore not separate from but rather embedded within the broader framework of value creation and form the rationale for adopting PPPs in the first place. As elaborated in the Table, *value creation* captures both the strategic and long-term transformation that PPPs deliver.

The next section presents the value creation process of PPP projects throughout the phases of the PPP-PLC.

2.10 The PPP Project Value Creation Process

PPP projects promise value in the form of an improved economy, quality of life, technology transfer, innovation, competitiveness, and a robust, efficient public sector institutional capacity, among others (Tang, Liu and Zhang, 2021: 7). Like firms, they play a major role in leveraging enablers and constraints to create value. Through contracts, partners set goals to be achieved, and by leveraging their networks and the phases of the PPP-PLC, they engage in value-creating activities to deliver to stakeholders. The interaction between public and private partners in typical PPP projects generates benefits that lay the foundation for value creation (Liu, Sankaran, *et al*., 2024: 229). This requires preparing projects in such a quality manner that it reasonably evaluates and allocates risk between parties fairly (Zatonatskiy and Lieonov, 2024: 68). A typical PPP project carries out its activities through a PLC, characterised by phases. This study adopted the PPP-PLC discussed earlier in the chapter, which is presented in Figure 2.3.

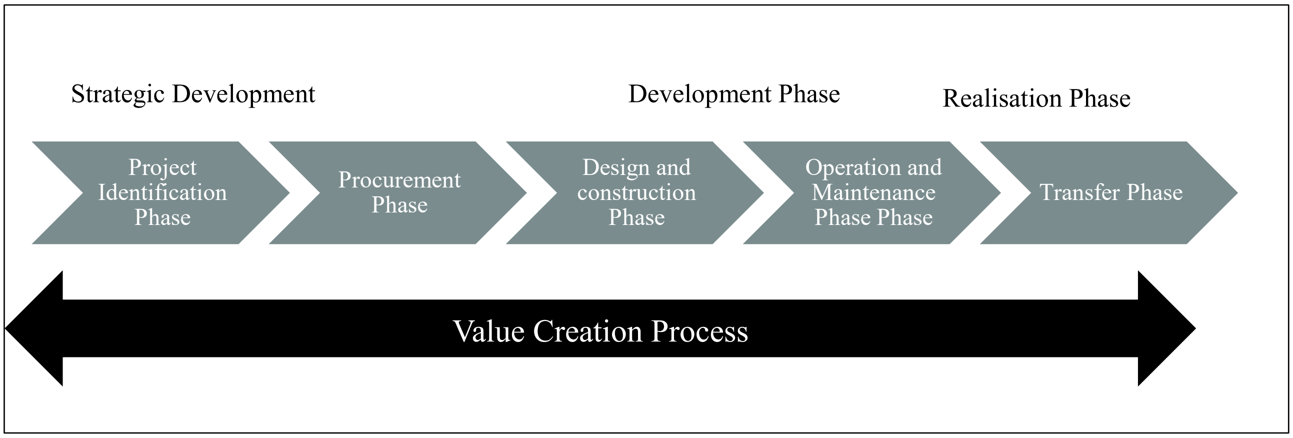


Figure 2.3 Value creation in a typical PPP-PLC

Source: Akinyode and Khan (2018: 16); Bao *et al*. (2018: 3); South *et al*. (2018: 63); Rwelamila *et al*. (2015: 222)

Figure 2.3 illustrates how PPP projects create value over the typical PPP-PLC. The PPP-PLC goes through phases that start with the project identification phase and end at the transfer phase. Nonetheless throughout the phases of the PLC, the project undertakes value creating processes at every stage.

The next section presents the drivers of value creation within the context of PPP projects according to literature.

2.11 Drivers Of Value Creation In PPP Projects

Studies define value as measured against internal and external events (Gruber, 2021: 30). These events drive PPP projects to create value for the primary beneficiaries and this is presented in the sub-sections below:

2.11.1 Participation in PPP projects

Participation entails support from the end user, citizens, government, and the community in a group process shaped by interaction extending over time through different phases of a PPP-PLC (Hurley, 2022: 249). It plays a critical role in influencing outcomes, shaping policies, enhancing trust, and affecting product and service quality. It also promotes social capital brought on board by the private sector among participants (Hurley, 2022: 248). It is essential for partners to participate by undertaking activities towards the success of the projects, particularly those which have widespread effects on stakeholders in society and the environment (Luo *et al*., 2022: 1).

Song *et al*. (2020: 1), clarifies that the public sector in this arrangement is represented by the government and these are key stakeholders. The other important stakeholders include groups like, landowners, local communities, and project users, who also contribute significantly to the project (Castelblanco, Guevara, Mesa and Hartmann, 2022: 2). When partners participate, resources are mobilised towards the delivery of satisfactory outputs. Participation essentially fosters connectivity among stakeholders, which is essential for value creation (Chamakiotis, Petrakaki and Panteli, 2021). Through this continuous interaction among stakeholders, value of goods and services is enhanced (Suseno, Laurell and Sick, 2018: 5). This is because participation establishes networks where activities, and resources help to create quality outputs (Eggert, Ulaga, Frow and Payne, 2018: 82). Participation from government presents itself in different ways including, government support, subsidies, policies, which may be indirect or direct as highlighted in Table 2.7.

Table 2.7: Government direct and indirect support

Direct Support	Indirect Support
• Capital subsidies in the form of cash for capital investments. • Revenue subsidies inform of support to recuperate investment during operation phase • In-kind (for example land) • Tax credits and exemptions	• Policies to support private investment • Risk reduction (depending on a predetermined event) • Guarantees like revenue, exchange rates, tariff rates and loan guarantees • Tax deductions

Source: Wang, Liu, Xiong and Zhu (2019: 501)

These elements of participation by government foster value creation in the projects. Government subsidies, for example, may be in the form of public institutions' contribution to financing in different forms for example purchasing guarantees and subsidies (Aladag and Isik, 2018: 175).

Participation takes many different forms as discussed in the next sub-sections.

2.10.1.1 Participation in the project identification phase

Participation, from stakeholders, especially the public partner is important at this phase. It serves to fulfil the basic rights of citizens, fosters fairness, and reasonableness in society (Luo *et al*., 2022: 2). It therefore creates a platform for stakeholders to brainstorm, monitor results, and contribute complementary ideas that affect the various phases of the PLC (Behnia, Heirollahi, Sahragard and Soltanifar, 2021: 364). There are a number of expectations from stakeholders which are important and once they are set and consistent with goal realisation for public interests, the intention to participate becomes strong (Luo *et al*., 2022: 13).

Participation influences the project by increasing the extent to which the members of the community go, to support a potential project (Boyer, 2019: 1467). The public sector is involved in the PPP-project from the onset and plays a key role of setting standards expected of projects to achieve, and defining goals that the public alone could not accomplish independently. The sector therefore strives to create an enabling environment that supports participation of stakeholders, and this is spearheaded by government. PPP projects are sensitive and require governments to establish policies, frameworks, and initiatives that communicate readiness and a commitment to the private sector in order to guarantee mobilisation of resources (Rezouki and Hassan Jinan Kata'a, 2019: 2645). Schulders and Rozenkowska, (2022: 310), argues that this is a commitment, from the government, and is a form of government support and is participation. Furthermore, constitutional, or political stabilisation and lack of violence is important as it attracts private investment in infrastructure development (Kouton, Sanogo and Djomgoue, 2023: 562)

Also, as part of the public sector, consumers are engaged at this stage for purposes of needs assessments and again, during ex-post evaluations to provide feedback. Active involvement of stakeholders enhances support for the project by increasing the perceived value of the project which will later lead to higher satisfaction and possibilities of greater consumption by the consumers (Gao and Zhao, 2020: 6). For the public partner to participate, the activities are often driven by financial constraints, which make the projects an attractive solution. The projects by nature promise the ease of budget pressures and reduced borrowing requirements (Cepparulo *et al.*, 2024: 191). Government also participates by enabling approvals. Approvals for the project, though they, require considerable funding support the project to avoid delays, disputes, and late acceptance of solutions that can considerably support complex obstacles at the next phases at the design, procurement, and the construction phases (Safapour, Kermanshachi, Ramaji and University, 2022: 11).

2.10.1.2 Participation during the procurement phase

At this phase, both partners participate in different forms. For the public sector, participation is about defining procurement specifications necessary to minimise the risk of corruption and ensure transparency of the procurement process (Cao and Wang, 2023: 13). Then as part of public sector is participation of the community. Community involvement is critical early in the procurement process as it strengthens the understanding of project requirements, prevents opposition, manages changes in expectations, and garners public support for the project (Simon, Jefferies, Davis and Tanvi Newaz, 2020: 619).

Private sector participation is enhanced through attraction. Due to high rates of globalisation and competition, attraction is focal as it influences foreign investment motivated by political and social economic reforms of a country (Rukhshona Farrukhkizi and Bobur Bakhtiyor ugli, 2024: 144). Private sector participation at this phase introduces the aspect of private financing, a prerequisite for governments and policymakers to implement the much-needed infrastructure projects (Zhang, Gu, Shan, Xiao and Darko, 2018: 2; Ameyaw, Chan and Owusu-Manu, 2017: 1). The procurement phase is typically the beginning of joint participation from both the public and private sectors. Although, Bin and Liang (2021: 8132), argue that private sector involvement largely commences when government creates the necessary environment to encourage private sector involvement, ensuring that private sector benefits are mutually realise. To attract substantial private sector participation, a PPP Unit is critical (Mallisetti, Dolla and Laishram, 2021: 227). PPP Units are used globally to facilitate successful attraction of capital in infrastructure investment (Casady and Geddes, 2016: 2). Most government policies allow the establishment and financing of PPP Unit whose activities sustain partner participation especially during the lengthy procurement process

(Casady, Flannery, Geddes, Palcic and Reeves, 2019: 1263). Through the PPP Units the public sector engages with stakeholders, streamline activities and influence private sector participation by influencing project size, project processes and length of the project. Potential bidders are influenced by market conditions and competition levels which attract them and these usually respond, based on the project scope and their portfolio (Dolla and Laishram, 2019: 1186). Participation can be through solicited or unsolicited proposals. Unsolicited proposals enhance private sector participation by fostering innovative and creative submissions (Mallisetti *et al*., 2021: 235).

Li, Xiong, Casady, Liu and Wang, (2023: 1), argue that the private sector at this phase participates by minimising public sector problems by aligning their commercial expectations with the public sector's goals and long-term sustainable development objectives. The relationship is then cemented by a contract whose main elements are usually presented in the tender specifications (Kopańska *et al*., 2024: 2).

During this phase, negotiation is a key component of the project if the project is to succeed; and therefore, the private partners negotiate to address the needs of stakeholders or risk losing contracts (Bherer, 2023: 3). A key feature of PPP projects is the Special Purpose Vehicle (SPV), a legal and independent entity created to explicitly provide operational and financial support in addition to project management to a specific PPP project for the duration of a concession period. This includes overseeing all levels of project activities from financing to construction, to maintenance, as per the terms of the contract (Sarmento and L.D.R, 2014: 8). While traditionally viewed as a representation of the private sector, Stafford and Stapleton (2016: 951), argue that an SPV embodies both public and private sector interests, functioning as a conduit for collaboration. The SPV operates as a limited company or a shell company to facilitate the flow of financial resources and coordinates relationships among key stakeholders that constitute the partnership. Therefore, during the negotiation, the project sponsors (usually both partners) are represented by the SPV, which is responsible for driving the project forward (Pantelias and Roumboutsos, 2015: 105). The way that the SPV is set up is in such a way that the partners sign a contract that fosters clear and well-defined contractual terms and roles for both parties. An SPV ensures that there is mutual trust and that citizens, or end users are part of the process (Warsen, Nederhand, Klijn, Grotenbreg and

Koppenjan, 2018: 18). The signed contract then provides structures for governance that enable the partnership to circumvent conflict by establishing mutuality (Marques, 2018: 2).

2.10.1.3 Participation during the design and construction phase

After the contract is signed, there is contract management. The public partner has a big role of contract management to play, so as to safeguard its interests within the confines of the contractual provisions (Dolla and Laishram, 2019: 1186). Represented by government, the public partner is responsible for creating and ensuring an enabling environment that enables contract performance. This includes enabling approvals, licences, permits, among other items that are important (Steen Olsen, 2009: 5).

Very appealing to government is modernised infrastructural delivery using experience and technology from counterparts in the private sector with very minimal public budget commitment (Garrido and Vassallo, 2021: 3). The private partner participates at this phase by making substantial financial commitments towards construction costs of the facilities while public partner further participates through the issuance of bonds, contribution of local tax revenue funds, the donation of public land and the reduction of property tax (Cocco, Mayer and Montanaro, 2023: 12). At this phase, the end user participates as they are no longer a passive onlooker in a PPP but then again, they put pressure on the government to deal with their expectations, requirement, and needs. Cao and Wang (2023: 12), argues that PPP projects often overlook the importance of user involvement. Nevertheless, user involvement is key as their involvement makes the project design better and further leads to better systems (Jelsma, 2003: 103).

Gómez-Carmona, Casado-Mansilla, López-de-Ipiña and García-Zubia, (2024: 1), also stress the user's role as the key to reduce their reluctance to forming part of new scenarios, as, engaging them to collaborate with solutions ensures that they are not perceived as a threat. As consumers, they are highly crucial since they may even be involved in the inspection of raw materials, appraisal of suppliers, demand transparency, and ethical compliance, all of which are matters of public concern as they connect to beliefs, influences, and must be examined (Farzin *et al*., 2022: 5).

2.10.1.4 Participation during the operate and maintenance phase

Partner participation at this phase takes on new form. For the private sector, participation does not stop at designing, constructing, managing, funding but also extends to operating government projects (Alghamdi, Tatari and Alghamdi, 2022: 2). This is driven by need for profit and for this reason the private party even hires professionals whose responsibility is to manage, keep safe and maximise profit of their portfolio since in the partnership they are the investor (Demirel, Leendertse and Volker, 2022: 166).

On the other hand, for the public sector, participation includes supervision. A supervisory institution is usually established by government, in addition to innovative incentives, restraint systems. Communication platforms are set up, linked with performance evaluations and payment mechanisms which incorporates penalties, punishment, and curbs opportunistic behaviour (Peng and Zeng, 2022: 10).

At this phase, the end user is also a key stakeholder as they are not only a consumer, but their experiences are capitalised upon. The end user improves investment effectiveness, fosters innovation, and accelerates project development all of which opens the doors to various strategies and solutions (Unvan and Ozdemir, 2023). Jointly, with the project, they embark on co-creation of products and services that generate satisfaction. Value co-creation encompasses the scope beyond the usual quality, price, and service improvements to the end users (Sheth, 2020: 4).

At this phase, for end users, economic value stands out in terms of pricing, or through their overall experience and engagement with the project is central (Ullah, 2021: 210; Freudenreich *et al*., 2020: 3).

Moreover, end user experience with products and services affects the project. The longer the citizens use products and services, the stronger their perceptions of the product and services' usefulness which government depends on, to attract and encourage users the use of products and services more often (Wang *et al*., 2021: 11).

At this phase, participation affects the budget, time conditions, regulatory requirements embedded in group dynamics, public support, satisfies the economic interests of the concessionaire in the recovery of initial investment and those of the public sector by ensuring accountability that guarantees that there is no heavy burden to society (Pellegrino, 2021: 2). The concession period is usually extended to allow the concessionaire to obtain abundant revenue levels at lower costs to the public partner or for a shorter period, but allowing for higher prices to the user (Hadi and Erzaij, 2019: 1237). In most instances government frequently intervenes during this phase to provide a bailout option to support the private partner in the delivery of products and services and to prevent disruptions, which is articulated as a means of maximising public welfare (Silaghi and Sarkar, 2021: 1).

2.10.1.5 Participation at the transfer phase

Participation at this phase is critical. At this phase, projects require resources and expertise to oversee sizeable infrastructure facilities once the private sector departs (Cocco *et al*., 2023: 26).The project responsibility shifts from the SPV to government (Bao, Martek, Chen, Wu and Chan, 2022: 8). However, the financial resources and capital required to support the public sector during this time can be provided by private partners. Stakeholders need public and private partner participation in short- and long-term training and commitment so to use knowledge management tools, create agencies entrusted with activities as well as legislative backing to support the activities (Akinbo, Fagbenle and Amusan, 2024: 9). The transfer phase requires understanding by both partners.

2.11.2 Partnership PPP projects

When newly formed, PPP projects create an imbalance, typical and expected (Bajwa, Kitchlew, Shahzad and Rehman, 2018: 682). That is why a strong partnership is imperative for the creation of value by stakeholders, at different phases of the PPP-PLC.PPP projects are founded on an interplay between the public and private sector and their interests which create dynamics where objectives either align or diverge (Wu *et al*., 2025: 1). Through partnership, PPP projects are able to synergise practical experience and resources of both parties to the partnership so as to achieve objectives (Budnyk, Vasylieva, Artemenko, Shcherbak and Kapelista, 2024: 5). They leverage their resources in the partnership, and these may be in the form of partner expertise and capabilities, local support, and involvement (Dykes and Uzuegbunam, 2023: 49). Other resources may range from capital or land towards the project (Ahmad *et al*., 2018: 3).

The next sub-sections present partnership as at the different phases of the PPP-PLC.

2.10.2.1 Partnerships during the project identification phase

During this phase, project managers create and evaluate initiatives that relate to stakeholder mapping, necessitate identification, classification, analysis of multiple groups and promote a clearer awareness of potential areas of stakeholder tensions (Johnson and Klassen, 2022: 6). The project therefore is bent towards guiding a consortium of actors towards broader societally oriented value propositions that go beyond the advantages of individual projects (Vosman, Coenen, Volker and Visscher, 2023: 15).

Rosell and Saz-Carranza (2020: 159), argues that this includes ensuring macroeconomic stability, regulatory environment, and market size which will play a significant role in attracting private investors and determining the number of PPP projects in a country. The process enhances partner collaboration within and through complex environments and situations, govern future agreements and create an enabling environment to reduce conflict and enhance efficiency and performance in the partnership (South, Raymond, Levitt and Dewulf, 2017: 503).

2.10.2.2 Partnership in procurement phase

At this phase, attraction is key as it influences the flow of stakeholders (Erislan, 2017: 192). Government’s interest is in attracting the right partners to complement its production of products and services. The result of this phase, therefore, is a partnership of combined strength where partners involved achieve what each partner could not accomplish independently (Amadi, Carrillo and Tuuli, 2018: 1). It is therefore the responsibility of the public partner to evaluate the private partner, while, equally, at the same time, the private partner equally evaluates the public partner (Ye *et al*., 2018: 2). The partners form a concessionaire which acts as an agent, intended to maximise profit but with government as the principal who delegates responsibility to provide public service. They then have agreements that require negotiations to enable them to pursue the project, service, or activity, and the agreements are signed between the public and private partners (Addy and Adabor, 2021: 77).

2.10.2.3 Partnership in the design and construction phase

Government transfers its role to the private entity and maintains a role as supervisor as it capitalises on resources of the private entity, which has become the infrastructure provider (Iossa, Vergata and Saussier, 2018: 2). The private sector takes over the designs, allowing it to conduct more comprehensive self-monitoring to support the acceleration of project completion (Winata and Gultom, 2024: 1405). There are a number of resources used at this phase and these include, funds, expertise, skills, and knowledge are leveraged upon to reduce risks, manage stakeholders, and minimise any time-based delays (Osei-Asibey *et al*., 2024: 18). The private entity usually has diverse partners to supplement project resources, making the relationship even more complex. So, the partnership requires effective coordination to adapt to emerging situations during the contract period (Caldwell, Roehrich and George, 2017: 4). Knowledge sharing between partners to complement skills and expertise, is critical for the project outcome (Gurca, Bagherzadeh, Markovic and Koporcic, 2021: 8).

It is therefore imperative that since PPP projects are a product of two partners of the private and public sector, the legislative support empowers knowledge sharing especially from the private sector (Akinbo *et al*., 2024: 1027).

2.10.2.4 Partnership in operate and maintenance phase

A successful PPP project requires a healthy partnership between social capital and government where social capital's investment needs stem from reasonable income while government needs are so that the public interest is assured (Luo *et al*., 2022: 1). Therefore, during this phase, government supports the project by isolating political pressures to reduce tariffs and striving to maintain prices close to cost-recovery levels (Fabre and Straub, 2023: 5). Whereas the private sectors' role is to manage project operations which boost productivity and revenue, the government as part of the public sector maintains the duty to protect end users, ensuring quality of service, operations, and knowledge transfer (Unvan and Ozdemir, 2023: 55).

Further, the public partner is interested in providing the project within the shortest time possible, at least cost to the public and is therefore responsible for monitoring the private entity's compliance according to agreed terms (Kang *et al*., 2018). The partners play their roles to ensure strict implementation of existing laws and policies and fulfil the project contract terms (Liu, Guo, Martek, Chen and Tian, 2022: 3747).

2.10.1.5 Partnership in transfer phase

The concession period is an important facet of the project as it maps a timeframe within which the concessionaire is entrusted with responsibilities after which the asset eventually transfers back to public authority (Marco and Safari, 2024: 20). The private partner at this phase hands over the infrastructure in good condition after the concession period has expired, with the assets transferred back carrying the promised residual value (Bao, Chen, *et al*., 2023). At this phase, there is a delegation of powers to an operator that may succeed operations of the transferred project.

The next section discusses dynamic decision making in PPP-PLCs as a driving factor for the value creation process.

2.11.3 Dynamic decision making in PPP projects

Decision making is important as it covers all the phases of the PPP-PLC and a broad range of processes (Nibbelink and Brewer, 2018: 939). According to Gonzalez Cleotilde, Fakhari Pegah and Busemeyer Jerome (2017: 713), making decisions within complex systems is challenging, marred with many constraints and high uncertainty, coupled with people's complexity and behaviours. It is important to note that when making decisions in general or to reach a widespread agreement is important to make decisions under the consensus rule (Pérez *et al*., 2018: 21).

The next sub-section presents how PPP projects undertake dynamic decision making throughout the different phases of the PPP-PLC.

2.10.3.1 Dynamic decision making at project identification phase

Governments over time have developed new ways to deliver public services which involve non-state actors within the governance process representing a deviation from traditional government-led delivery mode (Lee and Kim, 2024: 1482). Since PPP projects are dynamic, they require the competence of actors and special attention at different phases specifically at the pre-contract phase to accurately assess market demand, return on investment, standard bidding processes and long-term dynamic decision making, to prevent drastic changes in the phases that follow (Wang *et al*., 2022: 738). At this phase, the project needs to establish governance structures. Governance structures align the project with stakeholder needs making it critical to deliver value across differing levels of the project (Ang and Biesenthal, 2017). At this phase, stakeholder inclusion in the decision-making process is crucial as it engages the stakeholders in social issues, increases trust among stakeholders and improves social criteria of the toll tariff policy (Castelblanco *et al*., 2022: 1). Among the decisions expected of government is to enact legislation which favours the diverse approaches to PPP (Kang and Vedlitz, 2025: 4).

2.10.3.2 Dynamic decision making during the procurement phase

Torchia and Calabrò (2018: 94), assert that PPP projects require well-functioning institutions, transparent and efficient procedures, accountable and competent partners. Government takes decisions to facilitate private sector entry into the country and the more decisions that facilitate private sector entry, the more private firms are willing to take on more risks (Kouton *et al*., 2023: 562). The establishment of a PPP unit supports the practice of PPP policies and strategies of PPP projects while standardising transparency of the process as the critical factor for the sustainability of a PP Partnership. Further, the choice of a competent private partner is critical. The experience and expertise may present in the form of the technical abilities of the private entity which is a strong determinant for a PPP (Ameyaw *et al*., 2017: 22). The decision for the private partner to engage in the project is enhanced by the potential for the project to be profitable and complex as well as supportive to environmental (Ye *et al*., 2018: 8).

The private sector's decision to participate enhances financial support towards the project (Liu and Cao, 2021: 4).

2.10.3.3 Dynamic decision making during the design and construction phase

Once the partners have mutual objectives, there is equal salience and equal treatment due to shared goals (Sheppard and Beck, 2020:5). Dynamic decision making effectively supports projects to address social issues and lower possible inflexibility of stakeholders who are impacted by the project, toward the project (Castelblanco *et al*., 2022:12). Interaction of stakeholders in decision making is important as it further supports the development of innovative ideas rather than demand innovation in contract (Callens, Verhoest and Boon, 2021b:2). It enhances governance which improves transparency, accountability, inclusiveness, equipping the project to overcome failure that may arise from governance related aspects (Mohammed, Jubair, Singh and Singh, 2022: 1562). Al-Tekreeti, Beheiry and Ahmed (2022: 3), assert that flexibility is key to supporting the design and enhancing techniques, critical to cut waste, risk and enhance efficiency and adaptation. Further, knowledge is created through the dynamic interaction between tacit and explicit knowledge, which facilitates problem-solving. This knowledge can be shared across networks through structured frameworks designed to enhance knowledge transfer. Knowledge sharing behaviour encourages the integration of diverse knowledge sources, which are then transformed into valuable knowledge resources. These resources evolve into knowledge capital, contributing incrementally to overall performance (Li, Wang, Wang, Su and Zhang, 2020: 3).

2.10.3.4 Dynamic decision making during the operate and maintenance Phase

The extended period that PPP projects take result into contractual changes and renegotiations over the concession period and therefore, contracts need to include clauses that address the dynamic environment within which the Projects operate since contract negotiations; change management is inevitable (Ahmad, Connolly and Demirag, 2020: 2). Structures over the PPP-PLC are important for the decision-making process. Horizontal structures, without hierarchies and built on trust, might be formal or informal, but they are vital for generating synergistic linkages between partners, enhancing relationships, and fostering decision-making and accountability (Burke and Demirag, 2017: 36). Further, to make an informed decision, feedback from previous decisions made in similar environments is a strong determinant and is guided by the decision-makers' perception, attention, and memory. Krogh (2022: 3), asserts that skilled, competent, and resourceful team members capable of developing effective strategies that can design strategies to handle cross-pressure and meet numerous partner needs while resolving project tensions are critical. When project team members are competent, they can formulate SMART objectives goals and detailed plans in complex situations, over the PLC, requiring them to perform and reconcile wicked problems efficiently and effectively (Krogh, 2022: 1994).

2.10.3.5 Dynamic decision making in transfer phase

At this phase, the asset or facility is transferred back to government in a prior agreed working condition (Ahmad *et al*., 2018: 5). The role of government is central during this period, and the residual ownership of the project may impact its survival as government is more concerned about public welfare than profit; therefore, development and enhancement of infrastructure are more significant with the public partner than with the private partner (Mansaray, Coleman, Ataullah and Sirichand, 2021: 3).

The next section discusses risk management at the different phases of the PPP-PLC.

2.11.4 Risk management in PPP projects

Risk management is so critical to the survival of a PPP project as it is the major objective for the partnership in the first place. Large infrastructure projects have contracts which are typically lengthy and complex, implying that risk is inherent in the project processes (Soecipto and Verhoest, 2018). The need to reduce risk calls for all partners and stakeholders to take part (Tamošaitienė, Sarvari, Chan and Cristofaro, 2020: 2). Government attracts PPPs, to reduce risk to itself, the public's risk must therefore be close to zero, as the assumption is that government should effectively be risk-neutral (Moore, Boardman and Vining, 2017: 4). According to Saher Najmul and Khan Shahwali (2018: 318), risk is,

> *"… a situation in which a project suffers a detrimental influence"*

Understanding risk management takes a lot of effort from both partners, as failing to manage it is the main reason of all PPP Project failures (Batjargal, 2022:2). The concept comprises risk allocation to partners or stakeholders who are most qualified to mitigate them (Mohammed *et al*., 2022: 1524). Risks and their allocation are the heart of a PPP agreement (Pantelias and Roumboutsos, 2015:110).

Researchers categorised risks using different dimensions. For example, Tamošaitienė *et al*. (2020: 6), categorised it as physical, competency-related, economic, political, social, construction-related, and contractual/legal. On the other hand, Tang *et al*. (2019: 8), categorised it as government decision-making risk, government credit risk, revenue risk, payment risk, public opposition risk, change in market and demand risk, technical risk, delay in project approval and permitting risk, supply risk, lack of supporting infrastructure risk, exchange rate risk, legal and policy risk. Furthermore, Bel, Bel-Pi and Rosell (2017: 149), argues that risk is land expropriation risk, permits and licenses risk, design and geology risk, financial risk and technological. Generally, different studies have examined the concept of risk and categorised it according to their studies' perspective.

The next sections present how PPP projects manage risk through the PPP-PLC.

2.10.4.1 Risk management at project identification phase

PPPs have grown appealing, for financing infrastructure projects as a result of countries' financing challenges (Mousa, Zhang, Ahmed, Anbar and Hemdan, 2024: 8). Especially in developing countries, PPP projects are adopted to advance infrastructure, and this is influenced by the need to share risks and rewards between the public and private sector investors (Dugal and Tiwari, 2024: 1). Partners evaluate their strengths and weaknesses at these early phases, as understanding them enables the project to appreciate what is required of a partner in order to allocate and manage risk appropriately so as to minimise transaction costs, enhance performance and facilitate timely completion of the project (Mohammed *et al*., 2022: 1534). Partners hail from across different sectors, to cooperate within relationships and efficiently allocate risk through strategy (Wang, Liu, Xiong and Song, 2018: 117). When risk is managed it can positively affect project performance (Aladag and Isik, 2018: 1). There are a number of techniques that partners apply formally to assess, identify, and implement predetermined means to manage risks and contain consequences (Tallaki and Bracci, 2021: 2). Tools that enable accurate assessment and evaluation for equal distribution of risk among partners are necessary for risk management (Batjargal, 2022: 8). Risk, if identified and allocated to partners who are most capable of lowering them, increases their chances to effectively manage the project (Almarri and Boussabaine, 2017: 90).

2.10.4.2 Risk management at procurement phase

Risk management in the procurement phase includes procuring a compete and reliable private partner and resources to undertake the project (Mohammed *et al*., 2022: 1524). Typical PPP projects manage risk by shifting it to the partnership through contracts (Iossa *et al*., 2018: 2). The signing of a concession agreement (contract) marks the beginning of the concession period between government and the private sector, and this is more often long and not standard to allow private sector to recoup their investment and make a profit (Kouton *et al*., 2023: 545). In this phase, the contract determines the project scope, prepares partners and prepares them to perform key performance indicators for the project's overall success by curbing the depreciation of standards during project implementation (Mohd Isa, 2018: 159). The contract signed should be flexible enough to deal with the high uncertainties of the PPP projects (Guo, Zhang and Wang, 2021: 156). The contract should further be structured in such a way that financiers pass risks from the public clients through the Special Purpose Vehicle (SPV) to Design, Construction, Operation and Maintenance contractors (Liu, Clegg, *et al*., 2024a: 36). It is important as the contract is being designed to consider possibilities of renegotiation.

Negotiation is key in managing the project processes. It plays an important role in the calculation of the potential benefit and risk of such involvements (Han and Gui, 2024: 909). It also curbs opportunistic behaviour through contracts signed. The contracts therefore are structured in such a way as to create sustainable infrastructure while lowering the risk of opportunistic behaviour by stakeholders especially investors, focusing on long term relationships and trust, and putting less emphasis on one-off transactions (Spohr *et al*., 2021: 275). Generally, PPP contracts by nature leave room for renegotiation through improved communication channels in their structures to accommodate renegotiation as it arises (Ahmad, Niu and Xiao, 2017: 26). Key to negotiation is an incorporation of clauses that limit the number of modifications so that partners can free themselves when the contract exceeds the number of times, employing private insurance (Bel *et al*., 2017: 149).

2.10.4.3 Risk management at design and construction phase

Partners conveniently and efficiently assign risk at design, construction, operation, and maintenance phases mainly to the private partner to minimise risk to the user (Nizkorodov, 2021: 11). Risk is recurrent at this point due to the dynamism of the environment requiring transfer of risk within contract terms (Xu, Chong and Chi, 2021: 2).

It is imperative that all stakeholders place strong emphasis on identification of risks as the soundness of this process reflects directly on the success or failure of the project (Cao, Li, Su, Zhang and Zhang, 2024: 2). According to researchers, the project’s focus is on maintaining a balance between reducing costs large enough to avoid cost overruns (Haaskjold, Andersen and

Langlo, 2023: 135). Some risks may present themselves in terms of a regulatory system which may not always operate as planned, creating a gap between written laws and actual implementation (Kouton *et al*., 2023: 564). Other risks may include inaccuracy, unclear mechanisms of distributing roles among partners, inconsistency, vagueness, inflexibility, and rigidity. Involvement of top-level management is crucial, to encourage completion of the project within scheduled time despite adequate financial resources (Brogaard, 2019: 635). Successful implementation is hinged on expertise and capability of the project team to implement the project activities through an SPV (Sainati, Locatelli, Smith, Brookes and Olver, 2020: 151). This is because the SPV typically has independent project governance and administrative responsibilities of delivering the project (Liu, Clegg, *et al*., 2024a: 36). It supports the project by sharing risks which are contractually based on risk allocation between the SPV and government authority despite it being independent from project sponsors (Pantelias and Roumboutsos, 2015: 109). Further, to manage risk, projects need to be cognizant of the local community who should be involved in processes so as to lessen the inconvenience to them (Morshedi, Yoon, Bhattacharyya, Jung and Hastak, 2022: 1). Bargaining, negotiating, and sub-contracting are therefore common, and the existing contracts need to be accommodating so as to influence positive outcomes of the project (Demirel, Leendertse, Volker and Hertogh, 2017: 197).

Risk can be managed though renegotiations, early terminations, and dispute resolutions (Xiong, Zhao, Yuan and Luo, 2017: 76). Renegotiations usually occur shortly after contract award (Engel, Fischer and Galetovic, 2020: 20). Early termination is also another risk which typically occurs as triggered voluntarily by the procuring entity in the interests of the public or otherwise referred to as public policy (Marques, 2021: 2). Early termination entails stopping the main contract and quitting a partnership, causing significant losses to the project stakeholders (Sharafi *et al*., 2021: 4). When early termination occurs, the government compensates the contractor takes over rights, service provision, investments, and assets to avoid future risks (Xiong *et al*., 2017: 80). Compensation may also be a bailout where the government pays the private partner for land acquisition, civil works, and acquisition costs equivalent to the investment or based on remaining time until the end of the concession according to the partnership economic, financial plan (Alcaraz Carrillo de Albornoz, Sánchez Soliño, Lara Galera and Isabel Álvarez, 2021: 86).

2.10.4.4 Risk management at operate and maintenance and operation phase

This phase involves the levying of tolls from users. Tolling is implemented for user-pays projects, and there is a risk of revenue underperformance and public opposition stemming from the nature of the products delivered by the project. Private sector therefore requires options to mitigate the risks by setting revenue, and this may require government support to provide subsidies, guarantees or alternative forms of support such as incentives to enable them to alleviate the concern of revenue risk and attract participation of the private sector (Attarzadeh, Chua, Beer and Abbott, 2017: 15). In some cases, the risk of revenue underperformance due to public opposition are borne by the public sector through contract rather than sharing it or transferring it to the private sector (Castelblanco *et al*., 2022: 11). Researchers argue that government is the primary creator of risk since it plans for the projects and is a significant influencer of the repayment plan or willingness to pay or buy the user (Engel *et al*., 2020: 18). The project must deal with a variety of issues and since it is a fresh operation, and these include finding and managing customers, suppliers, employees, and the facility (Mousa *et al*., 2024: 7).

2.10.4.5 Risk Management at transfer phase

During transfer phase there are numerous risks stemming from the transfer of technology like know-how, technical patents, and work instructions which are technologically related aspects important to the project. However, due to the fact that projects are built and run by international, sometimes foreign private sector organisations they often utilise unfamiliar technology which government and or local organisations may not be equipped to efficiently or effectively run the project (Bao *et al*., 2022: 1). Effective knowledge management practices during this phase are essential to understand the project's risks, as during this time, some may argue that the product's value may depreciate due to overuse of resources as the concession period has ended (Le, Kirytopoulos, Chileshe and Rameezdeen, 2019: 177). Assigning residual ownership of infrastructure to the government reduces the prospect of project failure (Mansaray *et al*., 2021: 1). Click or tap here to enter text.

2.11.5 Innovations in PPP projects

For communities, innovation is important, as it enables them to achieve sustainable competitive advantage and growth (Mcclain, 2022: 43). For countries, it is important to develop and maintain current infrastructure, create new initiatives that benefit from cutting-edge technology and modify both their old and new systems to accommodate the shift in economic trends (Irons, 2023: 4). Generally, innovation solves environmental issues, stimulates economic activities, distributes reliable, sustainable products and services in a rather accessible and equitable way to intended beneficiaries and stakeholders (Bacq and Aguilera, 2021: 30).

In light of the economic and social challenges in today's world, priority is given to professional competence that boosts innovations and effectively manages them throughout a dynamic environment (Beliakova and Yurieva, 2020: 2). There are many definitions of innovation according to literature but for this purpose, the study adopts the definition by (Callander and Matouschek, 2020: 1). They define innovation as, doing things better and differently. Innovation involves a total of concepts like new products, technology, services, products, and regulations (Zilberman *et al*., 2022: 2). In the context of PPPs, the definition serves the purpose of highlighting what the PPP model brings onboard and further indicates what is expected of the partners as outputs.

To put concepts into practice, the innovation process needs practical resources (Cinar, Simms and Trott, 2022: 4). The resources include expertise, knowledge of the workforces as well as access to natural resources, technological advancements, product designs, market information and partnership with third parties (Lopez-Vega and Lakemond, 2022: 399). Liu, Clegg and Pollack, (2024b: 31), insists that the advancement of PPP adoption fosters innovation. Priharsari *et al*., (2019: 764), argues that technology is also one of the actors in innovation, with its own capabilities and should be emphasised.

2.10.5.1 Innovation during the project identification phase

Innovation at this phase is triggered by problem solving ideas followed by efforts to turn the ideas into processes, products and standards which are then subsequently implemented in practice (Mattsson and Junker, 2023: 24). At this phase, projects employ innovation strategies to bridge the innovation gap between their desired future position and current position to get beyond the institutional limitations of technology leadership, sourcing and scope that influence value generating skills, seeking to sustain competitive advantages (Lopez-Vega and Lakemond, 2022: 419). Stakeholders therefore require governance structures so that when value is created through innovations, it reaches the intended party in a sustainable and desirable manner (Bacq and Aguilera, 2021: 30). They design an environment that boosts design freedom to enhance potential effects of information sharing and network management that foster innovation (Callens *et al*., 2021: 276). Gifford, Mckelvey and Saemundsson, (2021: 652), suggest an environment that adopts a bottom-up approach to entrepreneurship that focuses on activities that help solve societal problems and have effects outside the boundaries of the eco-system, and top-down approach to public policy to stimulate new science and technology which can be used by public and private partners to realise sustainability.

However, during this phase, not a lot of innovative activities are carried out and in fact they are discouraged, as, innovations prior to the project being undertaken actually limits innovation during project delivery by building inflexibility and an aversion to risk (Liu, Clegg, *et al*., 2024a: 39).

2.10.5.2 Innovation during the procurement phase

Public procurement generally attempts to acquire something new (Zabala-Iturriagagoitia, 2022: 1207). Traditionally, innovation drives procurement of a PPP, out of a duty to carry out activities that deliver an infrastructural asset, and requiring the shift of responsibility to another partner, in this case, the private partner (Dolla and Laishram, 2019: 1188). At this phase, several factors influence or affect innovation, leading to consequences related to the basic logic of how it is handled, put into practice, and influenced by political dynamics (Meijer and Thaens, 2020: 137). Critical to note is requirement specification, which is key as it immediately specifies and marks the start of the procurement process when stakeholders' specific expectations of the product outcomes and operational activities are advanced (Adjei-Bamfo, Djajadikerta, Jie and Mavi, 2022: 14).

Innovation is procured as deliverables of the project, and this is contractually defined and maintained through long-term collaboration between the public partner who procures and the private partner who is contracted (Callens *et al*., 2021). At the tendering stage of the procurement phase, there is bound to be flexibility of the project contract to permit the involvement and consideration of citizens, their knowledge, and experiences (Mu and Wang, 2020: 502). When stakeholders are involved in innovation activities at this phase, the public authority can address specific issues or needs, since in the first place, the public authority was unable to resolve its needs on its own (Milenkovic, Rasic and Jovancevic, 2022: 1261). Public authority therefore works to develop and embrace technologies and goods that are in their early phases of development and ahead of existing market demands by identifying firms that have the much-needed experience with smart projects to integrate data from citizens, private partners, and government to achieve mutual satisfaction (Quan and Solheim, 2023: 4). Ojiako, Chipulu, Almeile, Ika and Bashir (2023: 13), insists that at this phase, innovation can be driven through the contracts drawn to incentivise paying the private sector for the delivery of specific services and assets. In the structuring of the contract, payment mechanism needs to be incorporated to match performance favour innovations (Carbonara and Pellegrino, 2020: 151).

2.10.5.3 Innovation during the design construction phase

Innovation ideally requires an integration of procedures and outcome-based practices that engage stakeholders and foster novel opportunities for improved environmental outcomes (Johnson and Klassen, 2022: 2). This phase is characterised with arbitrary difficulties which may lead to innovation opportunities for both the public and private sector, other than depending on contract conditions (Callens *et al*., 2021: 876). Therefore, innovation is not isolated but rather a collaborative process that calls for participation of organisations with complementary competencies and capabilities or a combination (Rocha, 2022: 41).

Innovative collaboration techniques include those that increase the involvement of small and minority suppliers, and this is advantageous (Johnson and Klassen, 2022: 6). A holistic approach encompassing top down and bottom-up approach is key to enhancing and governing of intensive innovation and co-development by stakeholders.

Co-development is a component of innovation which refers to partners' collaborative efforts that partners undertake in innovation to deliver flexible product design and share knowledge (Gurca *et al*., 2021: 8). It calls for partners to work with a range of relevant government and non-government actors that hold critical assets like experience, ideas, legitimacy, courage, and authority. The idea is that innovation is an improvement to government which calls for a wide range of partnerships to co-develop with actors like citizens since society is dynamic and governments need to adapt and deal with changes in technology, social situations, and needs of citizens (Meijer and Thaens, 2020: 136). When stakeholders collaborate for an innovation, the process promotes the development of innovation-related assets and capabilities through mutual knowledge, skills, and resource exchange to develop solutions that increase the ability to implement technologies, competitiveness, and value creation (Samoylov, Zhulega and Sycheva, 2021: 136). In fact, co-development after all, yields responsible innovation as it involves stakeholders in decision making under all conditions and enhance the push for responsible actions in innovation (Adomako, Dong Tran and Chi Minh City, 2022: 1702). This approach is key to facilitating knowledge development and sharing which encourages collective action for science and technology, and links these processes to established knowledge, norms, and incentives (Gifford *et al*., 2021: 668). Digital technologies form part of innovation and are critical at this phase as they are used to deliver the most modern, cutting-edge, and environmentally friendly innovations (Milenkovic *et al*., 2022: 1259).

When a project develops an innovative product, an announcement is made, and the product unveiled. According to Chu, He, Hui and Lehavy (2024: 1), stakeholders typically get to learn about product that has been innovated through a new product announcement. However, in some cases, unfavourable results may arise from continuous innovation which may result in lack of stability which, despite the fact that it is frequently desirable, it may disrupt processes that are actually effective, causing stress among employees, customers, and external relations because no one knows what to expect from the organisation (Meijer and Thaens, 2020: 140). *"Exnovation"* is an aspect that is key at this point, and partners have to be aware that it happens especially when a project has to make the choice to substantially or entirely reverse an innovation which was previously committed to with resources, so stakeholders have to be engaged, political capital frequently spent, organisational practice altered, and training acquired (Hartley and Knell, 2022: 46).

Important to note is that, during innovation especially for design of infrastructure, the project needs to consider economic, financial, social, and environmental needs of stakeholders (Koppa, Musonda and Zulu, 2023: 5). Technological adaptability, technical soundness, minimal environmental effect, optimal economic and social equality are all key during the development of innovative products (Hailemariam and Nuramo, 2023: 13). Regarding project finance, since it is central to innovation, partners bear the risk with little interest for any innovations that may diminish returns as their part of contractual bundling (Liu, Clegg, *et al*., 2024a: 41).

2.10.5.4 Innovation during operation and maintenance phase

During this phase, innovation is enhanced by interactions between the public and private partners who are encouraged to adapt their operations to consider sustainable development leading to creation of new markets and inventive prospects (Gifford *et al*., 2021: 669). Here, the project capitalises a lot on new technologies, talents and assets and innovatively utilises them to satisfy demands of existing consumers and markets, increasing present knowledge and capabilities to meet changing client and market demands and generate profit (Mcclain, 2022: 37). Innovations may manifest in the reality of the product and service of the project (Dolla and Laishram, 2019: 1190). However, even though innovation may be for competitive advantage, it is more for advantages of future bidding practices rather than profit in the current PPP (Liu, Clegg, *et al*., 2024a: 36).

Adaptation to the environment is key at this phase and it includes considering consumer purchasing behaviour and adapting to the situation at large as the competition intensifies and market conditions differ (Samoylov *et al*., 2021: 6). PPPs, therefore, have to match the market needs. And they achieve this by reducing restrictions during implementation which may allow for more freedom to the partners, to enhance creativity and innovation (Callens *et al*., 2021: 2). Projects therefore need to be just open enough to innovation without sabotaging their own business model (Olk and West, 2019: 2).

Further, since maintenance activities are part of this phase, experience of maintenance experts is critical in optimising maintenance based on data to support maintenance decisions (Hinrichs, Prifti and Schneegass, 2024: 208). And to manage activities, communication is important and should be supported by effective channels to ensure that it is more meaningful in the social system by providing more information about the innovation so that it becomes self-sustaining overtime and owned by the project partners rather than hoarded (Santen *et al*., 2022: 8). There is involvement of many entities, like big corporations, various government agencies, business associations, research institutes, universities, regional governments among others (Holroyd, 2020: 20). The numerous entities make the project have access to a lot of data from various sources, and this data needs to be analysed, integrated, and shared to become useful knowledge which then becomes the seed for create ideas (Cepeda-Carrion, Ortega-Gutierrez, Garrido-Moreno and Cegarra-Navarro, 2022: 6). An innovation policy is crucial to shaping supportive institutional set up, connect stakeholders, facilitate learning, capability development and overcome institutional failures especially those that impede innovations (Selviaridis and Spring, 2022: 97).

2.10.5.5 Innovation at transfer phase

During this phase, the public sector which has been dependent on private sector's technological edge innovations strives to bring this dependence to an end since it will now occupy this task (Bao, Martek, *et al*., 2023: 6). Critical at this phase is knowledge transfer and protection of intellectual property, which is key, as it creates jobs by assisting the new business model, and enhances competitiveness (Osorno-Hinojosa, M Koria and Vazquez, 2021: 1). Stakeholders such as politicians, managers, and citizens are important and they play a critical role of continued innovation not just for benefit of the end user but also for innovation as a societal good (Hartley and Knell, 2022: 41).

Whereas there are drivers for the adoption of PPP projects, literature argues that there are barriers to the process. This section presented the drivers of value creation at the different phases of the PPP-PLC and therefore the next section presents the barriers to the value creation process that exist within the PPP-PLC.

2.12 Barriers To The Value Creation Process In PPP projects

Partnerships by nature are difficult to maintain, and there is almost always, no guarantee that one or both parties will get any value in the endeavour (Brogaard, 2019: 617). PPPs are no different, and their implementation across the globe has not been without any challenges. These are attributed to trouble due to the complexity and the dynamic environment characterised by uncertainties (Pellegrino, 2021: 1). Castelblanco *et al*. (2022: 57), assert that over the last four decades, the world has experienced major crises which have become recurrent events that jeopardised the overall sustainability of PPP projects and programs. In addition, several researchers have cited obstacles such as price determination, risk management, project procurement and stakeholder management in the implementation of PPP projects (Jayasuriya *et al*., 2019: 11). (Garrido and Vassallo, 2021: 2), adds in some cases, the projects may face early termination. There are a number of barriers to the value creation in projects as presented in the next sections.

2.12.1 Opportunistic behaviour of partners

In a PPP project, partners tend to exhibit opportunistic behaviours which maybe at any phase but especially during the operation and maintenance phase, but the behaviours have proved to be an obstacle (Peng and Zeng, 2022: 10). Opportunistic behaviour, according to some researchers, may arise as a result of unequal allocation of risks, which in some cases may actually not be borne to the party most capable to manage it. It which increases the project cost and introduces risk of to the party undertaking the risk (Pantelias and Roumboutsos, 2015: 109)..

Some partners take advantage of flaws in the system, regulatory gaps and sometimes use cunning speculative behaviour, or information asymmetry to conceal or distort information to avoid obligations. The other entities sacrifice their interests as a result at the expense of the project's overall safety and quality (Wen *et al*., 2024: 1). In most cases, this behaviour leads to contract renegotiation (Gifford *et al*., 2023:1584). From the private sector for example, opportunistic behaviour may manifest in concession projects when the private sector wants to prolong the concession period because it maybe more beneficial to it. This behaviour may have negative effects and induce loss to government (Carbonara, Costantino and Pellegrino, 2014: 1224). This behaviour consequently breeds negative mindsets by impacted stakeholders against responsible party (Carbonara Nunzia, Constantino Nicola and Pellegrino Roberta, 2016: 1224). This may trigger destruction and further, social opportunism. Maqbool and Sridhar, (2024: 95), stresses the effect of opportunism as detrimental to the project in such a way that when a partner discovers that they are being exploited, they may no longer wish to maintain or cultivate the relationship, affecting the partnership meant to produce a required level of quality and the project ends up falling apart.

2.12.2 Lengthy tendering process

Projects that deliver infrastructure are by nature, long and complex in their interactions with partner, individual, organisational, environmental within context (An, Hall and Yoon, 2021: 13). On average, PPP projects exceed an average 25years (Tan, Zhirong and Zhao, 2024: 3). And, a project which takes a long period is high risk (Abdel Rashid *et al*., 2019: 339). Researchers highlight the tendering process of these projects as one of the great contributors to the long-term nature of the PPP projects. Casady *et al*., (2019: 1261), suggest that this could be explained by the complexity of contracts which arises from bundling of project design, construction, and operation and maintenance phases. Owolabi *et al*., (2020: 13), confirms that the tendering process for most projects dramatically impacts the length of the project and stresses that the process further affects budget and timelines and, in some cases, make the projects go off course. With the lengthy projects come complexities which make the projects even more expensive, tiring and this is a huge deterrent to stakeholders.

2.12.3 Inadequate financial resources

Due to their large-scale nature, and complexity, PPP projects incur substantial construction and operational expenditures to carry out their activities (Mohamad, Ismail and Mohd Said, 2018: 8). The long duration, coupled with uncertainties within the dynamic project environment, complicates cost estimation, impacts the planning process, and affects completion of the project within the projected budget and time period (Owolabi *et al*., 2020: 12). Private sector organisations often charge a premium for their services especially for large-scale projects further placing significant financial burden on the public sector (Zwalf, 2024: 18). The high costs associated with PPP projects therefore may deter public entities from pursuing such partnerships, as the financial implications are substantial on the project and end up impacting the end user.

2.12.4 Renegotiations

Different factors often spur renegotiation, and in PPP projects especially, renegotiation is a common phenomenon. It is often driven by the private sector motivation to maximise profits from the delivery of project outputs. Renegotiations is often started by the private sector, and it may occur out of loss of revenue at a specific phase for example, at the operation phase (Sharafi *et al*., 2021: 12). In addition, factors such as changes in project scope, timelines, costs, and the initial misallocation of risks also spur renegotiations (Vecchi *et al*., 2022: 397).

Renegotiation starts when parties invoke the contract's dispute resolution clause. This clause is designed to compel the procuring entity to revisit specific aspects of the agreement, and this often results in adjustments that carry significant financial implications. The adjustments in the contract that spur renegotiation, while necessary may lead to increased project costs and extended timelines,(Dolla and Laishram, 2020: 3).

From the onset of a PPP-project, the private sector is motivated by private interests within public service works, and they therefore expect an incentive as compensation (Ndiaye, 2018: 395). When the costs of project implementation are high, they are only recoverable upon the success of the project (Bwanali and Rwelamila, 2017: 103). Consequently, the tariffs are also expected to be higher or, the concession period becomes longer. In the process, the private sector usually recovers the cost to avoid financial losses that may disrupt the product and service (Tariq and Zhang, 2021: 12). This calls for partner renegotiation of the contract and revision of the terms. Abdou (2024: 336) , argues that in contract renegotiation, within the context of meaningful competition, private sector is more at an advantage as they have sufficient power to exert major pressure on contract renegotiation in ways that ultimately guarantee their own interests. Gifford argues that it is a winner's curse that triggers renegotiation, and this is spurred when a private company submits an aggressive winning bid that fails to prove profitable to them (Gifford, Bolaños, Daito and Casady, 2023: 1589). But renegotiation at the detriment of the public sector is a barrier to value creation of PPP projects.

2.12.5 Delays

Delays are a common phenomenon in PPP projects. They often arise from the inherent conflicts that arise in due course between partners, typically as a result of differing priorities and misunderstandings, that lead to setbacks such as increased costs and prolonged project timelines (Osei-Kyei, Chan, Yao and Mazher, 2019: 2). During the operation phase private partners push to extend the concession period, and this delays other aspects of the project at the different phases, like the transfer of assets back to the public sector. This extension is often motivated by the private partner's desire to maximise profits, especially where revenue generation is tied to user fees (Bao *et al*., 2018: 5). In projects that rely on user-pay systems, the profitability of the project is strongly linked to the length of the concession; the longer the duration, the higher the potential to return on investment (Jin, Liu, Liu and Udawatta, 2019: 28). For governments, one of the key advantages of engaging in PPP projects is the ability to transfer significant financial or operational risks to the private partner. However, despite this risk transfer, there remains a possibility that the private partner may fail to complete the project within the agreed period. And when these delays occur, the risks that were initially shifted to the private sector revert to the public sector, especially to end user, thereby undermining the anticipated benefits of the arrangement (Owolabi *et al*., 2020: 3).

2.12.6 High tariffs

In countries where citizens are faced with extreme poverty levels, user charges and revenues depend on payments made directly or indirectly from users (Kouton *et al*., 2023: 540). Some PPP projects usually set high tariffs, and evidence shows that they have often changed charges, all, while overlooking the needs and perspectives of end users. And this has led to widespread dissatisfaction further triggering riots (Castelblanco *et al*., 2022: 11).

In developing countries, high tariffs are rampant, as most regulators lack the experience and independence, especially from political power, to set acceptable tariff levels (Ndiaye, 2018: 396). Policies are therefore designed more often to expect, and demand that end users pay user fees so as to access public service (Unvan and Ozdemir, 2023: 52). End users end up failing to afford the facilities' cost, which leads to defaulting, a risk to the private sector and disrupts streams of operation costs, causing cost overruns and leading to the termination of contracts by the government (Zheng, Liu, Sun, Tian and Yu, 2021: 12). Furthermore, this has therefore made the demand for user-pay systems unpopular (Castelblanco, Guevara, *et al*., 2024: 57).

Even after the private sector departs, overwhelmed and overqualified local government administrators are tasked with deciding how to repurpose these enormous infrastructure sites while taxpayers continue to pay the debt service on a facility that no longer adds value to the community (Cocco *et al*., 2023: 12). The unfairness provokes the unwillingness of the users to pay for services because they perceive the facility as supposed to be offered by the government free of charge.

2.12.7 Inadequate enforcement mechanisms

Ineffective enforcement mechanisms in PPP projects can significantly increase the risk of conflict, often leading to breaches of contract or even project termination if risks are not effectively managed or allocated (Osei-Kyei and Chan, 2021: 126). The public sector is responsible for overseeing and monitoring the performance of private entities within the PPP-PLCs. However, inadequate oversight often results in a range of issues, including poor performance, contract cancellations, lack of transparency, substandard service, product quality and overcharging of users. Further, the weak regulatory frameworks coupled with insufficient competencies of the public sector further worsen these problems (Umar, Amila, Zawawi and Abdul-Aziz, 2018: 3). In many instances, the public sector lacks the expertise needed to enforce contracts and this leads to further inefficiencies and, ultimately, the failure of projects (Bwanali and Rwelamila, 2017: 103).

The next section the theory that underpins this study and the different perspective of the theory especially in relation to the study's context of PPP projects.

2.13 Theoretical Perspectives Of The PV Theory

In 1995, Mark H. Moore, an academic in the United States, conceived the concept of public value (Turrell, 2017: 1). The idea was in reaction to the New Public Management concept, where the academic challenged neo-liberal thinking. Moore's PV theory sought to reorient public management towards creating value that citizens can collectively desire. PV theory has several underpinnings that explain value as stemming from the actions and activities of the public sector. According to the theory, government has a role to play in producing products and services that meet the needs of citizens. The central role of the public therefore is public product and service delivery. The theory posits that government is responsible for delivering public services, regardless of financial challenges. Part of its role is to create a conducive political, social, and economic environment for value creation. Therefore, authorising environment, operational capacity, and public value outcomes must align.

Through its entities and systems, government identifies gaps and collaborates to generate public value that supports government's objectives. To create public value therefore, the theory posits that public managers need to be restless and with value seeking imaginations to seek opportunities to do so (Moore, 2009: 1). Since public value is inherently created for citizens, it may differ with individual self-interests. Consequently, the public sector continuously creates, co-creates, and re-creates value for the public, even amid competing stakeholder interests.

Government leverages resources and engages with the business and non-profit sectors to generate public value. Public value is therefore not only created by the public alone but is an outcome generated with the private sector, the voluntary sector, informal community organisations and government (Benington, 2009b: 237). The theory has the following assumptions:

i. Government in society is not only a rule-setter but a service a creator of public value and a pro-active shaper of the public sphere creating conditions for value creation (politically, economically, socially, and culturally).

ii. The managers in government entities play a role as the steward of public assets with restless value-seeking imaginations and with important roles to play in helping government discover what could be done with assets entrusted to their offices as well as ensuring responsive services to users and citizens.

iii. There are techniques required by managers to help governments more adaptable to dynamic environments, changing needs and political aspirations, orchestrating the processes of public stakeholders in ways so as to ensure that good choices are made in the public's interest, which are legitimate, animate and guide subsequent implementation so as to improve outcomes for the public.

Moore (2020: 7), further asserts that,

The core concept of the theory and practice of creating public value is referred to as the *"strategic triangle"*

Figure 2.4 presents the dimensions of the strategic triangle stressing the importance of legitimacy, and support and operational capacity in the creation of public value.

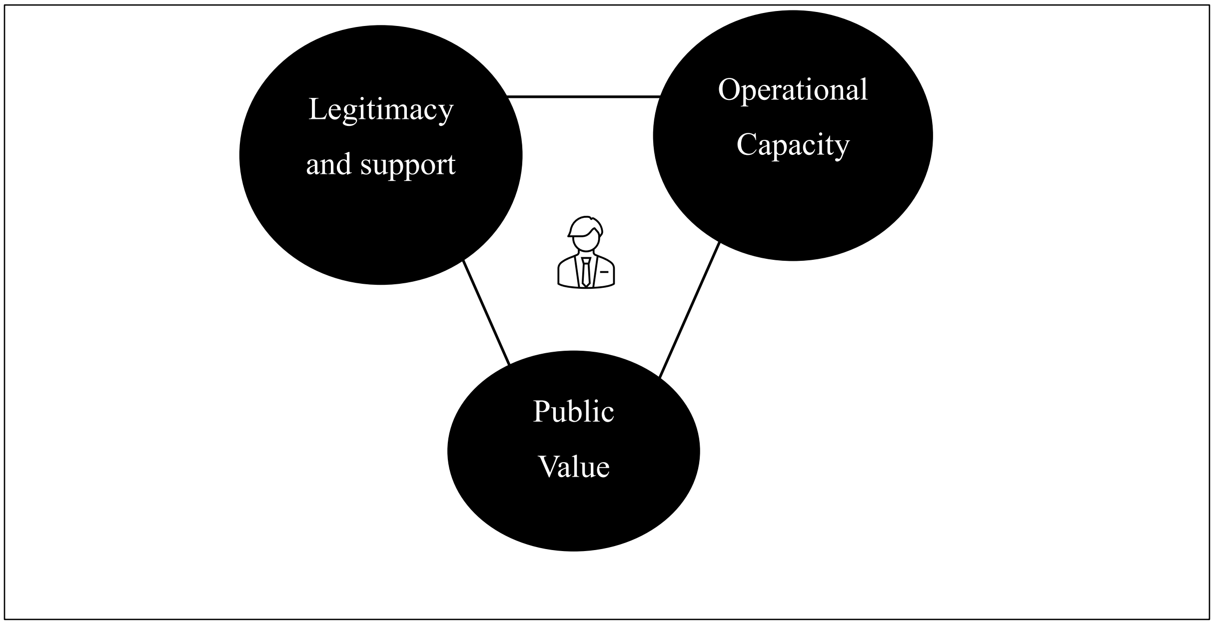


Figure 2.4: The strategic triangle

Source: Moore (2020: 7)

According to the illustration in Figure 2.4, the conception of the outcomes that are being pursued is public value. The characteristic of the actions that could reliably produce the desired results is the operational capacity, while the account of how public support for the collective action could be mobilised is legitimacy and support. The responsibility of the public manager in the middle of the triangle is to ensure that all three aspects are achieved.

Mark H Moore offers the PV theory and the strategic triangle as guides for public managers and change agents to reimagine the possibilities that they can achieve together in service for more than only a prosperous society.

The theory underpins this study by emphasising the importance of aligning exceptional operational capacities, legitimacy, and support in the context of PPPs. Additionally, the theory provides a framework for analysing how governments and private sector entities work together to create value for that meets the needs of the stakeholders in society. By applying the PV theory lends, this study examined the role of the project managers in leveraging the resources, engaging stakeholders, and enacting environments that foster PPP activities and where PPP projects can thrive. The strategic triangle therefore provides an analytical framework for exploring how legitimacy, operational capacity and public value intersect to deliver outcomes that contribute to sustainable development and progress in society.

In PPP projects, incorporating values into the project goals of stakeholders, especially from the public and private sector, is crucial. PPP projects are effective mechanisms for value creation as they rely a lot on public acceptance and support, to carry out their activities. This support can be fostered through enactment of regulatory frameworks, political support, engagement with media, trade unions, civil society organisations, and NGOs.

The next section presents the nature of PPP project set ups in different countries worldwide.

2.14 Theoretical And Practical Perspectives Of PPP Project Set-Ups

Academics, policymakers, practitioners, and other stakeholders in society have extensively studied the concept of PPP projects. But, the volume of literature delves mostly into the performance metrics of PPP projects, arguing that traditional post-project assessments used to gauge actually fall short (Rejeb, Rejeb, Appolloni, Zailani and Iranmanesh, 2024: 2). Empirical studies about PPP projects argue that partners, especially government enter into this type of partnership to deliver the project while sharing risks. The private sector is generally regarded as the creative one, entrepreneurial, and self-motivated partner with the ability to provide the much-needed capital to fill the gaps that lie within the public sector. Whereas theory emphasises the allocation of resources throughout the PPP-PLC, the practicality of the concept of PPP value creation lies in the *how* the different arrangements create value for the stakeholders. The next section presents the practical perspectives of the value creation process of PPPs in a global context.

2.14.1 Practical perspectives: The global context

Governments have attained political backing, developed intelligent bureaucratic systems, offered support, enacted robust regulatory frameworks, and technical and managerial aspects to foster the survival of PPP projects within their economies (Biygautane, Neesham and Al-Yahya, 2019: 194).

As a result, great number of projects worldwide, have been delivered using the PPP model, with diverse results (Garrido, Rangel, Baeza and Vassallo, 2019: 66).

Countries like, the United Kingdom, Spain, Portugal, Australia, the United States, Canada, and the Netherlands are among the developed nations that employed PPP projects as a procurement method (Eze and Ameyaw, 2024: 1). PPP project within these regions have delivered infrastructure within the sectors of water and sanitation, energy renewables, transport, and municipal solid waste.

World Bank (2023: 1), reports that in 2023 alone, there was Private Participation in Infrastructure (PPI) commitments of US$86.0Billion and an increase in PPI from 54 countries to 68 countries in 2022. East Asia and Pacific recorded PPI of UD$51.4bn, whereas Europe and Central Asia reported USD$4.1bn, Latin America and Caribbean, USD$15.8bn, Middle East and North Africa USD$2.9bn, South Asia USD$8.2bn, and Sub-Saharan Africa USD$3.5bn. However, for all the countries, there are unique aspects of the projects implemented. Hodge, Greve and Boardman (2017b: 277), agrees that in PPP implementation, there is no one-size-fits-all. Not all PPP projects are about maximising risk to the private sector. PPP adoption does not actually create more funds and that not all PPP models use long-term finance. The difference in the practicality of PPP project implementation worldwide is presented in the next section.

2.14.1.1 PPP projects in Europe

The global economic crisis among European Union (EU) countries, saw a reduction of the 28 EU countries to below 3 percent of their GDP in 2015 (Deloitte, 2017: 7). To boost PPP projects, a number of grants were injected from European regional development fund (ERDF) and Cohesion Fund (CF) to support even the poorest region so as to narrow the development gap and achieve higher economic and social cohesion among the European Union countries (Garrido, Gomez, De Los, Baeza and Vassallo, 2017: 20). Consequently, some countries in Southern Europe especially, adopted concessions as a directive 2014/2/EU of the European Parliament clarifying risk transfer thoroughly to a private contractor (Bel *et al*., 2017: 150). The countries enacted harmonised frameworks, developed, and maintained competitive environments that coerced and obligated member states to pass PPP laws by the set deadline of June 2017 (Rosell and Saz-Carranza, 2020: 1177).

In 2016, the European Union enabled innovative partnerships by encouraging innovation that combined development and purchases elements tailored to requirements that ensure equality and transparency of the Projects (Vilén, 2021: 1). Between 2000 and 2016, governments signed approximately 1563 PPP projects valued at 306.5billion Euros throughout Europe, according to the European Investment Bank's PPP Expertise Centre (IEB Report, 2018: 16). The European Union further established the European PPP Expertise Centre (EPEC) to support collaboration for member states, monitor sectorial, national PPP market development, and provide institutional support with national administrations. The European Union further established development frameworks for member states to gradually build their infrastructure, like the Trans-European Transport Networks (TEN-T). Furthermore, participating institutions such as the European Investment Bank (EIB) provided an independent view of PPP Project progress in all project phases. And the EIB participated in all PPP projects throughout the PLC guaranteeing decision-making not based on political influence. Ever since the founding of the TEN policies, the EU promoted financing mechanisms to support Projects of common interest (Garrido *et al*., 2019: 68). Deloitte (2017: 8), reports that most concessions average 30 years while others have more than 35 years. Furthermore, many of the projects are in the transport sector, followed by ICT and other sectors.

The UK, formerly part of the EU, has historically been one of Europe's largest markets for PPP projects. However, Petrovan (2023: 49), argues that France and Germany have recently surpassed the UK in adopting the PPP model. For purposes of this study, the focus is Spain due to its extensive and successful use of PPPs across multiple sectors, particularly in transportation, energy, and infrastructure. Unlike the UK, which has faced criticism for its PFI, or Germany and France, where PPP projects are more state-controlled. Spain has developed a balanced model that encourages private sector involvement which has helped drive its economic recovery after the 2008 financial crisis, providing valuable lessons in leveraging private investment for public sector project

a) PPP projects in Spain

Spain is one of the European Union member states with the most significant and most prolonged tradition of private finance in infrastructural development in the region (Acerete, Shaoul and Stafford, 2009: 19). In Europe, Spain was the largest beneficiary of both structural and cohesion funds until 2004 when EU enlarged (Garrido *et al*., 2017: 20). As an avid subscriber to the PPP concept, Spain received the most significant financing, potentially open to PPP projects in the EU. The country enacted regulatory frameworks and announced government awards of Subordinated Public Participation Loans (SPPL) to the private sector, boosting bidder participation, project feasibility, and viability during poor economic performance (Garrido and Vassallo, 2021: 2). The country records 72 Projects closed in the past ten (10) years and reported 16,705 Km with the most extended high-capacity road network within Europe and the third-longest in the world after China and the United States. The country enacted a State's Financial liability (Responsabilidad Patrimonial de la administration) legal framework, allowing public compensation upon early recission of a concession owing to a concessionaire's bankruptcy (Bel *et al.*, 2017: 147).

Further, in 2015, the country amended a law obliging the government to compensate private entities for works constructed but not yet depreciated in case of early contract termination not caused by negligence, but then which may cause bankruptcy like low traffic levels on a toll road. Furthermore, during the covid-19 pandemic, Spain's health and transport sector required 33,498 million to solve challenges, and government mobilised 94 percent of the funds from private capital, which resources improved passenger transport infrastructure, created over 468,986 jobs, and witnessed a fiscal return of 16,414 million Euros, and increased economic activity of 64,319 million Euros (Rotellar-García and González-Medrano, 2021: 22).

2.14.1.2 PPP projects in Asia

PPP projects have played a significant role in infrastructural development in Asia. Countries in Asia have pursued PPP projects in pursuit of greater efficiency in a bid to recover citizen's trust through public management (Xiang, Kim and Xiang Kwa, 2019: 3). For purposes of this study, China and Singapore are the top choices due to their successful and widespread use of these models in infrastructure development, making them leading examples of PPP success in Asia. This section explores the PPP projects in the Asian context, focusing on China and Singapore.

a) PPP projects in China

PPP projects in China are traced as early as 1984 with the delivery of Shenzhen Shajiao B Powerplant through a BOT method (Liu *et al*., 2020: 226). During this time, there was no concept of a PPP. However, in 1986, the Chinese government published the first policy not directly corresponding to PPP but with rules encouraging foreign investment. In the Chinese state, the common law that regulates and governs conventional procurement also governs PPP projects (Tan and Zhao, 2019: 2).

Over the years, the Chinese government invested more in PPP projects than any other government in the world and the motivation is strongly out of need to strengthen and liberalise the Chinese state (Jones and Bloomfield, 2020: 830). PPP projects in the country are state-owned, and this model primarily attracts diverse channels of financing, increasing the injection of vast amounts of money by the Chinese local governments into PPPs to finance the projects (Tao, Yuan, Book and Zones, 2017: 5). Furthermore, most of the PPP project take on the Build Operate Transfer (BOT) with three life cycle phases including development, realisation, and operation. Being state-owned, the pricing mechanism of PPP projects in China is regulated and fully controlled by local government and therefore any adjustments in user-charge is determined by public authorities (Wu, Liu, Sing, Humphrey and Zhao, 2020: 26). In this country, the concept of PPP projects involves *"state-capital"* as a key to private sector participation permitting private sector investment within urban infrastructure through franchise and other means and this was proposed in 2014 (Guo, Martek and Chen, 2019: 9). PPP projects have enabled the country to develop infrastructure within different sectors like transport, energy, and sewage, among other sectors (Zhu, 2020: 1).

In 2008, the financial crisis affected the country and saw a reduction in PPP implementation, citing problems with inadequate financial foresight and deficient regulation, which necessitated government measures to improve PPP activities (Castelblanco, Guevara, *et al*., 2024: 67). Government devised measures to improve the environment within which the PPP projects were operating. In 2017, the Chinese Ministry of Finance revised the administrative measures on bidding and tendering for government procurement of goods and services. During the same year, PPP projects increased sharply from a reported 12,248 in 2016 to 14,220 in 2017, worth a total value of 17.8 trillion renminbi (Tan and Zhao, 2019: 514). China set up a China PPP projects Centre (CPPPC) responsible for all PPP projects and China and related information. Further, the

CPPPC under the Ministry of Finance built a data system providing a window into infrastructural partnership Projects in China and provides information through the platform and issues the relevant guidelines and policies with an institutional guarantee of government participation in the PPP Project (Sun and Ren, 2017: 181). The mature PPP institutional environment saw the delivery of many PPP projects much as the country was only on its way to establishing a solid PPP framework (Zheng, Yuan, Li and Skibniewski, 2019: 3). To further support PPPs, China collaborates with MENA countries to innovate and participate through partnerships to provide internationally transferable assets, capabilities, knowledge, and increase the ability to compete globally (Collinson and Liu, 2019: 47).

The model of PPPs in China is unique in such a way that PPP project agreements are made between government and state-owned enterprises where state-owned enterprises are considered to make up the private partner (Thieriot and Dominguez, 2015: 2). The Chinese government is the majority partner in Chinese PPP projects with financial participation by over 50 percent capital guaranteed return of the investment made by the private sector; China uses PPPs to consolidate state control over the economy (Ahmadabadi and Heravi, 2019: 182). In 2018, China reported a completion of 183 PPP projects worth US$ 29,099 Billion with 76 percent private capital provided by Chinese state-owned corporations and unlisted private corporations accounting for 15per cent and 9percent listed corporations, respectively (Gao and Zhao, 2020: 2).

The involvement of the Chinese government has created a favourable environment for private partners, which has seen a surge in private investment since it guaranteed the private entity with fixed rates of return to profit for the private entity. Initially, Projects faced increased financial risk to the government, which led to massive debts resulting in government nationalisation of the PPP projects for economic benefit, removing the fixed rates, resulting in high rates of economic development (Song *et al*., 2018: 8). The typical Chinese PPP model is readjusted to shared and controlled risk through contracts that allow renegotiations (Sun and Ren, 2017: 183). Further, the Chinese government guaranteed each project's revenue source to avoid demand risk as it confined the guarantees within its affordability (Jiang, 2016: 103).

Government innovations in Chinese PPP projects include the Asset-Backed-Securitisation (ABS), which is an alternative mechanism to reduce financial debt challenges and increase private sector engagement in infrastructural service provision (Liu, Abe, Xie and Subhanij, 2021: 250). ABS provides a solution to boosting private sector engagement by expanding financing channels and improving exit mechanisms by trading PPP-ABS products in the capital market and enabling banks to extend more credit for PPP projects (Yu, Chen and Sun, 2018: 397). PPP-ABS is designed in such a way that the underlying asset backing is the project's future receivables, such as user fees and government subsidies (Lu *et al*., 2019: 2).

The PPP-ABS model has seen the development of Projects such as the Dachengxi Yellow River Bridge Toll ABS and the Yongli Heat and Electricity ABS. The Dachengxi Yellow River Bridge Toll ABS has an underlying asset as toll revenue. With the construction of the road, the country increased access to the coal mines thereby increasing traffic along the road. PPPABS has contributed to project success, taking advantage of financing innovations compared to conventional financing methods. For example, the One Belt Road Initiative is one of the projects developed under PPP model and it has connected China to Western Europe, South America, Southeast Asia, Russia, Persian Gulf, Middle East, North Africa, and the Mediterranean. This has increased access to the different continents (Estrada, 2018: 1). The road, worth more than 1trillion USD worth of investments impacts on more than 63per cent of the population, boosting close diplomatic and economic interactions with numerous participating countries and fostering new partnerships(Chaziza, 2018: 57).

Research however perceives the China's financing approach to infrastructure delivery as ineffective with its failure to attract enough foreign private investment and failed to control risk (Tan and Zhao, 2019: 4). Even with the stimulus packages that the governments have designed over the years, there is a decreased number of foreign investments (Zhang, 2017: 37). With reduced foreign investment within the country, China strategised by setting up the Silk Road Fund worth USD 40Billion, to increase Chinese foreign investments. As a result, Chinese entities commenced on several Projects like the Mombasa-Nairobi standard gauge railway, Karot Hydropower project, and Dubai Hassyan Clean Coal Power Plant (Estrada, 2018: 4). Yet despite all these efforts by the Chinese government, in less than ten years, China's PPP projects are reported to witness a trajectory from rapid growth to decline and in 2022. The National Audit Office conducted a special audit in 18 provinces which culminated into the cessation phase of the PPP sector, the suspension of the PPP centre project library by the Ministry of Finance and widespread inquiry and introspection into the stagnation of PPP projects in China (Li *et al*., 2024: 2).

b) PPP projects in Singapore

The concept of PPP in Singapore was spurred by the United Kingdom national-level PPP scheme, similarly to other countries. Singapore therefore implements the PFI model of PPP financing following the British-style approach to improve its competitiveness in the global market and ensure the welfare of its populace (Kim and Kwa, 2020: 144). Over the years, the country has carefully designed facilities to support its specific needs and demands, primarily within the transport and energy sectors through PPPs. The Global Competitiveness Report 2017 ranks the country second in global competitiveness since 2017 with its expansions linked to infrastructure development (Zen, 2018: 1). The first PPP projects in Singapore were initiated in 1968 by delivering the Jurong Town Corporation (JTC) intended for industrialising a city that was previously lagging economically (Fainstein, 2021: 275). Since formalising PPPs in 2003, the country has implemented several projects within the water, solid waste, education, defence, and ICT sectors. And, within the environmental industry, Singapore, through PPPs, adopted to preserve 13 extant otter species that were in decline and at risk of extinction through urbanisation. Consequently, through PPPs, private and public sectors were engaged in the drive that saw the improvement of clean water, sufficient food, improvement of the habitats, and a return of otters after a three-decade absence to a highly urbanised Singapore (Khoo and Lee, 2020: 9). Despite the firm establishment of PPPs in Singapore, Singapore lacks a PPP-centric Act as it instead has a PPP handbook developed by its Ministry of Finance guiding the bidding process and award of contracts (Kim and Choi, 2023: 151). The government plays a big role in the guiding of PPP projects on what to develop, but not vice versa. It maintained the ownership of space and land where the PPPs are established thereby giving them control over the shape of that space (Fainstein, 2021: 283).

2.14.1.3 PPP projects in North America

This section focuses on PPPs in North America. In this region, whereas Canada is the leading country in the adoption of PPP project implementation, especially in the sectors of transport, healthcare, and energy. The country further developed a robust well-structured legal framework and obtained strong government support for the model. Further, another country on North America, Mexico, also increased its use of PPP programs, within the energy sectors. The country has, however, been known to face challenges like political instability and financing risks, which remain.

However, compared to the USA, these countries have smaller sized projects and also face governance challenges. This makes the U.S. the strongest example for the current study. This section focuses on the USA and aims to learn from its practical use of PPP projects in emergency times, for example, during the health crisis of the COVID-19 pandemic when PPPs in the country contributed heavily to the recovery of the economy and economies worldwide. The effectiveness of the U.S. PPP model in both regular and during crises, makes it the best example.

a) PPP projects in the United States of America

In the Unites States, PPPs also known as P(3)s are on the rise. They are constantly used as a tool to bridge infrastructure gaps. Whereas the concept of PPPs is relatively new in the U.S., it drew inspiration from global practices to effectively manage the projects within the economy (Hodge *et al*., 2017b: 276). The US, like other areas of the world, are faced with funding challenges. As a result, the White House focused on P(3)s as an alternative means of addressing the country's significant infrastructure funding gap and they were consequently used to support a budget worth $1.5 trillion for the country's infrastructure (Maltin, 2019: 2). Yet, despite their growing popularity, PPP projects are not yet uniformly adopted in all states. By 2017, only 33 out of the 50 states in the US had enacted PPP-enabling legislation (Vandit and Deepak, 2017: 2). Between 2011 and 2016, PPP accounted an annual average of US$ 7.5bn (Albalate, Bel and Geddes, 2020: 6).

The past decade marked an increase in the use of P(3)s, particularly in the transport sector, where they were employed to reduce costs associated with highway maintenance and refurbishment (Acerete, Gasca and Stafford, 2019: 4). Projects like Virginia's I-495 Express Lanes, Florida's I-595, and California's Presidio Parkway were some of the projects that were completed ahead of schedule using the P(3) model (Kweun, Wheeler and Gifford, 2018: 13). The scope of P(3)s further expanded beyond transportation and included sectors of sectors of road, rail, water, and waste management sectors and countries like Florida and Virginia which implemented using policies and practices to facilitate those activities (Mantoan, 2019: 40).

The U.S. Department of Transportation plays a big role of guiding PPP arrangements and enhancing public sector capacity to prioritise and manage the projects (Casady *et al*., 2020: 175).

Although the literature on P(3)s in the U.S. is still limited, there are still relatively few projects delivered across different states, with a variation in the types of projects. For instance, in Virginia, some P(3) projects are Design and Build, where the private sector is responsible for the design and construction but not the financing. The COVID-19 pandemic saw a surge in P(3) engagements, particularly in the Health sector with emergency relief funds, training, protection efforts, mitigation of COVID-19 effects, prevention and control, tracing COVID-19 contacts, and delivery of health services and products like diagnosis and vaccines (Casola, 2020: 8).

In states like Pennsylvania, the government leveraged the use of unsolicited proposals from the private sector and allowed the public sector to evaluate and procure projects through the Public-Private Transportation Partnership Board (Casady and Baxter, 2022: 6). This approach facilitated the rapid bridge of replacement projects, which by 2019 had replaced a total of 556 bridges within the rural areas of the state, ensuring that there was a continuity of community transport networks. The project also employed over 50 Pennsylvania-based companies for design and construction. Additionally, the board has overseen the construction of 16 compressed natural gas fueling stations a P(3) innovation that has saved \$2.6 million compared to traditional fuel costs (Shiffelet, Gurinko, Bonini, Nicastro and Gramian, 2020: 5). Despite the benefits, P(3) projects in the U.S. have faced challenges, particularly around renegotiations which are cited to be rampant often leading to opposition from the public. Bolaños, Gifford and Kweun (2019: 190), highlights that many P(3) projects in the United States encounter frequent renegotiations. Renegotiation is one of the largest barriers within the P(3) PPP-PLC and it is borne out of opportunism from the partners especially the private sector. Renegotiation has increased complexity of the projects and gave rise to opposition from the general public (Gifford *et al*., 2023: 1595).

2.14.1.4 PPP projects in Australia

Australia is another international leader in developing of projects using PPP method. The country adopted PPP projects in preparation for the projected high population increase with a population increase of approximately 11.8 million people by 2050 (Simon and Jefferies, 2019: 2). PPP projects were developed to improve, enhance, productive, sustainable, equitable, and efficient cities through private financing. In 2010, the country enacted a PPP policy to provide a consistent framework to enable partners entities to work together and improve public service delivery using private sector resources (National Public Private Partnership Policy Framework, 2015: 5). According to the policy, the Australian government is responsible for the monitoring, reporting, and periodic publishing of financial reports which are Australian equivalent to international standards (Mantoan, 2019: 59). The policy heightened the adoption of several models to implement PPP projects to deliver transport infrastructure hospitals and prison facilities in Australia (Hodge *et al*., 2017b: 274).

Furthermore, the country enacted the Basel Committee on Banking Supervision (Basel III) which strengthened bank capital and stability with rules favouring project finance (Regan, Smith and Love, 2017: 267). Consequently, Australia primarily has two forms of PPPs; where the private sector's leading source of the revenue takes a form where service payment is from governments, and the infrastructure users charge the private sector's primary revenue source is through tolls (DLA Piper, 2020:5). Other than the toll projects which appeared in the 1990s and 2000s, the government funded nearly all PPP projects out of budget appropriations and over the past 18years, it implemented approximately 80 PPP projects in almost every jurisdiction after developing favourable policies and programs (Clark and Hakim, 2019b: 9).

For example, the Pacific Highway Upgrade of 408 miles of road in 1996; the Ballina Bypass, which was among the first PPP road Projects which the Australian government implemented to improve road infrastructure. The project involved five (5) companies in designing, contracting, and geotechnical services. The road has improved safety, decreased travel times along the pacific highway, and reduced costs associated with traveling along the route. However, the project faced challenges of soft ground necessitating innovations and co-opting of experts to strengthen the partnership. Consequently, the entity completed the works seven months ahead of time, saving USD 100Million, less than the estimated costs (Maltin, 2019: 4). Furthermore, like most countries opposed to the unsolicited call for proposals, during the Covid-19 pandemic, the Australian government engaged the private sector to boost medical staff in hospitals and to shore up bed facilities, securing over 30,000 beds and 105,000 additional staff in the private sector to partner in the fight against the Covid-19 outbreak. In addition, the government offered agreements to private and non-profit hospitals to ensure their availability during the pandemic (Casady and Baxter, 2022: 4).

2.14.1.5 PPP projects in Africa

African governments embraced PPP projects as an alternative to infrastructural project financing (Demeke and Jha, 2020: 1). Whether developing or underdeveloped, African countries have over the years indicated the need for resources to support the expansion, repair, reconstruction, or new infrastructure to sustain competitiveness. Governments have consequently altered their mindset from conventional procurement towards PPP Project implementation in different sectors of their economies (Tshombe *et al*., 2020: 153). According to the World Bank, out of the 54 countries, 42 African countries enacted PPP regulatory frameworks. South Africa, is leading on the continent in PPP transactions, followed by Morroco, Nigeria, Egypt and Ghana. These countries account for more than 50% of all PPPs in Africa. On the other hand, with only six (6) countries cited as not having implemented any PPP projects (African Development Bank, 2020:6). The countries that have adopted PPP projects have done so in hopes of bridging the large infrastructure gap that requires huge funds to finance infrastructure development projects. Research shows that Africa requires annual investments of up to US$ 93 billion for capital investments and maintenance of infrastructure projects (Bwanali and Rwelamila, 2017: 95).

Several countries in Africa have embraced PPP Project delivery by enacting PPP frameworks and PPP Units to support PPP projects. Development partners including the World Bank and AfDB are instrumental in advancing PPP mode of development and have dedicated resources towards the promotion of successful projects in Africa (Dykes & Carla and Jones, 2016: 7). The AfDB records that between 2009 and 2019, 269 Projects in Africa were reaching closure, and 173 (64 percent) of them were funded by bilateral and multilateral institutions (African Development Bank, 2020: 15).

For purposes of this study, the focus is on four countries; Nigeria, South Africa, Kenya, and Uganda, with the following justification. Located in West Africa, Nigeria is reported as the largest economy in Africa with an infrastructure investment gap of US$221 billion, equivalent to 51% of its GDP. This highlights the critical role and need for PPPs to bridge this gap (African Development Bank, 2024: 7). Further, located in Southern Africa, South Africa is a leader in PPP project implementation, accounting for a significant portion of successful PPP activity on the continent at US$21,218 (Deinde-Adedeji, Nchuchuwe, Abasilim, Gberevbie and Oni, 2024: 1182). In East Africa, Kenya stands out with a remarkable portfolio of 47 PPP projects, representing substantial investment in PPP projects, the majority of which are channelled into the electricity, ICT, and transportation sectors (Njeru, Njeru and Maingi, 2021: 243). The study finally focuses on Uganda, which is the context of the study. However, focusing on these three countries the study enlightens the study about the practice of PPP projects and their impact on infrastructure development in Africa.

The next section presents a discussion on PPP projects within the African context, focusing on South Africa, Nigeria, Kenya, and Ugandan contexts.

a) PPP projects in South Africa

Delivery of infrastructure using the PPP model in South Africa started in 1999 with publishing of a PPP manual (Seeletse, 2016: 23; Sanni and Hashim, 2014: 136). The country along with other international countries embarked on implementing projects using PPPs, The South African government has witnessed a history of highly successful PPP projects evidenced in 2007 when the country had only 18 PPP projects in operation and currently, the country has delivered over 124 projects within the transport, healthcare, information technology, and housing, fleet, and generic facilities' sector within a net value of US$300 Million (Singh, 2020: 29; Bruchez, 2014: 33). The PPP unit in South African was created in the National Department of treasury and the Unit has recorded closing approximately thirty-four PPP agreements by 2019 (Nuseeb, Kouussa, Matshindze, Umeokafo and Windapo, 2021: 63; Singh, 2020: 29). The success of PPP projects and the completion of these projects is attributed to a robust legal community, a centralised PPP unit, and local content requirements (Matey, 2019: 720). Through PPP, the country successfully delivered the Gautrain train that eased transport within the country. (Lombard, Behrens and Viruly, 2017: 468), reported that the Gautrain in South Africa was successfully implemented despite politicians, academics, and public opposition technical complexity. As a result of the delivery of the project, there was lowered traffic congestion which saved costs associated with accidents and promoted economic development in the region. In addition, the project came with technological innovation which led to the automatic fare collection that informed users of their whereabouts and convenient movement around the city. As a result, seven new rapid rail routes in Gauteng province emerged and property value within 2 km range of the Gau train increased. The project was delivered in time and succeeded in serving the urgent needs for transportation during the FIFA 2010 World Cup (Musonda *et al*., 2019: 36).

Yet, despite the conducive environment, a number of South African PPPs are marred with rules and structures that have succeeded in creating a culture that heightens losses and waste in procurement processes tainted with corruption practices (Vian, Mcintosh and Grabowski, 2017: 7).

b) PPP projects in Nigeria

Nigeria has the second-largest number of PPP projects in Africa, with 49 active PPP projects worth US$13,343 Million in investments. The Nigerian government supported the set-up of PPP projects by enacting the Debt Management Office Act 2003 and the Infrastructure Concession Regulatory Commissions (ICRC) in 2005. The ICRAC Act motivates private entity participation in financing infrastructure through contracts (Babatunde, Adeniyi and Awodele, 2017: 22). In addition, the country empowered the Ministry of Finance, departments, commissions, councils, and government agencies with the powers to enter into contracts with grant concessions to the constructed infrastructure and monitor the PPP Project implementation (Nwangwu, 2021: 1311). The establishment of a legal framework, a centralised PPP unit, and recognition of requirements by the local Nigerian community has contributed to the success of PPP projects in Nigeria (Matey, 2019: 720). Through the legal frameworks, the government encouraged participation, evidenced by the transfer of processes and responsibilities, including development, financial management, and operation of infrastructure, including airports, to the private entity (Akpoghome and Nwano, 2020: 490).

Consequently, the favourable environment attracted some indigenous banks as partners to finance the PPP projects (Bolomope, Baffour Awuah, Amidu and Filippova, 2020: 8). The country further attracted numerous private entities to invest in the economy, including non-OECD countries like China, with a commitment to invest in the Nigerian ports, natural gas, electricity, roads, ICT, airports, oil and gas, rail, health, and waste management sectors. Currently, the Nigerian economy reaps highly from PPP projects as evidenced by some infrastructure projects like the road that connects Lagos state and LCC which solved issues of slow traffic along the Lekki-Epe Axis, increased employment, business, and added Kms of road. The implementation of PPP projects however is not without challenges as, with the Lekki-Epe Project, the government signed a contract with private entities to implement the project without PPP Unit to represent the public (Demeke and Jha, 2020: 8). As a result, during its operation, the solicited company raised charges, leading to riots among the public demanding the government to propose a toll-free alternative (Ibikunle Busayo Qazeem, Ojjo and Adekunle Emmanuel, 2021: 293).

c) PPP projects in Kenya

Kenya's first PPP projects were implemented prior to the enactment of a PPP policy. Consequently, in the 1990s and 2005, the country enacted legal frameworks, including the PPDA Act of 2005 which guided the privatisation of state corporations and investments. The Act further provided for different PPP arrangements and institutions to regulate, monitor, and supervise PPP Project implementation (Baithili, Mburugu and Njeru, 2019: 284). The regulatory framework consequently attracted private investments within the telecommunications, energy, sewerage, housing, and road sectors (Chileshe, Njau, Kibichii, Macharia and Kavishe, 2020: 10; Hueskes, Koppenjan and Stefan, 2019: 158). Further, the regulatory framework encouraged community participation through the constitutional requirement of citizens to be involved in decision-making. The conducive PPP environment further enhanced private and public interaction, propelling the country increasing its PPP investments compared to Uganda, Tanzania, and Rwanda.

The Kenyan government registers ongoing PPP projects within the telecommunications, water and sanitation, energy, and transport sectors. Furthermore, with the enactment of PPP regulations, the government delivered roads like the Mombasa-Nairobi Highway, Nairobi-Nakuru-Mau Summit Highway, Nairobi-Thika Highway, Southern Bypass, Ngong-Kiserian-Isinya-Kajiado to Imaroo. These roads were known to reduce transport costs and travel time and an increase in funding and planning for road infrastructure projects through PPP model (Chumba, 2020: 42). Further, within the housing sector, the country embraced PPP projects to provide the people with massive housing requirements, in down town market within urban centres of Kenya (Giti, 2019: 109). The country reports 59 projects that have reached financial closure since the 1990s, worth over US$ 5,208 million in investments. Yet despite the success of projects within the different sectors, presence of road projects and strict regulations in projects like the Mombasa container terminal failed, due to the failure of the government to monitor the project construction phase (Soomro and Zhang, 2016: 10).

This section presented the PPP set ups in the global context. The context of the study is Uganda. The next section therefore presents the perspective within the Ugandan context.

2.15 Theoretical And Practical Perspectives: PPP Projects' Value Creation In The Ugandan Context

Uganda is one of the East African countries that has actively embraced PPP projects for infrastructure development. The foundation for PPPs in Uganda was laid in 1995 when the country began reforming its governance structures to operationalise these partnerships. A critical milestone occurred in 2005 when the Ugandan government amended the Constitution, specifically Articles 178 (9b) and 189 (16A), to provide a robust legal basis for PPPs. The legal framework was further strengthened in 2008 when the National Audit Act empowered the Office of the Auditor-General under Section 13(1) B to conduct financial value-for-money audits on any project involving public funds.

In 2010 when the government approved the Partnership Act, the legislative framework was solidified for PPPs in Uganda (The Republic of Uganda, 2010). The amendment of the Public Procurement and Disposal of Public Assets (PPDA) Act 1 of 2003 mandated the application of core procurement and disposal principles in all public projects further provided the much-needed guidance. The enactment of the PPP Act of 2015 marked a significant milestone in the development of strong legal foundation for PPP projects in Uganda. The Act addressed critical issues such as risk management and stakeholder engagement all bent towards ensuring that PPP projects are conducted efficiently and transparently (The Public Private Partnership Act, 2015). The introduction of the PPP Act further paved the way for ease of approval and formulation of a comprehensive PPP framework policy. This policy was designed in such a way as to guide the optimal use of public funds, stimulate economic growth, attract foreign direct investments, and establish the PPP Unit, a dedicated body tasked with overseeing PPP projects on behalf of the government. The PPP Unit established and funded under the Ministry of Finance was allocated Ug. Shs. 2.5 billion to further streamline PPP project processes, enhance accountability, and improve procurement activities associated with PPPs (Office of the Auditor General, 2017: 4). Furthermore, like other projects, PPPs in Uganda are also governed by the National Environment Act Cap 153 (1995), which mandates Environmental Impact Assessments (EIAs) for all projects passing through scenic, wooded, or mountainous areas, as stipulated in the Environmental Impact Assessment Guidelines for Road Projects (2008). In 2019, the Roads Act was passed, further enabling PPP activities and this was more related to toll roads, including the declaration of toll roads, setting toll rates, managing toll revenue, and implementing shadow tolling in the country. Therefore, Uganda's legal and regulatory framework provides the essential institutional support needed to guide the PPP projects at the national level, and gesturing to the private sector, the commitment of government to private sector investments from both within the country and outside. Figure 2.5 illustrates the legal and regulatory framework that characterised Uganda's PPP landscape.

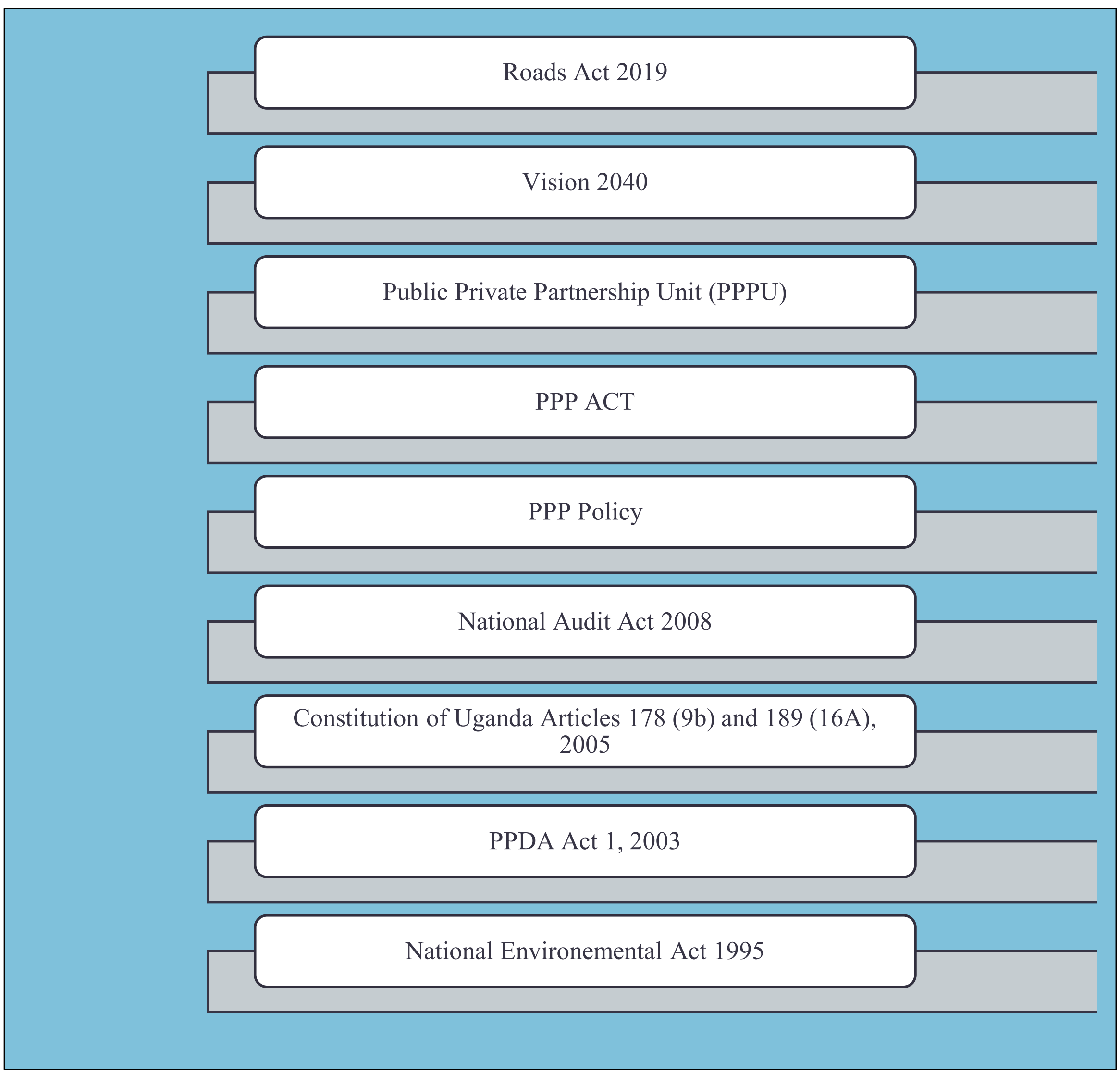


Figure 2.5: PPP Legal and regulatory framework in Uganda

Source: Adopted from ISER (2019: 55)

According to Figure 2.5, Uganda's regulatory landscape has evolved over the years to support and accommodate PPP projects within the economy. The landscape includes a number of frameworks that demonstrate the commitment of the Ugandan government to ensuring value for money, protection the rights of the people especially within the communities, transparency, accountability, participation, and stimulation of PPP activities through innovation and efficiency. The conducive landscape illustrated has enabled the development of PPP Project processes, thereby increasing the number of PPPs implemented in Uganda even when the concept of a PPP model is relatively new in the country.

The attraction of private sector financing from foreign organisations has supported the country, enabling it to achieve Uganda's vision 2040, the National Development Plan III and IV, and the achievement of the sustainable development goals (SDGs). Whereas some PPP projects were initiated prior to the enactment of the PPP Act, these were implemented under the Public Enterprises Reform and Divestiture Act 1993. With the enactment of the PPP Act, the government saw an increased level of private sector investments within the electricity sector, with several PPP projects implemented all over the country (Tshombe *et al*., 2020: 157). Several projects have over the years been implemented using the PPP model and reports showed that about 25 PPP projects had reached financial close, and that these were mainly established within the energy sector, agricultural sector, and road sector (Onyoin and Bovis, 2021: 52).

The typical PPP-PLC in Uganda, has four (4) project phases, including the project inception, feasibility study, PPP procurement, and project implementation as illustrated in Figure 2.6.

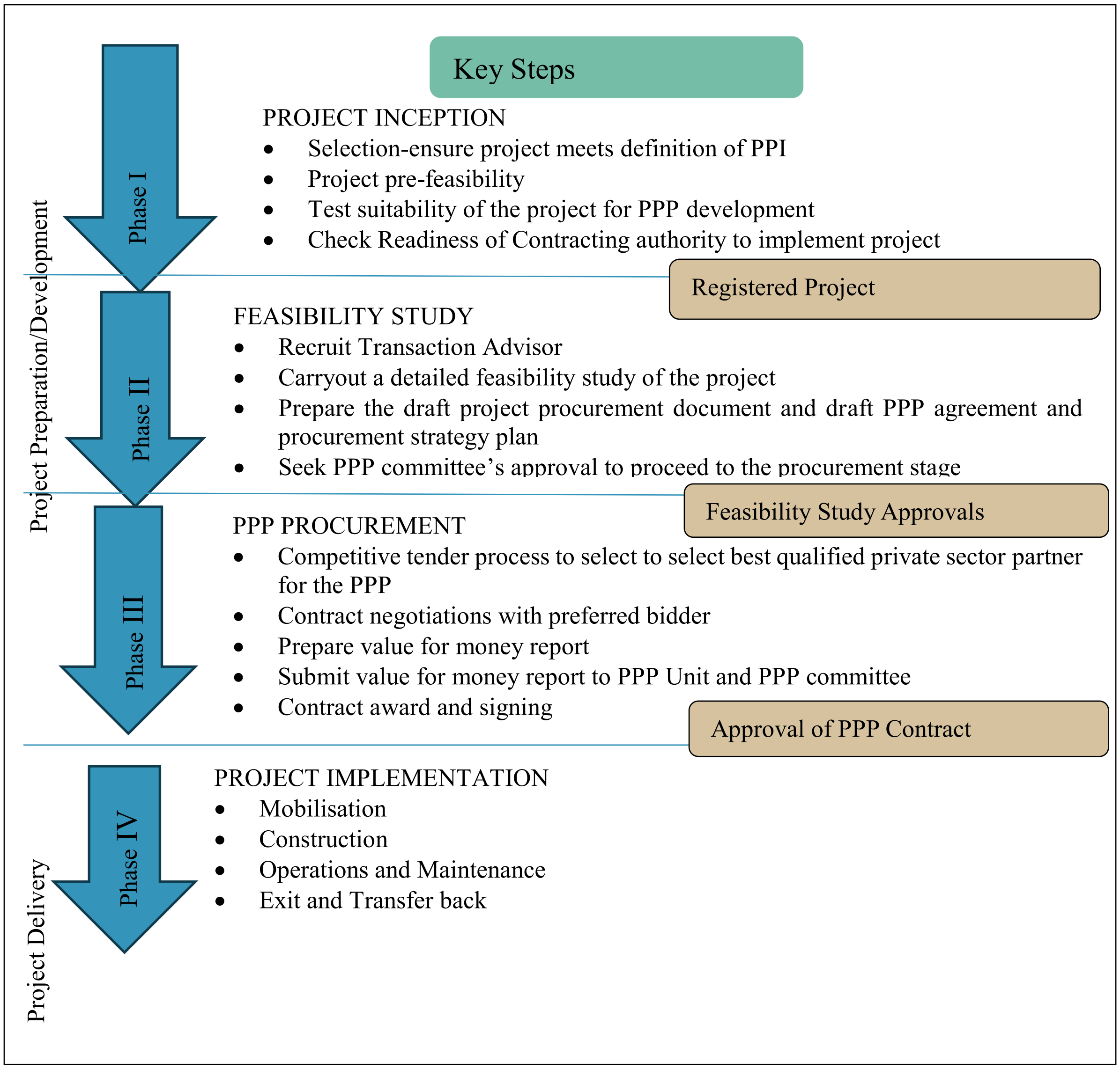


Figure 2.6: Uganda's PPP-PLC and key steps of the PPP process

Source: PPPUnit, (2025: 1)

According to Figure 2.6, the PPP-PLC is divided in four phases which start from Phase I (project inception), phase II (feasibility study), phase (III), PPP procurement, Phase IV (project implementation). All these phases have outputs. At phase one, output is a registered project, Phase III are feasibility study approvals and Phase III are approval of the PPP contract. The phases are also further categorised under preparation and development and project delivery. These phases guide the implementation of PPP projects in Uganda.

Prior to the enactment of the PPP Act, there were PPP projects implemented and these were governed by the contracts signed despite the country not having streamlines regulations in place specific to PPP project implementation. Whereas the PPP Act only recognises projects that were implemented after the enactment of the Act, this study reviews literature on PPPs in Uganda before and after the enactment of the PPP Act. This study review literature to examine the practices within the PPP partnership that create value for stakeholders in Uganda.

The next section presents a discussion of value creation of PPPs within the different sectors of Uganda's economy.

2.15.1 PPP value creation within the different sectors of Uganda's economy

Uganda faces a significant infrastructure deficit, amounting to 6.4 percent of its GDP. Over the years, the country has relied on projected revenues from oil exploitation and external borrowing to finance its infrastructure needs (World Bank, 2016: 12). Furthermore, the country has developed infrastructure within diverse sectors of the economy using the PPP method as highlighted in the previous sections. Even though these projects are riddled with challenges they have managed to navigate and create value for stakeholder despite these challenges particularly in sectors of energy, transportation, and education.

2.15.1.1 Energy Sector

The energy sector in Uganda is the most attractive sector to foreign private sector investment. Part of the reason could be the favorable regulatory framework. In 2006 alone, Uganda faced a severe power supply shortage which necessitated emergency power installations in the country (Meyer *et al.*, 2018: 75). Since then, the government made tremendous efforts to initiate PPP projects so as to address the emerging country's energy needs for power generation. One of the projects was the Eskom Uganda project, which contributed an average of 150MW, thereby reducing electricity purchase costs by about UGX 6 bn in 2021. Then the Bujagali Hydropower plant was another notable project, which the government initiated expecting it to increase power generation from about 1368 GWh to 1399.5 GWh.

In general, the government made strides to commit itself towards the expansion of access to electricity for the Ugandan citizens, further leading to the enactment of the Electricity Connections Policy (ECP). The policy was to support the provision of free electricity connections to over 300,000 households by 2027. This policy is part of a broader affirmative action by the government towards increasing infrastructure to support the development of industrial parks and regional power trade with neighbouring countries of Rwanda, the DRC and Sudan. The projects were expected to reduce tariffs for large industries, and further to increase the reliability of electricity supply to citizens (ERA, 2021: 11). As a result, these efforts saw a growth of PPP projects in other sectors. Sectors supported included the industry which saw the plan and development of industrial and business parks in the different regions of Uganda, some of which are operational, while others are at the project identification phase (Uganda Investment Authority, 2021: 2). These projects aligned with Uganda's Vision 2040, and their impact is evident. According to Onyoin and Bovis, (2021) , 90 percent of the 25 PPP projects in Uganda that reached financial close by 2019 were in the energy sector. These projects were primarily delivered through Build-Operate-Transfer (BOT), Design-Build-Operate-Transfer (DBOT), and Build-Own-Operate (BOO) arrangements. The results of these government efforts saw a projection of power generation to 3115MW by 2025 (137%) above Uganda's electricity needs (Kavuma *et al.*, 2021: 190).

2.14.1.2 Transportation Sector

As a landlocked country, Uganda relies heavily on a functional road network to connect the country to neighbouring countries to access ports. However, the road sector has over the years faced challenges due to heavy traffic congestion and travel delays, therefore leading to increased accidents along key routes in the country (Oporia *et al.*, 2020: 5). To solve this, the government secured loans from the Chinese based entities like Exim Bank to fund large road projects like the Kampala-Entebbe Expressway, connecting Kampala to Entebbe International Airport. The project was completed on schedule in 2018, marking a significant milestone in Uganda's state-of-the-art road development. This project, which started as a loan, later adopted a PPP arrangement at the Operation and Maintenance phase, borrowing practices from the African Development Bank. A private firm manages the project contracted to collect tolls using a PPP arrangement (Nuwagaba, 2019: 60). Furthermore, Uganda's Uganda National Roads Authority (UNRA) initiated another road project, the Kampala-Jinja Express Highway project, which is a 95km toll road designed to facilitate trade and transport between Uganda and its neighbouring countries. The country expects the road to boost industrial and commercial activity, create direct jobs, increase GDP per capita, as well as improve the efficiency of imports and exports, all while contributing to Uganda's economic growth (African Development Bank, 2018: 5). To support PPP efforts, the country enacted the PPP Act, the Kampala-Entebbe Expressway, making the Kampala Entebbe Expressway the first to adopt a PPP arrangement in Uganda's road sector. This effort significantly increased efficiency, further reducing travel time between Kampala and Entebbe Airport from three hours to less than one hour. Although the project faced delays in tolling due to lack of adequate supporting policies, the country later enacted the Roads Act upon completing the project in 2018. Subsequently tolling in line with the Act commenced in 2022 making the project fully operational and easing traffic congestion between Kampala and areas around Entebbe (Nuwagaba, Molokwane, Nduhura, Tshombe and Muhwezi, 2022: 51).

Further in the transport sector, for Kampala city, the government contracted a private entity to maintain a street parking facility on behalf of the government at a fee agreed upon by the public entity. (Nuwagaba and Molokwane, 2020: 35). The private entity was responsible for the display of parking metres, handheld metres on the roads and increased the number of automated number plate recognition units to increase (Galukande-Kiganda and Muhwezi, 2020: 169).The transport sector is one of the largest beneficiaries of PPP products and services. Other sectors, like education, have also benefited from the PPP mode of project delivery.

2.14.1.3 Education Sector

In the education sector, the Ugandan government leveraged PPP projects to support the expansion of access to secondary school education. The Universal Secondary Education (USE) program, launched through a PPP model, increased student enrolment in the education sector. By 2016, the USE program had enrolled over one million students, which was a significant number compared to the challenges of low secondary school enrolment in the country at the time. This project proved the potential success of PPP projects in the education sector (O'Donoghue, Crawfurd, Makaaru, Otieno and Perakis, 2018: 16). To further increase access to secondary education, the further government signed Memorandums of Understanding (MoUs) between itself and schools in the country, as a form of PPP arrangement. This arrangement was however not being recognised under the PPP Act of 2015, because of its need, government proceeded to support this nature of PPP arrangement. The MoUs led to a 60 percent increase in secondary school student enrolment, further reducing teacher absenteeism in schools, improved the quality of physical infrastructure of the schools, and increased student performance in secondary (Masuda and Yamauchi, 2018: 31). PPP mode of delivery in education was another of the numerous government efforts to improve access to education thereby creating value for stakeholders in the education sector in Uganda's economy.

2.14.1.4 Other Sectors

Beyond energy, transportation, and education, the Ugandan government has implemented PPPs in other sectors such as healthcare, waste management, agriculture industry and cultural development among other sectors. Further, projects like the Mulago National Referral Car Parking and the Kampala Waste Management Project are examples of ongoing efforts by government to create value through PPPs in diversified sectors.

In the agricultural sector, for example, projects have evidently delivered positive outcomes from PPPs, particularly in the production and distribution of sorghum where multinational partnerships were partnered with brewing companies and these introduced technology, improved crop production, and enhanced seed varieties, leading to increased food production in semi-arid areas (Akullo, Maat and Wals, 2021: 11). In industry, PPPs have supported the development of over 2000acres of business parks in different regions of the country some of which are already operational (Uganda Investment Authority, 2021: 9).

From the review of literature, it is clear that there are a number of drivers of PPP value creation in Uganda's economy and these are rooted in several key factors including but not limited to Ugandan government commitment which provides supportive policies like the PPP Act, the Electricity Connections Policy, and the projects aligned with Uganda's Vision 2040. Then there is the pressing need for infrastructure development across different sectors within the energy, transport, and education sectors which drive PPP adoption. Further the ability of the projects to address needs of the community for example the power shortages, improving road networks, and expanding access to education as well as the economic incentives, such as attracting foreign investment and boosting industrial activity, motivate PPP activities. Key in all this is the geographical location of Uganda as a landlocked country which stresses the importance of PPPs in enhancing connectivity and trade. These are some of the factors that foster PPP activities. However, the value created through PPPs is evolving and whereas some projects are in the initial phase, others are at implementation, stage, yet they all still face challenges which bar them from creating value for stakeholders. The next section presents the barriers to value creation within the projects.

2.15.2 Barriers to PPP value creation in Uganda

In Uganda, the pursuit of value creation through PPP projects began even before the enactment of the PPP Act or the establishment of a formal regulatory framework. The country's favourable environment alone along with the available opportunities encouraged private sector participation within the various sectors such as energy, health, transport, and education. These PPP projects despite existing for some years were not registered formally with the PPP Unit because of the already existing contracts. The country therefore reports on several PPP projects in the reports, despite there being little information known. Reports from the Office of the Auditor General cite challenges of accessing information but note that the existing PPP projects face several challenges within their activities.

This section looks at the different PPP projects in the economy not excluding those that existed prior to the regulatory framework and notes the challenges. The next section presents the challenges that have impeded the effective creation of value by PPP projects in the Ugandan setting throughout the PPP-PLC.

2.14.2.1 Unclear and or biased regulatory framework

Despite there being projects executing activities at the operation and maintenance phase, there are unclear policies cited that are available to regulate their activities. This has created challenges of which have paved was for opportunistic behaviours especially from the private partners. In the transport sector for example, a street parking project under the Directorate of Transport in Kampala City Council Authority (KCCA) noted issues that led to frustrations among road users, and caused significant traffic jam along the various roads in Kampala City costing the economy more than Ugx 200M to manage (Nuwagaba *et al*., 2022: 35). There were guidelines to support the project to manage this, yet, despite those guidelines existing, the stakeholders complained of unclear policies which has disorganised and hindered efficient utilisation of the parking within the city (Nakanwagi, Kiggundu and Mukwaya, 2024: 18).

Researchers argue and blame government for a skewed regulatory framework which they claim is biased towards specific sectors, particularly towards the energy sector, making it less favourable to other sectors of the economy. According to research by ISER (2019: 34), the typical Ugandan PPP model involves the government providing a selected concessionaire with valuable resources to develop the needed facilities in exchange for private sector investment into that economy. This model though well-suited to the energy sector is not well suited to other sectors like health. Consequently, and as a result a lot of private sector companies have focused predominantly on the energy sector, with limited attention to other sectors of the economy. This has led to the neglect of critical sectors, such as water and waste management, which are just as crucial for the well-being of the citizens in Uganda.

Despite the biases in policy formulation, the country has goals among which is the aiming of government towards provision of 60 percent of Ugandans with access to electricity. Even with the heavy investments though, only 26.7 percent of households have electricity access, and that is, even with a surplus in electricity generation by the companies in place (Kakumba, 2021: 1). Government at the same time, reported that out of 135 districts, only 36 districts had hospitals, indicating that other districts had no hospitals at all. This variance indicated a failure by the country to distribute infrastructure equitably, especially since private entities tended to invest only in accessible areas (ISER, 2019: 74). Therefore, even with an existing policy and opportunities and further, even with the available resources, such as a surplus in electricity generation, the intended outcome like widespread electricity access and equitable healthcare distribution are not being realised in the economy due to the skewed frameworks. This leaves a large portion of the population underserved and calls for a more targeted and equitable approach to infrastructure development that ensures that all regions and communities benefit from the essential services.

2.14.2.2 Lack of technical and human infrastructure to manage activities of PPP projects

The country being in the early stages of development of PPP projects probably contributed to the poor human resource capacity to manage activities of PPPs. This has culminated in a number of issues including lack of transparency, poor communication, among others. Case in point is a report by the World Bank (2019c: 60), which cites lack of technical and human infrastructure as well as lack of capacity of the officers who are not empowered enough to disseminate information leading to poor record management thereby limiting effective disclosure. This lack of transparency limits access to projects making it difficult for stakeholders to evaluate viability, monitor progress, or raise awareness in real-time. The Office of the Auditor General Uganda (2018: 180), reported failure by the government to recruit staff for the PPP Unit. The same report also cited expiry of terms of all board members of the standard gauge railway, and these had not been nominated, stalling activities of the project.

2.14.2.3 Failure to monitor or supervise the PPP projects.

PPP projects in Uganda are not effectively monitored for the performance of their activities by the government. This was confirmed by the Office of the Auditor General Uganda (2018: 185), that reported projects like Kilembe Mines Ltd which had failed to comply with handover procedures and that the assets handed back to government, worth Ugx. 23bn were not evaluated or assessed. Another project, the Kalangala Infrastructure services project, was reported not to have had any government agency monitoring it activities for the ferry services to certify whether the traffic levels were achieved (Office of the Auditor General, 2019: 79). These examples point to a failure by partners to comply as per regulatory framework and contracts to monitor activities. The failure to monitor posed risks of non-compliance with PPP regulations by partners.

2.14.2.4 Non-compliance with existing regulations

There are several projects that have failed to create value for stakeholders due to noncompliance with existing regulatory frameworks in the country. Researchers cited issues related to the existing procurement systems, which they termed immature, and were seen as a cause of flawed contract designs, legal disputes, and poor delivery of projects in the country (Bagenda and Ndevu, 2024: 197). In the Health sector for example, the International Specialised Hospital of Uganda project, was reported as plagued by high irregularities which hindered access to health products by the public, restricted public participation, hindered access to information, and was cited to flout existing regulations deliberately. As a result, stakeholders questioned its ability to deliver value for money or even equitable healthcare distribution (ISER, 2019: 69).

2.14.2.5 Delays in government processes

Several delays in project processes were cited as having led to failure of project activities to proceed in several PPP projects in the initial stages. For example, the Karuma and Isimba Hydro projects, where stakeholders cited delays by government in securing land for the construction of the projects, which further led to holding of funds meant for Project Affected Persons (PAPs) equivalent to approximately Ugx. 748.8 M for just one project (Office of the Auditor General, 2019: 74). Some delays were also cited at the procurement phases, which further intensified delays of the projects to progress to the operational phase, resulting in further financial losses. In the road sector as earlier cited, the Kampala-Entebbe Expressway project faced delays in compensation of project affected persons. This led to an increase in land cost per kilometre compared to regions in similar contexts. These delays affected the project as much as the citizens in the communities, by having further effects on the project both directly and indirectly. Moreover, even after the project construction was completed, the project was meant to proceed to the Operation and Maintenance phase but the failure by government to have an existing Act to support tolling augmented the problem. This affected further procurement as the contractor for the operation and maintenance was not done in time, hence loss of time and funds by the project. This delay affected therefore affected the tolling operations and further caused government to miss its first payment obligations to Exim Bank since the project was initiated as a loan.

2.14.2.6 High Tariffs

High tariffs is a hug problem facing a number of PPP- projects in Uganda. The failure by stakeholders to afford tariffs set by concessionaires was a huge challenge that affects PPP projects. In some cases, the high tariffs affected access and reliability of the developed products and services which consumer found to be lacking. Within the energy sector, UMEME had a concession which was reported as unfair to the Ugandan citizens making their services inaccessible. Even when their access rates remain low, the costs of connection and high tariffs even while the products were not reliable therefore affecting the project (Twesigye, 2023: 2). Similarly in the health sector, the case of Cipla Quality Chemicals (Ltd.) indicates similar challenges, where the government contracted a private entity to produce essential drugs (ARVs and anti-malarials) for treatment of Malaria and as medication for HIV-Aids. Yet, the products and services that were produced were found to be even more expensive and less available to the people as compared to imported alternatives of the same message, and this was attributed to high costs of production by the project (Murungi, 2018: 2).

2.14.2.7 Vandalism

Projects have reported vandalism of project assets, which has further affected the work progress. For example, the Bujagali -Tororo project, faced vandalism which led to the loss of a 220kV transmission line, affecting the progress of work (Office of the Auditor General, 2019: 199). The nature of vandalism, especially as experienced in the energy sector, is evidenced in different ways like power theft, and illegal connections, which have resulted in significant financial losses, further affecting power distribution. The country reports generation of surplus electricity which is exported to neighbouring countries. However, even with the existing policies that fostered an increased access to electricity, only 26.7 percent of Ugandan households were reported to access the electricity generated in the country (Kakumba, 2021: 1).

Further, even with the prevalent barriers among projects in Uganda that hindered them from achieving their intended goals, some PPP projects have demonstrated notable success in creating value, thereby providing examples and valuable lessons for other pro jects to benchmark with. Hence, by examining the existing best practices within the projects in detail, stakeholders can identify them, learn from them, and strategise to undertake similar projects while overcoming existing barriers.

The next section presents the salient issues that arose from the literature review on the theory and practice of PPP value creation process. It explores and highlights the key issues that arose out of the review of literature by the study.

2.16 Salient Issues From The Review Of Literature On The Theory And Practice Of PPP Value Creation Process

This Chapter presented an in-depth review of literature about PPP value creation providing researchers' views about what constitutes value and how the PPP process delivers this value through the PPP-PLC, the drivers of the value creation and the barriers to the value creation process. A number of salient issues stood out during the review of literature, and these are presented in the following section.

a) Governments increasingly opted for PPP mode of delivery over traditional procurement for complex infrastructure projects.
b) PPPs were implemented by governments for centuries, despite some countries lacking proper regulatory frameworks to support their success.
c) The PPP model, initially focused on infrastructure, and, it expanded to include service industries such as healthcare and education.
d) Different countries in the world had different structures especially in the nature of the phases found within their PPP-PLCs which was also guided by the project arrangements. The projects were also run based on national priorities and economic needs of societies.
e) PPP projects were implemented over extended or long-term periods and through complex environments and these required detailed contracts and agreements to define the roles of partners as well their responsibilities so as to manage risk.
f) The success of PPP projects depended on the type of PPP agreements. And the private sector contributions depended on the nature of the projects while the diversity in the investments depended on the urgency of public sector needs.
g) Value creation in PPP projects require balancing the interests of three key stakeholders: the government, end users, and social capital (private partner).
h) Many countries struggled to balance value for all stakeholders' failure of which led to public dissatisfaction and opposition.
i) Even in countries with a long history of PPP project implementation, many projects still failed at value creation.
j) In some instances, after the transfer phase where project assets were handed over to government, governments still failed, creating concern on issues of sustainability.

k) In some countries like China and UK where PPP activities were significant, the barriers within the PPP landscape were so devastating that the countries took decisions to scale back on the use of the PPP model.
l) PPP projects often concentrated on a few sectors, neglecting others that could benefit from private sector participation.
m) Various factors drove PPP adoption, and many of these drivers cut across economies worldwide.
n) Stakeholder interests were an issue in all contexts where PPP model was used, and the worries were that the efforts were misaligned for all parties.
o) The persistent barriers highlighted weaknesses in the landscape where current PPP frameworks, were ineffective thus calling for newer more robust and proactive frameworks to guide the value creation process.
p) Gaps in project execution hindered PPP projects from delivering expected value, requiring streamlined practices by stakeholders.
q) Existing best practices for value creation were insufficient for value creation necessitating deeper understanding of current best practices that work.
r) Continuous evaluation of projects is a requirement to address emerging value creation challenges.
s) Successful PPP projects offer lessons that can help other projects overcome obstacles and enhance value creation.
t) PPP projects played a huge role in delivering of infrastructure across diverse sectors, including water, energy, sanitation, transport, health, and ICT and these fostered development.
u) Many countries enacted laws and regulations to encourage private sector participation thus enhancing the potential for PPP projects to create value.
v) Countries like China use PPP projects not only for development but also to advance ideological, political, and economic agendas.

2.17 Chapter Summary

This Chapter reviewed literature on PPP projects worldwide. It explored traditional procurement methods, the reasons governments adopt the PPP model, the history of PPPs, the phases of the PPP-PLC, different PPP arrangements, key drivers for adoption of PPPs, barriers, and the PV theory. It also examined theoretical and practical perspectives on value creation in PPP projects globally. Through this review, the study identified gaps in the current practices of PPP projects, established that there are persistent barriers within the PPP-PLC despite attempts from stakeholders to overcome them. The study therefore needs to establish how value is created by PPP projects.

Chapter Three builds upon the literature reviewed in this Chapter by examining the theory and practice of frameworks as management tools. This review helps establish the building blocks that form the foundation for developing the practice framework presented in Chapter Seven and enabling the study to achieve the major research goal.

CHAPTER THREE : THEORY AND PRACTICE OF FRAMEWORKS AS MANAGEMENT TOOLS

3.1 Introduction

In Chapter Two, the study reviewed literature on the theory and practice of the value creation process in PPP projects, focusing specifically on PPP projects as a procurement method and method of project delivery and further as a funding mechanism for activities of the phases of the PPP-PLC, types of PPP project arrangements, the value creation process in PPP projects, the theory and practice of PPP projects worldwide and the theory underpinning the study.

This chapter builds on the pace set by Chapter Two to review existing literature to guide the development of practice frameworks as management tools. This chapter laid the foundation for the development of the best practice framework of the study, presented in Chapter seven, by aligning various perspectives from literature on how to effectively structure frameworks.

This chapter is therefore organised into the following sections: an overview of conceptual and practice frameworks, reasons why studies adopt practice frameworks, determinants of their structure, key aspects of a conceptual framework, conditions required for a practice framework to achieve its objectives, theoretical foundations and the integration of PV theory, relevant case studies, a checklist for developing practice frameworks, their application, constraints to adaptation, and potential criticisms and limitations.

3.2 Overview of Conceptual Frameworks

Conceptual frameworks play a leading role in guiding ontological, epistemological, and methodological assumptions of studies (Jabareen, 2009: 51). They present propositions, concepts, or best practices in a way that guides and articulates, well-grounded solutions instead of distinctive, eccentric, or prejudiced approaches (Bordage, 2009: 318). Academics often adopt words, such as, *"terms," "models"* and *"concepts"* while users adopt terms like "*tools"* and *"techniques*" (Phillips and Klein, 2022: 189). Further, researchers interchangeably use the terms "framework" and "model" when describing the same concept.

Eppler (2000: 2), defines a conceptual framework as,

> *"... a structured model-based way of proceeding to improve the problem solving or decision-making process whether individually or for a group in an organisational context. A conceptual tool achieves this by providing through structures, action steps and representation formats to facilitate convergent (analytical) or divergent (creative thinking)."*

Conceptual frameworks come in wide, distinct varieties according to the influence they intend to have. The differences are based on circumstances, stakeholders' perspectives, and the legal and regulatory context in which the frameworks are meant to be implemented. There are different approaches and not merely one, which is deemed perfect to describe or represent professional practice (Batt, Williams, Rich and Tavares, 2021: 6). When organisations need to develop and present practical approaches to work, within specific contexts, practice frameworks are the way (Gillingham, 2018: 190), this sense, Practice frameworks are deemed a near-perfect approach, as they explore peace and provide insight into *how* things are done.

3.3 An Overview Of Practice Frameworks

Different contexts increasingly adopted practice frameworks due to their proven ability to enhance outcomes (Gillingham, 2018: 190). They possess a prescriptive mode of approach as they are constructed based on a series of best practices that have overtime been proved as successful within organisations to achieve objectives (Ivarsson and Gorschek, 2012: 19). They establish a fundamental basis for guiding interventions by offering principles that share an approach to work, while providing triggers for implementing best practices (Connolly, 2007: 827). In organisations where they are used, practice frameworks clarify on goals, challenges, and objectives which they clearly outline to key players, specify roles, and guide on the practices they engage in. There are a number of reasons why practice frameworks are adopted by organizations in different contexts.

3.3.1 Reasons for the adoption of practice frameworks

There are a number of reasons why studies adopt practice frameworks, and these are explained in the next sections.

i. They establish a fundamental basis for guiding interventions by offering principles that structure an approach to work and provide triggers for implementing best practices (Connolly, 2007: 827). They do this by providing a road map and steps of what to do to implement activities, why, and why to practice (Santana *et al*., 2018: 437).
ii. Practice frameworks clarify on goals, challenges, and objectives, which they clearly outline to key players, specify their roles, and guide the practices they engage in. They also encourage a variety of practice instruments for conducting the activities (Stanley and Kelly, 2019: 49). They structure the work of groups of people and as a result, users are empowered and gain confidence in implementing the main goals of their job and aid others in understanding how to carry out their roles (Stanley, Baron and Robertson, 2021: 21; Graupner, Motahari-Nezhad, Singhal and Basu, 2009: 27).
iii. Stanley, Baron and Robertson (2021: 25), stress that they are prescriptive in knowledge as they detail and define practice processes, particularly processes of professional judgement and decision-making, which knowledge is often coded professionally into a checklist.
iv. By their very nature, practice frameworks attempt to arrange, clarify, or characterise data and connections between ideas. Some of these frameworks have relationships that define procedures and are thus helpful in communication (Moullin *et al*., 2020: 2).

A number of sectors have adopted and developed practice frameworks within their processes. Research refers to this process using various terms, including “modelling,” “developing,” “constructing,” “building,” and “analysis.” The framework is constructed using distinct steps. Schaffer, Sandau and Diedrick (2012: 1200), proposed five steps to modelling a framework and these include (i) discovery of new knowledge (ii) summary of the evidence following a rigorous review process (iii) translation of the evidence to practice (iv) integration of recommended change into practice, and (v) evaluating the impact of the practice to establish its impact on quality improvement. To achieve the steps recommended, a study needs to focus on the structure of choice, based on a number of determinants highlighted in the next sections.

3.4 Determinants Of The Structure Of A Practice Framework

Over the years, studies have structured frameworks based on several concepts. Most frameworks are evidence-based and built upon best practice efforts and assessments within their context

(Connolly, 2007: 827). Ward and Durrant (2021: 2), argue that even though evidence-based frameworks are based on empirical assessment, stakeholder expertise, values and preferences are key and are intended to guide the interventions. The structure of practice frameworks therefore typically seeks to explore existing gaps, examine factors that contribute to the gaps, address the challenges encountered, and bridge the divide between science and practice (Morrissey *et al*., 1997: 375). Canzittu (2024: 567), proposes five essential levels that determine the structure of a framework. These include the actors, the devices, the practices, the issues, and the general aims and objectives, illustrated in Figure 3.1.

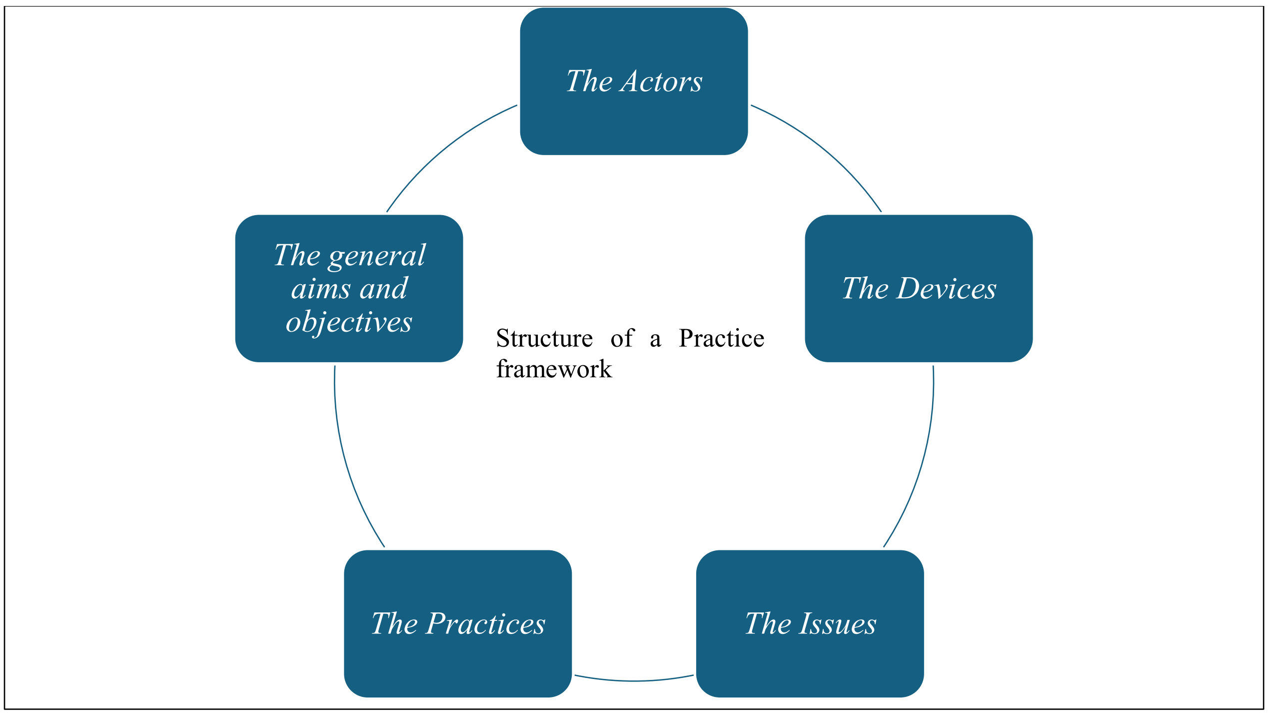


Figure 3.1: The essential determinants of the structure of frameworks

According to Figure 3.1, frameworks are composed of several determinants interlinked within the framework structure. As illustrated, these include the actors, devices, issues, practices, and general aims and objectives. The details of these determinants are presented in the next sub-sections.

3.4.1 The actors

Actors are key participants who interact in a system, shaping and influencing its design and functionality (Sixsmith, Sixsmith, Mihailidis and Fang, 2021: 384). Since they are integral to the design fabric of a framework, they are key in the design process. Their expertise is a key aspect which impacts the framework design process, ensuring that the final product aligns with their priorities, experiences, and realities, to make it even more practical and valuable (Goldberg *et al*., 2023: 2).

As agents of change, their actions, constantly produce and develop structures that enable and both contain their actions (Rose, 2001: 220). When a problem arises, actors as stakeholders struggle to create a refined solution by collaborating within a community of practice to solve it. The interaction within the community involves activities, which foster the selection, application, and achievement of the set outcomes (Jarzabkowski and Kaplan, 2015: 541). During the development of the framework, the participants within the community of practice have their roles and responsibilities classified and clarified to improve efficiency (Canzittu, 2024). The development of timely and innovative solutions is tailored to real-world contexts and challenges. This approach is human-centred, as it emphasises the expertise, democracy, non-discrimination, integrity, human rights, and service user participation (Connolly, 2007: 827).

3.4.2 The devices

Devices are key, as they encompass systems and everything in place for the purpose of guiding and supporting (Canzittu, 2024). They provide structure and institutionalised resources with structural features and properties (Rose and Scheepers, 2001: 219). Devices can be in the form of statutory systems or cultural belief systems which affect responsiveness within a diverse society (Connolly, 2007: 828). In the process of implementation devices offer a common language for stakeholders to become acquainted with while serving as a useful tool for organising, carrying out, and assessing efforts in the real world (Moullin *et al*., 2020: 2). Devices offer a deeper understanding of the ecological and social processes that work towards a better local environment quality, if policies are to succeed (Rekolainen, Saloranta and Hiltunen, 2003: 351).

3.4.3 The practices

Practices are shaped and informed by values, which serve as a map out of a range of effective approaches, of what is done, why, and the rationale for the practice (Stanley and Kelly, 2019: 49). Organisations improve themselves by identifying, communicating, and facilitating the transfer of practices that seem to work successfully in different contexts (Veselý, 2011: 99). Mahon, Kemmis, Francisco and Lloyd (2017: 5), define a practice as,

> *"…the site and source of intelligibility and understanding, structuring human action."*

Practices are socially recognised actions that can be repeated either tacitly or explicitly. To be socially recognised, they must incorporate norms shared by people and also recognised by observers as being very much in line with practice-based literature (Takahashi, Yates and Herman, 2010: 6). Each practice is associated with theory and is important in its own right as it confers benefits to stakeholder initiatives (Ward and Durrant, 2021: 1). From among the practices, best practices can be selected based on evidence and derived from an array of implemented programmes (Morrissey *et al*., 2015: 157). The practices that are recognised over time and recommended by experts are adopted for successful results, as they are viewed as best practices (Cuentas, Pico and Arias, 2015: 861).

Practices are associated with theory, but they are important in their own right as they confer benefits to stakeholder efforts (Ward and Durrant, 2021: 1). Where practice is a systematic set of human acts, theory offers an analytical lens for understanding relationships which may include evaluating practices. There are numerous definitions for the term *"theory."* According to Abend, (2008: 177), theory means,

> *"...general proposition, or logically connected system of general propositions, which establishes a relationship between two or more variables."*

Theories provide us with a tentative understanding of how to grasp a part of the world they refer to, guiding observations and interpretation of phenomena in ways that reduce our need for knowledge (Durrant and Ward 2022:2). Over time, theory and practice, influence what and how frameworks are structured. For this study, the framework under development is underpinned by the PV theory which emphasises that the public sector has the mandate to create value through efficient and effective use of resources, to deliver societal needs. Within the context of PPPs, the PV theory is key since the PPP projects are meant to serve public needs.

3.4.4 The issues

There are a number of research related issues that need to be resolved (Zhang, Mong and Lee, 2001: 2). Frameworks are adopted by studies as a means of presenting and representing the issues (Shehabuddeen, Probert, Phaal, Platts and Lane, 2000: 6). Frameworks present and communicate the issues that need to be resolved, and the disparate perspectives, which are brought together to better understand how constructs can be assessed and developed (Allen, Kern, Rozek, McInerney and Slavich, 2021: 88). It is important for the stakeholders to be aware of issues, and communicating the issues, implementing the decisions through frameworks is only fair to all stakeholders (Banks, Knapp, Lin, Sanders and Grand, 2022: 227).

3.4.5 The general aims and objectives

Frameworks are developed, recognising that there are interests not sufficiently addressed by other approaches (Connolly, 2007: 828). Frameworks therefore serve the purpose of organising and clarifying distinct roles and tasks to be performed (Zhang *et al*., 2001: 2). Practice frameworks are the go-to format and in most cases, deliberately generalised so that they can be applicable as interventions within relevant contexts (Morrissey *et al*., 2015: 163).

Frameworks help studies by translating research, interpreting it, and applying it in different contexts, by acknowledging the discrepancy between research knowledge and how alternatives, policies, and practices are applied, and how to bridge this gap, utilising evidence in novel contexts with diverse people and eventually, distributing successful interventions into policy and practice (Milat and Li, 2017: 10).

3.5 Aspects To Consider In The Development Of A Practice Framework

Practice frameworks serve a number of advantages among which is integrating best practices that support transitions within practice settings. Consequently, practice frameworks should be designed in a way that adopts diverse settings. Several aspects are essential to the make-up of the frameworks. Where some frameworks differ in complexity, other frameworks depend on the layers that preside inside each of them. Literature proposes a number of aspects that need to be considered when developing frameworks. Since practice frameworks are guided by practices or activities within different contexts, the aspects must be considered while developing. The next section presents the key aspects.

3.5.1 Integration of disciplines

Integration of disciplines spurs inclusivity in the operationalisation of a developed framework. In some cases, phenomena have eluded researchers in the field, and they require explanations which can only be derived as new insights or solutions to illuminate the field (Shaw, Tangirala, Vissa and Rodell, 2018: 2). It is often questionable as to whether frameworks grounded in one discipline can provide enough depth and breadth for stakeholders and society (Zumstein-Shaha and Grace, 2023: 4). Multidisciplinary integration is essential because it synthesises several viewpoints to produce a more comprehensive understanding or enlightenment of a fair assessment, workable solutions, or a product that imaginatively considers various viewpoints (Golding, 2009: 3). A dynamic framework that integrates disciplines is therefore essential as it allows for continual assessment and intervention response to support those in that setting and those connected to it (Dyess, Prestia, Levene and Gonzalez, 2020: 1).

3.5.2 Adaptability and specialisation

Practice frameworks, like tools, must be tailored to a company's specific needs rather than coming with bundled instructions or a guarantee (Rigby and Goffinet, 2009: 2). Oftentimes, frameworks are drawn extensively from an originator’s experience of implementing new practices (Nilsen, 2015: 5). It therefore provides a clear justification for practice by outlining what has to be done and why, while also encouraging the use of various practice techniques and instruments to conduct interventions within the work phases (Stanley *et al*., 2021: 25). These are then adapted in different contexts to support practices.

The network effect and a framework's ability to self-reproduce once it has gained traction are key factors in its widespread adoption. Without self-reproduction, the framework's usage would decline, and the need for a new management framework would arise (Budler and Trkman, 2019: 180). Adaptation is therefore key for frameworks. It can be either formal adaptation, which is systematic and done collectively or informal adaptation, which occurs without using an established framework and may be outside evidence-based recommendations (Wang, Norris and Bero, 2018: 3). In framework development, adaptability is crucial because it enables a framework to be versatile and targeted, allowing it to be applied in different contexts. The concept of adaptability entails the modification of guidelines produced within a cultural or organisational setting and can be applied to a different context (Wang, Norris, *et al*., 2018: 2). Adaptability, and specialisation go hand in hand because specialisation arises from adaptation in contexts that are constrained and do not undergo change (Poisot, Bever, Nemri, Thrall and Hochberg, 2011: 842).

3.5.3 Coherence and consistency

In the framework presentation, each dimension is essential for creating continued opportunity that influences exceedingly good practices. Coherence serves the purpose of interpreting the related segments to provide more information than is available by the sum of segments taken in isolation (Sanders *et al*., 2021: 8). It is important to encourage consistent practices and standards that encourage continuity across settings (Dyess *et al*., 2020: 6). Consistency within framework development context refers to adherence of principles and the degree of evenness. On the other hand, coherence facilitates and encourages the even and invariable application of norms by assigning responsibilities to stakeholders (Crossley, 2020: 441). Coherence and consistency are therefore important in the alignment of framework elements and function to enable the user to understand, apply and replicate it.

3.5.4 Sustainability focus

Sustainability of a framework to guide teams through practice settings is important (Dyess *et al*., 2020: 1). Sustainability supports sustained continuance of operations, which encourages local ownership or institutionalisation of the framework (Ng and De Colombani, 2015: 161). Incorporating sustainability concepts in framework development ensures that the framework remains effective, relevant, and valuable over time, so as to serve the dynamic, ever-evolving needs of stakeholders. This requires that the frameworks be designed such that they allow organisations to get over obstacles, and fill gaps to provide successful results (Awasthy, Flint, Sankarnarayana and Jones, 2020: 54).

As a framework is being developed, some conditions enable it to serve its intended purpose. The next section presents the conditions that have to be in place.

3.5.5 Knowledge related assumptions

Assumptions are introduced into frameworks as a way to reduce computational effort to solve problems (Fensel and Benjamins 1998:18). Introducing them on real-world problems supports the effective reasoning of problems (Fensel and Benjamins, 1997: 1). Assumptions can be both dynamic in nature and dependent on the context within which they are introduced, meaning that they can be valid in one context while invalid in another (Yang, Liang and Avgeriou, 2017: 83). Knowledge often serves as a basis of assumptions as it stems from the reasoning process, and where an individual relies on the application of contradiction, knowledge helps to reject inconsistent theories, thereby limiting control and communication problems (Mason and Johnson 1989:300).

In this study, the development of the practice framework is anchored on the broader research goal of the study, which is to develop a best practice value creation framework for PPP projects. Further, this study's objective emphasises overcoming barriers in the value creation process by developing assumptions presented as research propositions. The framework developed will therefore be structured in such a way as to address the complexities within PPP-PLCs that hinder value creation.

3.6 Concepts That Shape Practice Frameworks

Frameworks are constructed as a combination of relevant frameworks, theory, and conceptual models, particularly based on reasoning (Santana *et al.*, 2018: 2). Reasoning is explicitly critical during the structuring of a framework and is particularly important, as it enables the study to make logical inferences about data (Johnson-Laird, 2010: 8). It is important to note that, during the development of frameworks, copious amounts of data are summarised and consolidated about experiences, gathered, described, defined, and refined over time, with clear structures on how work should be organised among people within a particular context (Graupner *et al*., 2009: 25)

(Graupner, Motahari-Nezhad, Singhal, and Basu 2009:25). The results are further synthesised and analysed to recognise diverse perspectives, experiences, and tacit knowledge, which brings understanding by individuals, while allowing the development of core domains to address key issues (A. Nancarrow *et al*., 2014: 248). The knowledge acquired during this process is described so that it can be applied to the world to inform practice (Trevithick, 2008: 1226). The framework structure can be portrayed through diagrams or graphical representations (Soni and Kodali, 2013: 267).

Kirkwood (2022: 6), proposed three concepts that shape practice frameworks, and they include: *values and principles, knowledge-related assumptions, and intervention guidelines*. Figure 3.2 illustrates the three levels.

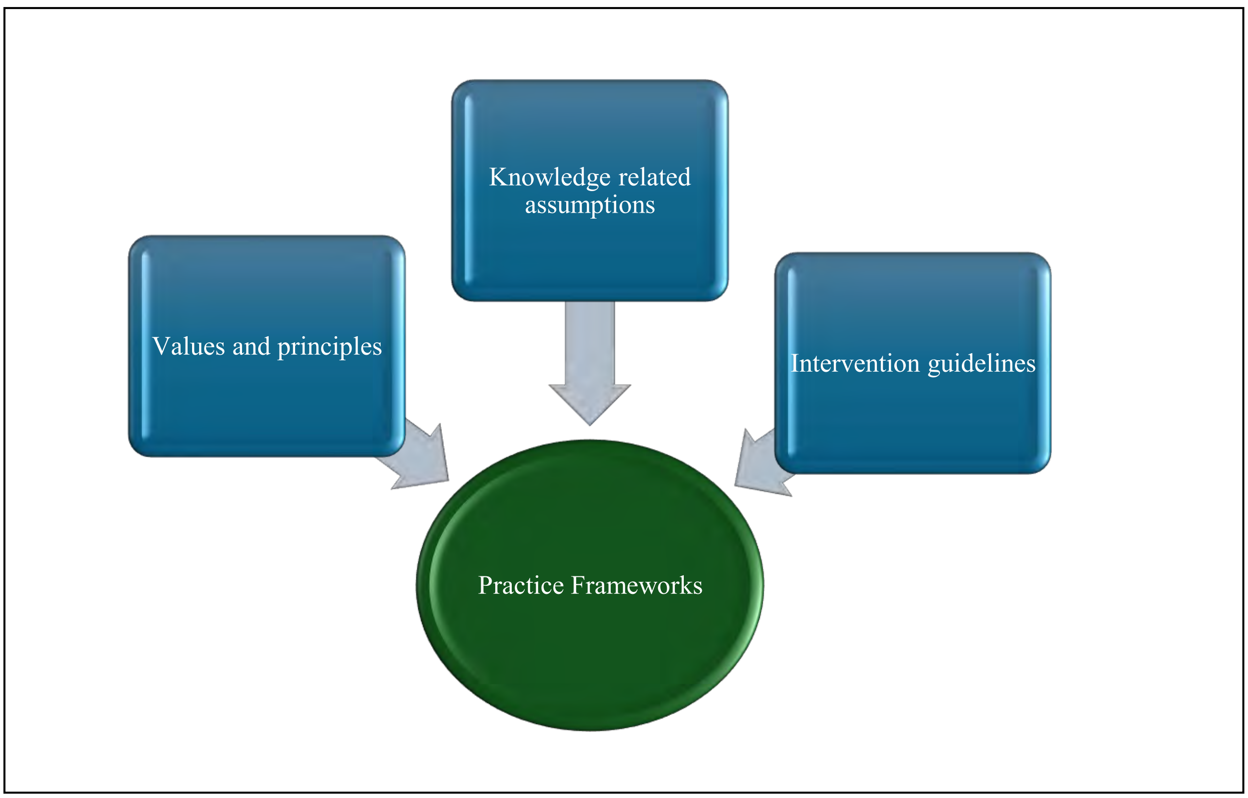


Figure 3.2: Concepts that shape practice frameworks

Source: Kirkwood (2022: 6)

According to Figure 3.2, there are three concepts that share practice, and these form the basis of practice frameworks. The next sections explain the concepts in detail.

3.6.1 Values and principles

Values and principles centre on individual values and beliefs to better understand connections (Anker-Hansen, Nyborg and Frost, 2021: 60). Individual actors determine which intrinsic values are relevant to particular actions (Donaldson, 2021: 60). They usually base on their values and principles to guide the practical deliberations and persist even when items selected are put on a list and into action. There is therefore no need to reconstruct an idea from scratch; instead, it is necessary to recognise ideas that continue in practice. However, a researcher recognising an idea does not make it new (Watson and Ohtani, 2015: 6). So, practice frameworks serve as readily accessible tools that provide optimal practice triggers, often serving as a reminder to workers of the connection between theory and practice (Connolly, 2007: 832). Stanley and Kelly (2019:44), agree that practice frameworks pride themselves on logically reinforcing ways that support excellent practice by highlighting core purpose in terms of values and ethics rather than managerial requirements.

The framework developed by this study was underpinned by the PV Theory, and the design emphasised the role of the public sector, especially the government, in its mandate and responsibility of creating value for citizens. This mandate extends beyond traditional focus on activities to include the social and political aspects. The theory, within the context of PPP projects supports projects in their structure to serve all stakeholders in society by collaborating with private sector entities to deliver for overall social wellbeing. Fundamentally, the PV Theory stresses the responsibility of public managers, who are part of the public sector and are responsible for determining and optimising value by matching the requirements of citizens with public services being delivered, while keeping inclusivity, equity, and responsiveness in mind. At the core of the framework's design is that value must be visible, meaningful, and appreciated by stakeholders who engage in the whole agenda. The theory, therefore, informs the guiding principles and objectives of the proposed framework's design by incorporating the overall supervisory role of government. Through a stakeholder-centered approach, the proposed framework intends to balance economic and societal needs, as well as the lopsided nature of previous research, and foster accountability, adaptability, and sustainability of the practices proposed.

3.6.2 Intervention guidelines

Frameworks support stakeholders to understand the gaps faced in prevention practices, and the barriers that exist between science and practice by facilitating bridging strategies (Morrissey, Wandersman, Seybolt, Nation, Crusto and Davino 1997b:375). It is therefore important for frameworks to be useful and readily available as a tool regardless of the user's experience or qualifications (Connolly, 2007: 827). When guidelines are well-crafted and take implementation into account, they help users in the most efficient way possible while also supporting policy administrators in creating the best possible programs (Wang, Norris and Bero 2018b:3). Integrating theory and research, creating, and modelling the intervention, figuring out acceptability and planning, and delivering the intervention are some of the crucial processes in the development of frameworks as interventions (Corry, Clarke, While and Lalor 2013:2380).

This next section presents the incorporation of the PV theory into the framework.

3.7 Theoretical Foundation, Integration Of The PV Theory, And Its Significance In Development Of The Best Practice Value Creation Framework For PPPs

Theoretical underpinnings enable the understanding of how implementation succeeds or fails and enhances opportunities while predicting the likelihood of success (Nilsen, 2015:11). The PV theory underpins this study and framework development, providing guiding principles for aligning the elements of the framework with public good, in the creation of value.

The PV theory according to Mark Moore 1995 influences public policy and is centered around PV being more a deliberate effort by the public sector but entails an aggregation of public needs in the creation of value rather than just achieving targets. Moore further stresses that the value creation process focuses on not only short-term activities and outputs but also on long-term outcomes for the public sphere (Benington and Moore 2005:31).

Moore (2012: 31), poses a critical question of,

> *"…how would public managers, the elected representations of the people who monitored their work, the citizens in whose name public enterprises were carried out, the taxpayers who provided much of the funding for government, and the individuals who had their interactions with governments as clients determine whether PV was in fact being created at a particular government enterprise?"*

This study explains the process of *how* value is created by managers through government instigated partnerships, specifically, PPP projects which are set up within different contexts. This is by examining how government and its agencies convene, catalyse, and collaborate or sometimes steer, row, partner or even stay out of the way but have its managers manage the inputs and outputs in ways that ensure the economy and responsiveness to customers (Bryson, Crosby and Bloomberg, 2014: 448). In supporting this study, the theory extends the concept of value beyond the traditional economic focus of leveraging private sector skills and expertise, to prioritising the balancing of different concepts that drive value to the diverse contexts of value as stakeholders grasp it. This theory is particularly relevant to the PPP project context, as, overall, value created by PPP projects is measured against benefits derived by stakeholders who all form part of public sector and are indeed, citizens.

The next sections detail how the study intends to integrate the PV theory into the development of the framework.

3.7.1 Integration of the PV theory in framework development

In the context of PPP projects, PV theory provides a lens through which the study can evaluate the effectiveness of PPP projects, ensuring that public interest remains central throughout the PPP-PLC. The value creation framework draws from this theoretical perspective to ensure that PPP projects are structured to enhance public welfare by amplifying benefits to society while also achieving project goals. To respond to public demands, a framework needs to emphasise the need for collaborative approaches that capitalise private sector resources and efficiencies.

The PV theory is rooted in a deliberate process of accountability by public managers responsible for the delivery as per the government's mandate. In line with the theory, the framework ensures that stakeholders are equipped to align their processes and practices with the goals of society, while at the same time balancing the interests of all stakeholders. This alignment is especially important for ensuring that the projects do not simply serve as vehicles for private partner gain but that they also actively contribute to long-term public benefits of improved infrastructure, social services, and economic development.

The next section presents the importance of integrating the PV theory into the framework.

3.7.2 Significance of integrating the PV theory into framework development

Integrating PV Theory into the practical development of the value creation framework is significant for several reasons, and these include:

a) Providing a structured way to evaluate the success of PPP projects, shifting the focus from short-term financial gains to long-term societal benefits by supporting managers to adopt a broader view of their roles in flexibility to boosting satisfaction, improving outcomes, securing legitimacy, and ensuring that all providers adhere to recognised best practices.
b) Ensures that the framework is adaptable to a wide range of PPP projects and contexts since the context of PV is not specific but rather varies depending on societal needs and expectations, so the framework is built for flexibility and inclusivity.
c) Ensuring accountability as the framework is designed for accountability towards users and citizens.

The next section builds upon the theoretical discussion and explores cases studies of practice framework, how elements were integrated into the design of the overall framework to ensure it serves its purpose.

3.8 Comparative Analysis Of Practice Framework-Case Studies

Case studies are a helpful tool in providing a foundation for the creation of more formal instruments required for surveys and experiments (Rowley, 2002: 16). If a study is trying to choose among several competing methods or tools to organise itself as a formal experiment, a case study is a viable choice (Lee, 1989: 53). Case studies thoroughly investigate an individual, a group of individuals, or a unit with the goal of generalising over them, an illustrative or verifiable purpose (Gustafsson and Gustafsson, 2017: 2).

In different contexts, case studies are rediscovered, driven by the need to link and gain insight into systems in order to assess them (Yin, 1999: 1209). They provide stiff discussion for readers to infer from implicit predictions of the studies. Stakeholders learn from case studies and often become better placed to understand how they use frameworks to guide, improve and address challenges specific to their various contexts. Table 3.1 presents examples of case studies and their area of focus and description.

Table 3.1: Case studies illustrating practice frameworks development

Framework Name	Context	Author	Description
Advanced competency framework for Indonesian pharmacists	Health	Meilianti, Smith, Bader, Himawan and Bates (2021: 1)	Educational approach to pharmacy workforce through an advanced practice competency framework development using adopt and adapt methodology
Best practice in surgical treatment of malignant head and net tumours	Health	Simon, Nicolai, Paderno and Dietz, (2020: 2)	Defining the best practices for head and neck cancer surgery.
AI ecological policy framework	Educatio n	Ka and Chan (2023:21)	AI Ecological Educational Policy framework to address multifaceted implications of AI integration in university teaching and learning.
New Product development practices framework	Business	Kahn, Barczak and Moss, (2006: 115)	Improves the discipline's understanding of the poor better, and best New Product Development practices
Best practice Framework for Implementing PPPs in Hong Kong	PPP	Cheung (2009: 264)	Provides a framework to help resolve the current economic crises by encouraging more developments and business opportunities for the private sector.
Best Practice Framework for PPPs in road projects	PPP	Boadi (2020: 196)	Proposed blueprint for PPP projects proposing tailor-made solutions to address challenges preventing the private sector from investing in PPP road projects in Ghana.
Best Practice Framework for PPP implementation for construction projects in developing countries: A case of Ghana	PPP	Osei-Kyei and Chan (2018c: 2818)	Presents best practices within the PPP lifecycle

Table 3.1 presents frameworks developed in different contexts ranging from healthcare, education, business, and project management. Each framework was tailored to address specific challenges in its respective context including enhancing competency in the pharmacy workforce, defining best

practices for surgical procedures, or developing resilient partnerships within the context of PPPs. By examining the case studies, this study is able to gather knowledge, adopt, alter, apply, and enhance the development of the current practice framework under development.

Table 3.2 further presents a detailed description of the different frameworks from diverse contexts, presenting the strengths and the recommendations that this study can pick from the previously developed frameworks and the shortcomings that this study aims to circumvent or improve during the development of its own best practice framework.

Table 3.2: Comparative analysis of practice frameworks from diverse contexts

Author	Strength	Shortcomings	Design	Objective	Aspects Adopted for Customisation	Validation	Recommendation For Adoption
Meilianti, Smith, Bader, Himawan and Bates (2021: 8)	Direct engagement with stakeholders including practitioners and professional leadership body, allows practitioners to self-assess themselves to the framework and identify their current stage of practice and potential learning needs, Career progression for practitioners.	Specific to pharmacists, The perception of self-assessment used related to the belief that practioners are self-aware and have the confidence to assess their actions objectively, Phrasing and wording in the framework could create issues of contextual differences for the target populations,	Framework Design not presented in study	To identify conceptual challenges of adopting and adapting an existing framework	Engaging practitioners to suggest modification to the draft presented by the study	Validated through an online discussion with practitioners and their leadership resulting in a final mapping consensus and suggested modification to the draft.	Recommend training of practitioners to in reflective practice and to conduct self-assessment to identify learning needs and gaps for practitioners, Development of national professional recognition system so as it signposts opportunities for continued advancement of practitioners and acts as credible evidence of practitioner's role, expertise, safety and enhancement of quality and impact within the context.
Ka and Chan (2023: 32)	Provides assessment methods, promised effective and equitable implementation of technologies, promises effective and equitable implementation of technologies, focuses on adaption of teaching methods, focuses on ethical conduct associated in the context	Recommends training and an assurance of resources to support to stakeholders, focuses on leadership as the initiators of the framework	Graphical model presented according to dimensions and capturing key areas according to dimensions	To establish an AI education policy for university teaching and learning that addresses concerns of the use of text generating AI in academic environments.	Graphical model presentation of concepts and key areas organised according to dimensions	Not presented in the study	Development of enforcement policies and procedures that address the ethical concerns surrounding the adopting of the framework, senior management as initiators of the framework, Ongoing monitoring, evaluation, and support for equitable implementation of the framework, training of practioners recommended

Cheung (2009: 265)	Within the context of PPPs, Presents practical outputs as checklist to develop and mitigate project failure, presents Dos and Don'ts at various stages	Focuses on general factors contributing to successful PPP projects , does not present best practices according to phases of the PPP-PLC, does not focus on end user needs.	Tabulated according to steps (Steps included dos and don'ts while referring to sections in the different Chapters of the thesis)	To deliver a best practice framework for implementing PPPs in Hong Kong	References the practices by linking them to other Chapters of the thesis like the Chapter on Literature Review	Conducted 9 Surveys with respondents from among researchers, private sector, and private sector on degrees of appropriateness, objectivity, replicability, applicability, reliability, and overall suitability of the framework	Presents how activities can be incorporated within existing PPP framework
Boadi, (2020: 217)	Best practices linked to barriers and recommendations	Focused on road projects the procurement phase, Links best practices to barriers and solutions and actions for stakeholders, Best practices not specific at operation and maintenance and transfer phases	Graphical model adopted to present according to phase, challenges, best practice, rationale, recommended solutions (long-term and short term) and guidance, tables presented according to the phases	To deliver a best practice framework for implementing PPP projects	Graphical model adopted in the presentation of concepts according to the phases of the PPP-PLC in addition to validating and presenting a final framework with improvements.	Nine responses collected from Questionnaire survey conducted based on relevance, usefulness, appropriateness. Respondents were not participants of the data collection. Upon validation, results were included in the results and rated for comprehensiveness of the proposed d solution.	Not presented in the study

Osei-Kyei and Chan, (2018c: 2818)	Presents best practices according to the distinct phases of the PPP-PLC, Presents specific best practices for contracting authority and private sector partner at distinct phases	Practices not chronologically arranged in the distinct phases.	Graphical model adopted to present according to PPP phases, distinguished according to contracting authority and private sector practitioners	To deliver a best practice framework for PPP implementati on	Graphical model adopted in the presentation of concepts according to phases and validation of framework with six experts.	Questionnaire survey conducted with six experts. Validation to establish credibility and quality of framework. Practice framework presented, and experts solicited for opinions with six questions.	Clear management measures for adoption at distinct phases of the PPP-PLC.

The analysis of the practice frameworks presented in Table 3.2 reveal key insights that guide this study in the development of a best practice framework. A key strength that cuts across these frameworks is the recognition that effective frameworks indeed must address both the technical and human elements within their contexts. Meilianti, Smith, Bader, Himawan and Bates, (2021)'s framework stresses the importance of stakeholder engagement and self-assessment, which allows the gauging of capabilities and an establishment of learning needs.

The focus of the framework was on career progression of the practitioners which fostered a reflective practice valuable and encouraged. However, the framework's assumed that all stakeholders are aware and able to accurately self-assess themselves and their environment, which may not always be true in this case. It is crucial to incorporate a practice of reflection into a framework so that stakeholders are equipped with the necessary skills to assess their roles and enhance their competencies while aligning actions with project objectives.

Further, frameworks presented by Boadi (2020); Osei-Kyei and Chan, (2018c), offer complementary approaches needed to be integrated in this study. Boadi's framework links best practices to barriers, provides practical, action-oriented approaches that ensure that barriers are not merely identified by the study, but addressed with concrete solutions emphasised by the best practices. Osei-Kyei and Chan's framework is structured according to different phases of the PPP-PLC which inform how this study shall organise it's the framework chronologically, according to the phases of the PPP-PLC. Presenting the practices in this manner ensures that they are clear, presented in a step-by-step order to enhance their usability for stakeholders while also allowing for smoother adoption, application and transition within each phase and from one phase of the PPP-PLC to another.

Leadership and senior management involvement are emphasised by Ka and Chan (2023), in their framework as key to the success of the framework. Engagement of decision-makers at the highest levels ensures that the framework maintains ethical considerations, effectively allocates resources, and enforces policy while fostering an environment where the framework can thrive and be sustainably implemented.

The proposed framework is a synthesis of the strengths identified by this study from the different case studies and adopting a chronological structure akin to Osei-Kyei and Boadi, ensuring best practices are linked to barriers at each phase. Further, drawing on Meilianti, Smith, Bader, Himawan and Bates, (2021)'s this study emphasises user training as an investment to maintain stakeholders equipped with the necessary skills to overcome the barriers identified to create value. This integrated approach, not only addresses technical and operational challenges but also cultivates a culture of continuous upgrade, positioning the framework as a robust tool for creating value by PPP projects throughout the PPP-PLC. This study determined essential elements and procedures to include in the development of its own practice framework, based on the review of the various case studies within and outside the PPP context. The next section presents a checklist to guide the development of this study's practice framework.

3.9 Checklist For The Development Of Practice Frameworks

This section presents the proposed steps, presented in the Chapter , that studies have previously suggested and adopted in developing of practice frameworks. The steps presented here stem from a review of literature on practice frameworks and a comparison of different framework development practices that studies undertook in development of practice frameworks.

Table 3.3: Comparative analysis of practice frameworks and steps taken in their development

No	Author	Name of framework	Steps Taken to Develop Practice Framework
1.	Osei-Kyei and Chan, (2018c: 2813)	Best Practice Framework	• Selection of practices from publications • Practices incorporate into the process of procuring PPPs. • Clear instructions given at each stage on how to implement successful PPPs. • Practices grouped under each sector/partner. • Practices presented at each phase and allocated according to partner. • Framework Validated
2.	Boadi (2020: 195)	Best Practice Framework	• Identified best practices in PPP projects. • Considered PPP project life cycle approach. • Customising the design to address vital stages, considering challenges • Tailor made solutions to identify challenges. • Validated
3.	Cheung (2009: 257)	Best Practice Framework	• Collected data on steps taken in the PPP process. • Findings collected and each step demonstrated as guidelines according to PPP process. • Guidelines incorporated in PPP process as Dos and Don'ts • Guidelines presented in a table form with reference to other sections of the thesis
4.	Kahn, Barczak and Moss (2006: 114)	Best Practice Framework	• Reviews of studies conducted for practices. • Practices delineated across management dimensions. • Characterisation of best practices according to dimension • Organisation of benchmarking data in framework as best practices
5.	Ka and Chan (2023: 20)	Policy framework	• Key areas developed within the context, ground in practice. • Key areas organised according to required dimensions • Each dimension's responsibility presented, and a link established
6.	Meilianti, Smith, Bader, Himawan and Bates (2021: 1)	Competency Framework	• Adopt and Adapt approach. • Adopted an already existing framework. • Practices incorporated in latest agreed framework. • Feedback sought. • Validation to investigate feasibility and validity of tool

Studies adopt distinct terminologies to define practice frameworks. From the presentations in Table 3.3, the different terms identified include *best practice, competence, policy, and competency frameworks*. Table 3.3 also presents and analyses nomenclature that the studies adopted in the development of their own frameworks. In some studies, the steps were explicitly highlighted and illustrated and in others the steps were not clearly stated. Table 3.4 presents the steps derived from the studies discussed in the earlier sections that they study adopted in the development of its own practice framework.

Table 3.4: Checklist for development of practice frameworks

Step No	Description
1.	Establish guiding principles based on the underpinning theory
2.	Clarify the framework's goals to align with study needs and expectations
3.	Collect data on steps taken by stakeholders
4.	Name the practices
5.	Group the practices according to the preferred context e.g. Phases, dimensions, stakeholders, etc
6.	Design the framework to address vital stages, considering challenges
7.	Establish right framework design to adopt and customise
8.	Tailor the framework to the specific context, ensuring flexibility and adaptability, sustainability etc to address potential challenges and limitations that may arise.
9.	Ensure that guiding principles and elements are embedded at every stage within the context.
10.	Develop clear guidelines with defined roles and responsibilities for stakeholders
11.	Design and address vital stages, considering challenges or limitations of applying the practices
12.	Provide clear instructions for stakeholders at every phase/dimension/stage
13.	Choose validation method and respondents for the validation
14.	Validate the framework.

The study, through a review of literature developed a checklist to guide studies through the process of framework development to ensure that the framework is grounded in theory and practice the recommended steps are presented in Table 3.4

Further, after going through the first 13 steps of the checklist, the framework should be validated to establish the degree to which the claim about the use or uses inferred from the framework are credible (Child and Shaw, 2023: 35).

3.10 Framework Validation

Validation is indispensable and is used to strengthen a study's trustworthiness (Soysal and Türkmen, 2024: 47). It examines whether a particular design meets its intended purpose and that it performs as expected (Yussiff, Fatimah, Ahmad and Mustapha, 2015: 250). Validation further provides an indicator as to whether the created work or design is legitimate and appropriate for use, that it accurately depicts the intended processes and stakeholders, and that it serves as a practical theory-based instrument for study and application (Bird *et al*., 2014: 651). According to Inglis (2008: 358), if validation is for establishment of fitness-for purpose, then the framework is structured in a way in which validation considers the purpose for which the framework is to be used.

For practice frameworks, validation can support a project to understand how a framework works in an industry over time, and how the framework can overcome difficulties uncovered by the validation (Ivarsson and Gorschek, 2012: 53). Since framework development is a continuous process, the validity of the framework, therefore, is never final but rather ongoing to assess the impact of the framework to ascertain whether it requires added focus (Batt *et al*., 2021: 6). Only through validation can a study show its inherent quality in fulfilment of minimum acceptance criteria and prove the practicability for the purpose (Peters, Drummer and Musshoff, 2007: 216). Research studies propose strengthening the study by the use of member checking and triangulation as a form of validation (Bird *et al*., 2014: 651).

The next section explains the concept of validation through member checks and triangulation.

3.10.1 Member checks

Member checks are also known as participant validation. They involve a strategy for researchers to return the data collected from participants back to them, to verify its accuracy, findings, and interpretations as it was derived from interviews or observations of the study (Soysal and Türkmen, 2024: 43). This process involves the researcher returning the interview transcripts or analysed data to participants, to check and confirm the results. It may also include engagement of participants in public meetings which are organised to interact together and discuss the findings and provide feedback (Birt, Scott, Cavers, Campbell and Walter, 2016: 1805). The study may also engage participants through focus groups or individual interviews or written feedback to accommodate the diverse participants (Simpson and Quigley, 2016: 381). The challenge with this method of data validation however is that, if the framework is returned to the same interview participants, this may raise ethical questions about protection of participants in the research process.

3.10.2 Research triangulation

Triangulation is a sophisticated method of generating and testing validity and reliability of research findings (Bans-Akutey and Tiimub, 2021: 1). It aims at validating already existing findings (Jonsen and Jehn, 2009: 140). Studies triangulate by involving several investigators or peer researchers in the interpretation of data within different contexts of time and location (Karmilla Kaman and Othman, 2016: 351). Other studies are evaluated by distributing questionnaires to practitioners and or academics to establish feasibility and needs of the framework as well as to establish whether there is need for changes to the framework being developed (Hidayati, Riadi, Ramadhani, Ulfah and Amany, 2021: 127). Inglis (2008: 350), confirms that validating of a framework against experts in the field is another approach to validating a framework. This can be conducted after development where some frameworks are further refined and validated through structured interview sessions with professionals and or with experts, and the results published in future publications (Fong, Al Saadi and Abdou, 2024: 14). Experts are chosen from professionals or academics in the field, and these are asked to provide their opinions on particular aspects of each item. They may be asked to determine whether the item is understandable and clear, whether they concur that it is relevant to the study, whether they disagree, and whether the item is clear. If they disagree, they may suggest making changes to the framework along with a brief justification (Calciolari, González Ortiz, Goodwin and Stein, 2022: 7). Following their evaluation, the experts can identify any significant or absent elements that should have been part of the framework for process validation by completing the survey. It is possible to create and distribute the questionnaire online. This can be done in an effort to further improve the conceptual framework and make it useful in the setting of the study (Peters *et al*., 2016: 121).

Triangulation improves research by offering a range of datasets to clarify various facets of interesting phenomena, such as (Noble and Heale, 2019: 67). When a study proves to be difficult, alternative perspectives are engaged to gather data from diverse sources, within different contexts, at different times and under different circumstances while excluding studies where data comprises of independent variables in an experiment (Turner and Turner, 2009: 172).

This study intends to validate the developed framework before it is recommended for users to apply it. The study will indicate the preferred method of validation in Chapter seven of the study upon presentation of the data in framework format.

The next section presents discussed application of practice frameworks by practioners.

3.11 Application Of Practice Frameworks

Practice frameworks summarise substantial amounts of experience gathered and refined over time, by experts who define and describe the organisations, structure, and context of how work ought to be in a particular domain (Graupner *et al*., 2009: 25). In the field of management, practice frameworks guide stakeholders in decision making by presenting a range of tools to adopt to support their expertise (Gillingham, Harnett, Healy, Lynch and Tower, 2017: 54). This guided implementation provides users with much needed structure to describe, analyse and evaluate efforts that facilitate advancement of generalisable science knowledge (Moullin *et al*., 2020: 10). Literature proposes some key concepts to support the framework application on how the generic design should be applied in the field (Disconzi and Abreu Saurin, 2024: 4). Stanley, Baron and Robertson (2021: 2), proposed several requirements necessary for the adaptation and application of practice frameworks, and these include:

a) Commitment or dedication to using the practices at individual, team, service, and leadership levels.
b) Theoretical and operational approaches to innovation are intricately linked to the disciplinary orientation of users.
c) Consistency with the user's inner motivation to conduct excellent, transformative practices that initially inspired them to pursue their careers.

d) Shift of perception to acknowledge that the frameworks can be used without undue hardship, making their effort morally righteous and bringing them closer to the practices they aspire to provide.

Whereas frameworks are universal and serve many needs, organisations that wish to implement them need to look into their own situations and adopt those that are a better fit to their structure, strategy, and culture (Kahn *et al*., 2006: 105). Wang, Norris and Bero (2018: 11), propose a number of guidelines or processes for the implementation of frameworks by organisations, as presented in Figure 3.3.

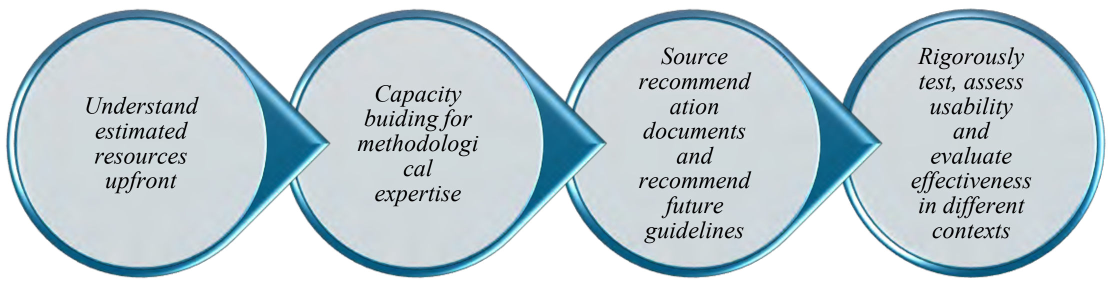


Figure 3.3: Guidelines for implementation of practice frameworks

Source: Wang, Norris and Bero (2018: 11)

As illustrated in Figure 3.3, there are a number of guidelines to the implementation of practice frameworks and these are explained below.

a) Understanding upfront estimation of resources including time and flexibility in the resources required to enable the framework respond to the different challenges that may arise from adaptation within different contexts.
b) Build the capacity building of stakeholders on how to implement the frameworks. This may include fostering collaborations between the developers and the stakeholders to furnish them with the much-needed expertise that takes into consideration the local needs.

c) Provide a recommendation section for future guidelines and improve the developed framework's adaptability within the existing system.
d) Establish a quality assurance certification process and rigorously test and assess the usability and effectiveness of the framework within different contexts.

The proposed guidelines, if adopted, necessitate the existence of specific requirements so as to achieve high-quality results (Simon, Nicolai, *et al*., 2020: 2).

3.12 Constraints To The Adaption Of Practice Frameworks

Tools designed to enhance decision-making are often well received by practitioners (Gillingham *et al*., 2017: 53). But, the tools, even when good, often have constraints in their usage, which include:

i. The existence of policies and documents in an organisation, which may be rigid, making it challenging to adopt new frameworks for implementation (Tomlinson, 2002: 386).
ii. Changes in contexts and environments where the development context differed from the implementation context. Some contexts are designed to address broader contexts and not specific contexts, making them not practical during implementation (Wang, Norris, *et al*., 2018: 2).
iii. Some frameworks may require a lot of time and resources, which may also make it impractical in some organisations (Wang, Norris, *et al*., 2018: 10).
iv. Categorising people based on predetermined definitions often oversimplifies the complexity of their circumstances, leading to potential inaccuracies in assessing risk (Gillingham *et al*., 2017: 53).

Practice frameworks are designed to learn from people's interactions within those contexts to enrich organisations by providing a background to who did what and when (Graupner *et al*., 2009: 33). They serve as a versatile mapping tool that evolves with an organisation's and its professionals' needs within that context.

Besides the constraints to adaptation of the frameworks, several criticisms may limit the adoption of practice frameworks within different contexts. These are as indicated in the next section.

3.13 Potential Criticisms In The Adoption Of Practice Frameworks

Even though they are backed by literature, proposed practice frameworks need to anticipate some limitations as they have to be adopted by stakeholders in diverse contexts. The anticipated limitations may include resource constraints, resistance, and perception of complexity, and these are further explained in detail below:

i. Application of a practice framework places demands on resources in the form of dedicated time for stakeholders to undertake their roles, and support (Lamprell, Arnolda, Delaney, Liauw and Braithwaite, 2019: 206). Resources may be financial, human, and technical, but may not always be readily available. In some instances, the resources are needed for capacity development, which is a key element that needs ongoing input in terms of time and expertise.

Whereas resource constraints are expected, a framework should be designed to be flexible enough to allow a phased approach during the implementation of practices, where they are implemented in order of priority, beginning with high-impact and gradually expanding as capacity grows. Furthermore, in setting priorities, stakeholders need to choose between competing values and set priorities, and these can be set based on efficiency, equity, or justice (Sibbald, Singer, Upshur and Martin, 2009: 2).

ii. Resistance to the developed framework may also be met, especially when goals are perceived as clashing with stakeholder interests. Schoonover *et al*. (2019: 9), argue that involving stakeholders indicates thoughtful reflection on the kind of space they need, what will best meet their needs. Achieving this may require additional resources from stakeholders, and stakeholders may be reluctant to adopt practices that demand additional investments at a particular time.

To counter this challenge, a framework should be designed to balance stakeholder needs, focusing on equity and sustainability, to avoid opportunistic goals of some stakeholders. However, it helps to clarify responsibilities among stakeholders since they usually have different interests, but clarifying supports the transformation from vagueness actionable plans that can easily be understood and practiced (Lin *et al*., 2018: 561). A balanced approach would go a long way in positioning complementary goals rather than causing a conflict of interests of all involved. Alignment strives to enable the different system components to pull towards a common goal by ensuring no conflict exists among goals, plans, procedures within the structure of the organisation (Lundmark *et al*., 2021: 2)

iii. Complexity in adapting the framework is another challenge that may arise out of lack of knowledge, awareness, professional skills, or appraisal skills (Yang, Yang, Quan and Zeng, 2021: 138). Some frameworks are applied where there are unresolved issues about how best to implement them in different real-world conditions (Cornelissen *et al*., 2014: 9).

To meet stakeholder needs, a framework should be adaptable and compatible with the guiding principles for flexibility and allowing it to be tailored to different contexts and meet needs. Moreover, including continuous feedback mechanisms would go a long way to ensuring that a framework developed with this in mind stays responsive to the dynamic environment and can be adjusted to better serve stakeholder needs. According to Bartley (2012: 16), agrees and calls for organisations to establish systems where practical experiences are shared as feedback even at policy level to inform continuous improvement and foster decision making.

By inviting different concepts to be incorporated into a framework, a framework can be robust, adaptable, practical, and functional across various contexts.

The next section presents salient issues noted by the study during the literature review.

3.14 Salient Issues Arising In This Chapter

Several salient issues were noted during the review, which are presented in Table 3.5.

Table 3.5: Salient issues arising from review of literature on the theory and practice of frameworks as management tools

Section	Salient Issues
Overview of Conceptual Frameworks	Conceptual frameworks guide ontological, epistemological, and methodological assumptions of a study
	Frameworks offer structured models towards problem-solving or guide the decision-making processes.
	Conceptual frameworks vary depending on the organisation, the perception of the stakeholder and the existing regulatory framework within that context.
Overview of Practice Frameworks	Practice frameworks offer guiding principles and triggers for best practices.
	They provide the necessary steps that act as a roadmap for implementing activities, thereby fostering confidence among stakeholders.
	Frameworks clarify goals, challenges, and objectives, guiding key players while specifying their roles.
Key Conditions for Practice Frameworks	Frameworks must address values, principles, knowledge assumptions, and intervention guidelines.
	Knowledge acquisition is essential, and social relations influence the effectiveness of frameworks in practice.
	PV Theory informs the proposed framework's design, emphasising societal needs and stakeholder satisfaction.
Determinants of Framework Structure	The structure of the framework is determined by the actors, devices, practices, issues, and general aims and objectives.
	Frameworks must have a human-centred design, involve stakeholders, and ensure that the structure addresses real-world challenges.
Steps in Designing a Practice Framework	Comparative analysis of practice frameworks Different studies take several steps to develop practice frameworks, including identification of practises, incorporated into framework development and validation process.
Key Aspects of Conceptual Framework	Key aspects include the integration of disciplines, coherence, consistency, adaptability, and sustainability focus.
	A framework should balance adaptability with specialisation to ensure relevance across different contexts.
Research Validation	Validation methods include member checks (participant validation) and triangulation (multiple data sources and perspectives).
	Validation strengthens the framework's credibility, ensuring it meets its intended purpose and can be applied in real-world contexts.
Application of Practice Frameworks	Frameworks are used in different fields to organise, guide, analyse, and evaluate practices.
	Successful application requires user commitment, consistency in practice, and adaptation to organisational needs.
Constraints in Adapting Frameworks	Challenges include preexisting documents, complexity of guidelines, resource constraints, and stakeholder resistance to adopting new frameworks.
	The framework's adaptability is key to overcoming these constraints, and proactive engagement with stakeholders is essential.
Case Studies of Practice Frameworks	Various frameworks in sectors like health, education, and business demonstrate how practice frameworks can address sector-specific challenges.
	Frameworks such as those for AI education policy and PPP projects provide lessons on stakeholder engagement, best practices, and validation approaches.

	There are practices among stakeholders that other entities within similar contexts can adopt, that studies can identify, and using existing frameworks, adopt and design a management tool to enable other stakeholders overcome barriers in the existing systems.
	There is no study that has presented a best practice value creation framework for PPP projects, considering the actors, the practices, the devises, the issues, organised according to phases of the PPP-PLC.

The Table 3.5 presented the salient issues uncovered during the review of literature and summarised the different sections presented by the study.

3.15 Chapter Summary

This chapter presents a literature review that demonstrates the building blocks that guide studies in developing practice frameworks. The chapter further displayed how each component of the building block fits into the other to support the framework development process. The study adopted the checklist and the process and delivered the best practice value creation framework finally presented in Chapter seven. The next Chapter of this study is Chapter four, which guides this study on what data to collect and how to collect it to inform the development of a functional, adaptable, and sustainable framework. The next Chapter of the study is the methodology chapter.

CHAPTER FOUR : RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This Chapter presents a structured research design and methodology adopted by the study, to ensure a rigorous examination of the study topic. The Chapter is organised in different sections that include the overview of the MRQ and SQs, the purpose of the study, research goals and sub-goals, theory of research methodology and practice, research framework, research methods, research design, data sources, sampling, data collection and analysis techniques and ethical considerations. In these sections, the study analyses the different approaches in research and demonstrates how it systematically adopted them to collect and analyse data to answer the MRQ. According to Goldsmith (2021: 1), research questions play a significant role in a study to guide the inquiry, the design process, and the research design.

The next section presents an overview of the MRQ and sub questions that guided the study's inquiry.

4.2 Overview Of The MRQ And Research Sub-Questions

During the literature review conducted in Chapter two and three, the study highlighted key factors pertaining to the theory and practice of value creation in PPP projects (Chapter Two). And the theory and practice of frameworks as management tools (Chapter three).

In the Chapter, the study discussed the key drivers for the adoption of PPP projects, the drivers of value creation in the PPP-PLC, and the barriers that hindered the value creation process. Further, it acknowledged that there were existing gaps in the value creation process of PPP projects. The study found that despite the existence of value-creating practices within the PPP-PLC presented in section 2.10, challenges still persisted in the value creation process as presented in section 2.11. And that, these barriers prevented PPP projects from successfully delivering value for stakeholders. However, there was also evidence of successful value creation by PPP projects in some contexts, while others failed and struggled (section 2.13). The findings indicated that there was a need to examine successful PPP projects with the aim of extracting key lessons (best practices) that contributed to their success.

The study therefore collected and analysed data to inform the development of a best practice value creation framework as a contribution to the field. To develop the framework, the study adopted several steps presented in Chapter Three. In Chapter three, the study critically examined historical frameworks (section 3.8) and identified gaps in their effectiveness as management tools. The existing limitations of those historic frameworks presented a background and building blocks, consequently providing the much-needed justification for developing a more comprehensive and unbiased framework to support the value creation process throughout the PPP-PLC. Accordingly, this research aimed to address the gaps by examining and then presenting existing practices and processes through which value was created at each phase of the PPP-PLC, thus answering the MRQ.

Rutberg and Bouikidis (2018: 209), claims that a research question determines the research method or design that a researcher applies. From the MRQ presented by this study, sub-questions (SQs) were derived and these include:

SQ1: What is the potential of PPP projects to create value for stakeholders?
SQ2: What are the current practices within PPP projects in Uganda that create value?
SQ3: What are the barriers to value creation within PPP projects in Uganda?
SQ4: What are the best practices within the PPP-PLC that create value for stakeholders?
SQ5: What is the relationship between current and best practices within the PPP-PLC in the creation of value for stakeholders?

The research questions and SQs were linked to the research goal, to guide the study to serve its purpose.

4.3 Purpose Of The Study

The purpose of this study was to explore how PPP projects created value for stakeholders as guided by the MRQ. As the literature review revealed, governments turned to PPPs as a mode of project delivery because of their potential to create value across various sectors of the economy (Isolana, 2021: 40; Kisitu and Costa, 2019: 90). PPP projects, therefore held the promise of unlocking new possibilities in ways that traditional procurement processes could not. And, through a closer examination of the value creation process of PPP projects as presented in Chapter Two, evidence consistently pointed to the benefits that these projects delivered to stakeholders. This is further confirmed in Chapter Six by proving research sub questions SQ1 and SQ2.

As presented in Chapter Two, governments adopted PPPs for a number of reasons, among which were to reshape the ideologies of the public, stabilise economies, revive dilapidated infrastructure and advance technology within different contexts. But, with the engagement of the private sector within the public sphere, the PPP models brought with them aspects of efficiency and success stories worldwide (Li and Wei, 2024: 2; Owolabi *et al*., 2020: 12; Miller, 2017: 53). Even with the advantages, the model was riddled with public dissatisfaction, project suspension and in some cases a halt of PPP activities. This necessitated the understanding of the reasons or elements behind the successes and the failures. The study achieved this by following steps outlined in the *checklist for developing frameworks as management tools* presented in Chapter Three, specifically **Step Three of the checklist**, which was undertaken and presented in this Chapter. Further, the study undertook the remaining steps of the checklist (steps 7-14) to finalise the building and presentation of the framework in Chapter Seven. The developed framework acts as a guide for stakeholders through the value creation process in different contexts throughout the phases of the PPP-PLC.

4.4 Research Goal And Sub-Goals

A research goal is important in focusing a research methodology so that the methodology does not exist as an end in itself (Trauth, 1997: 225). A goal enhances a study's motivation from the belief that it is attainable. Subgoals on the other hand are a structured breakdown of the main goal to enhance the sense of attainability further, leading to greater motivation by reducing the difficulty of the pursuit (Huang, Jin and Zhang, 2017: 1). In research, goals are aligned with research questions to drive a research study through the process of data collection, data analysis, and conclusions (Doody and Bailey, 2016: 22). For this study, the research goal was,

Research goal: ***To develop a best practice value creation framework for Public-Private Partnership (PPP) projects.***

And the sub-goals of the study derived included:

a) To examine the existing knowledge on PPP projects to gain an understanding of the drivers and barriers of the value creation process in PPP projects.

b) To explore current practices in Uganda and global best practices of value creation in PPP projects that address challenges identified.

c) To develop and validate a best practice value creation framework that addresses the challenges of PPP projects identified from the study.

Table 4.1: Research questions and research propositions for this study

Sub-Question (SQ)		Research Proposition	
Sub-Question One (SQ1)	SQ (1):What is the potential of PPPs to create value for stakeholders?	Proposition One P(1)	P(1):PPP projects have the potential to create value for stakeholders through the Project Life Cycle (PLC).
Sub-Question Two (SQ2)	SQ (2):What are the current practices within Uganda's PPPs that create value for stakeholders	Proposition Two (P(2))	P(2):Current practices within Uganda's PPP projects can create value for stakeholders
Sub-Questions Three (SQ3)	SQ (3):What are the barriers to value creation within PPPs in Uganda?	Proposition Three P(3)	P(3): There are barriers to value creation within PPP projects in Uganda.
Sub-questions Four (SQ4)	SQ (4):What are the best practices within PPP-PLC to create value for stakeholders?	Proposition Four P(4)	P(4): Best practices within PPP-PLC enhance value for stakeholders.
Major Research Question (MRQ)	SQ (5):What is the relationship between current practices and best practices within the PLC in the creation of value for stakeholders?	Proposition Five P(5)	P(5): There is a relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders

The MRQ, research goal, sub-questions, and propositions shaped the development of the interview guide as the primary data collection instrument. This guide enabled the study to gather relevant data to address the MRQ. APPENDIX I, presents the detailed interview guide used by the study in data collection. The guide was structured in line with the SQs and research propositions as outlined in Table 4.7 of this Chapter .

A research goal plays a crucial role in shaping the research methodology in research studies. It is therefore essential to understand how the research methodology of this study aligned with the goal.

The next section presents the theory and practice of the research methodology.

4.5 Research Methodology Theory And Practice

A research methodology outlines how the research is undertaken by identifying the methods to be applied (Alharahsheh and Pius, 2020: 40). It provides the blueprint that a study adopts to conduct research systematically. The methodology typically starts with a problem precondition for a study and follows a logical progression from the problem (Klopper, 2008: 68). The problem statement summarises the core issues or challenges that a study seeks to address. This study presented the problem statement in Chapter One (section 1.3). This statement guided the research to define the major research goal and further, to answer the MRQ presented in Chapter Six (Table 6.1). Furthermore, the MRQ provided the boundaries for this study that steered the investigation towards addressing the problem. To answer the MRQ, the study addressed the SQs by evaluating the research propositions as presented in (Table 6.1. By integrating these theoretical perspectives, the study adopted a structured approach to investigate the research problem and ensured that the methodology aligned with the study's overall research goal.

The study adopted a structured research methodology as detailed in the next sections and illustrated in Figure 4.11.

4.6 Research Frameworks

From the gaps identified during the literature review conducted in Chapter two (section 2.15), a conceptual framework was developed to guide the study. This framework was presented in Chapter one, as a visual presentation of the key concepts and their relationships. In qualitative research specifically, research propositions play a fundamental role of establishing relationships among different categories of information (Creswell, 2013: 187). Johnson (2020: 19), supports this view by emphasising that propositions in qualitative research are valuable in advancing explicit relationships for empirical testing.

Building upon this foundation, this Chapter focuses on how the study addressed the identified gaps by adopting an appropriate research methodology to answer the SQs and prove or disprove the relationships.

The study developed research propositions by establishing connections between key concepts, as illustrated in Chapter One, Figure 1.1. These propositions aligned with the SQs, the MRQ, and the major research goal. The next section presents the research methods.

4.7 Quantitative, Qualitative, And Mixed-Methods

According to Soiferman (2010: 2), studies select a method of research that enables them to answer a research question effectively. Research is therefore built on either quantitative or qualitative methods depending on the research context (Lo, Rey-Martí and Botella-Carrubi, 2020: 221). Qualitative studies seek to comprehend individuals' experiences, perceptions, attitudes, behaviours, and interactions with others in regard to the phenomenon under investigation, within a specific context of the conduct of groups of people (Kumar Das, 2022: 416). Denvers (1999: 1155), defines qualitative research as,

> *"…a diverse set of methods for conducting social research that are appropriate for answering particular types of research questions and therefore are capable of being integrated with qualitative research."*

They are designed to enable the researcher's appropriate intervention in tackling a complicated the research topic (Maher and Neale, 2019: 2). On the other hand, quantitative research views the social world as orderly, rule-governed, stable and can be entirely and exactly known (Allen-Meares and Laura, 1990: 452). This method of research operates within structures and standardised procedures based on mathematical and statistical principles within a known predefined domain (Popesku, 2015: 72). According to Apuke (2017: 41), quantitative research is when,

> *"…numerical data are collected and analysed using statistical methods."*

Further, some studies adopt mixed methods. Studies that adopt mixed methods boast of combining both qualitative and quantitative research methods, which are often viewed as two extremely distinct and opposed methods (Maarouf, 2019: 3). Researchers define mixed methods in different ways. According to Tashakkori and Creswell (2007: 4), mixed methods is a

"… research in which the investigator collects and analyses data, integrated the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry."

Studies choose a research method depending on the understanding of the methods. This is primarily driven by the research question and not by the researcher as an individual (Marshall, 1996: 552). Table 4.2 presents the comparison of the three research methods based on nature of inquiry, their approach, data collection methods, data type, strengths, suitability, and flexibility.

Table 4.2: Comparison of qualitative, quantitative, and mixed methods

Aspect	Qualitative Research	Quantitative Research	Mixed Methods Research
Nature of Inquiry	Seeks to explore and understand phenomena through subjective experiences.	Seeks to measure and quantify variables using statistical analysis.	Combines exploration and measurement for a comprehensive perspective.
Research Approach	Inductive; develops theories based on findings. Deductive approaches to allow researchers to use existing theory	Deductive; tests predefined hypotheses.	Uses both inductive and deductive approaches.
Data Collection Methods	Interviews, observations, document analysis, textual data.	Surveys, experiments, structured questionnaires.	Uses both qualitative and quantitative tools.
Data Type	Non-numerical, descriptive, interpretive.	Numerical, measurable, statistical.	Combines descriptive and statistical data.
Strengths	Provides in-depth insights and captures contextual complexity.	Allows for generalisation and statistical comparisons across large datasets.	Provides both depth and breadth by integrating qualitative richness and quantitative rigor.
Flexibility	Highly adaptable to emerging themes and participant perspectives.	Low structured and follows predefined models.	Moderately offers adaptability but requires clear planning.
Suitability for Social Sciences Research	Highly suitable; captures human behavior, perceptions, and interactions.	More suited for structured variables and measurable patterns.	Suitable for studies requiring both human perspectives and statistical validation.

Source: (Kumar Das, 2022: 416; Casula, Rangarajan and Shields, 2021: 1708; Alharahsheh and Pius, 2020: 40; Pope and Mays, 2020: 7; Maher and Neale, 2019: 2; McCusker and Gunaydin, 2014: 1; Kitto, Chesters and Grbich, 2008: 243)

To determine the most appropriate methodology for this study, a comparison of qualitative, quantitative, and mixed methods research was conducted as presented in Table 4.2. According to Table 4.2, the key differences between these approaches across various aspects, included the nature of inquiry, research approach, data collection methods, and overall suitability for the research. Based on the comparison**, in line with the MRQ, *this study adopted the qualitative method*** illustrated in Figure 4.1.

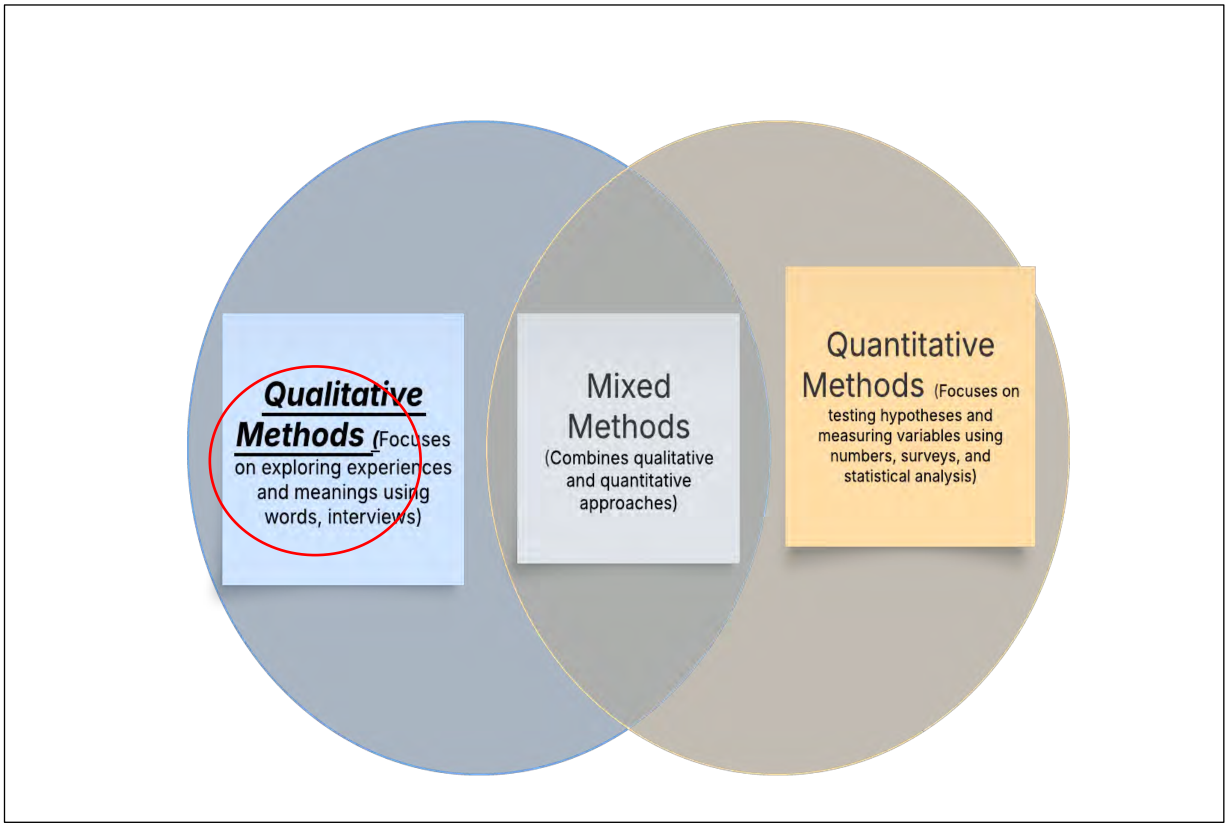


Figure 4.1: Research methods

Figure 4.1 presents an illustration of quantitative research methods, qualitative methods, and mixed methods. As highlighted the method of choice for this study was **<u>Qualitive research method</u>** and the justification for its adoption is presented in the next sub-section.

4.7.1 Justification for choice of qualitative research method

This study sought to answer the **MRQ:** *How can value be created in PPP projects in Uganda's economy?* Addressing this question required an in-depth exploration of the value creation process in PPP projects, capturing the perspectives and experiences of stakeholders involved in the PPP-PLC. For the purpose therefore, the study adopted a **qualitative research method.**

In studies that seek to explore complex social phenomena in-depth, qualitative studies are preferable. Unlike quantitative research, which focuses on numerical data and statistical analysis, qualitative research allows for rich detailed insights into participants' lived experiences. Given the exploratory nature of this study, qualitative methods allowed the flexibility needed to examine the underlying mechanisms that drive value creation in PPP projects. Furthermore, qualitative research methods are deemed as effective for examining subjective meanings and context-specific factors. Since this study focused on understanding perceptions of multiple stakeholders and the intricate processes of their involvement in the PPP-project value creation process, a qualitative method was more suitable than a quantitative one.

4.8 Research Design

In a research process, the research question guides the research design, ensuring an appropriate methodology is selected. The research design then informs data collection where relevant information is gathered. It is therefore designed to support the flexible discovery of perceptions and interpretations of a study and analysis of the data collected (Turhan and Karadağ, 2019: 3). Saunders *et al*. (2019: 130), proposed a research process for researchers to undertake research, referred to as the "*research onion*". This study adopted the research onion and the clearly identified approached as per the research onion to collect and analyse the data.

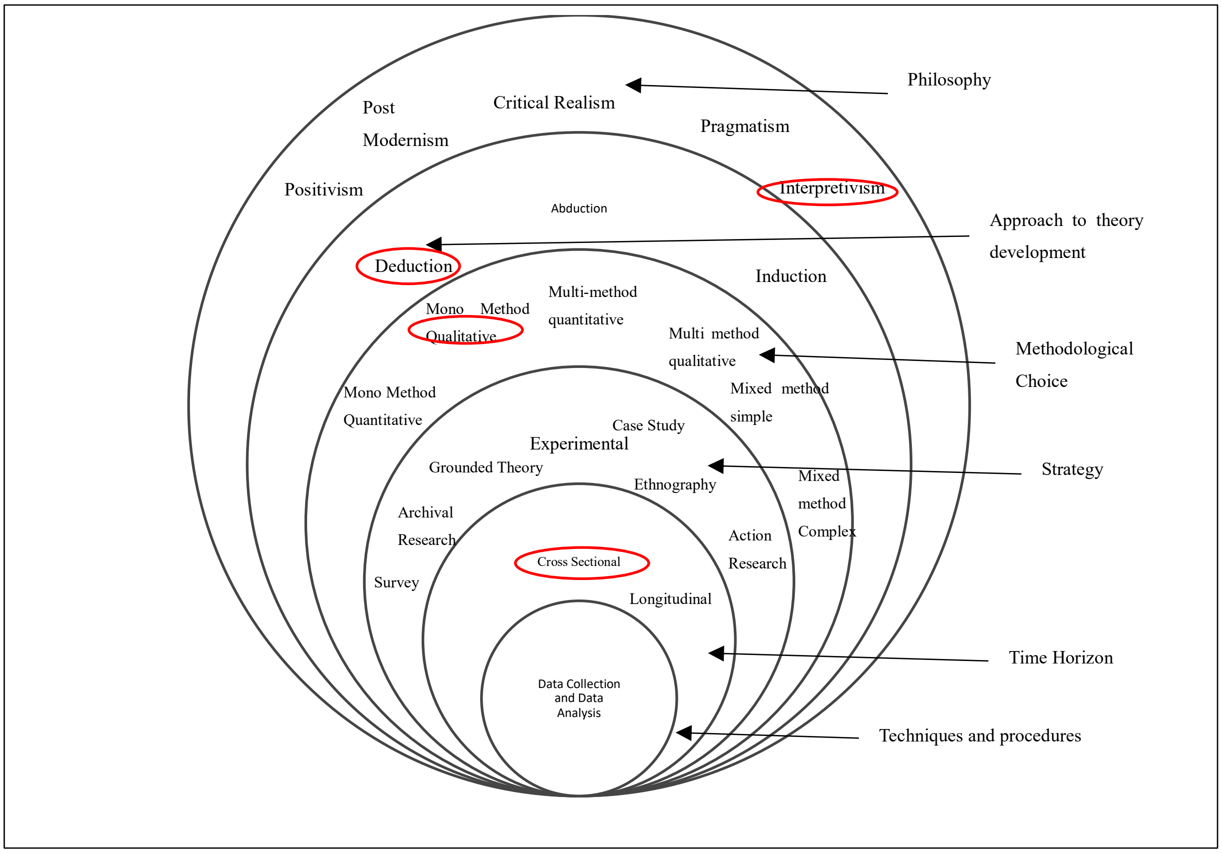


Figure 4.2: The Research onion

Source: Saunders et al. (2019: 130)

Borrowing from the research onion in Figure 4.2, this Chapter presents how it adopted the onion to collect and analyse data following the six layers of the research onion, starting with the (1) Philosophy, (2) Approach, (3) Methodology, (4) Strategy, (5) Time horizons and (6) Techniques which direct and guide the research process and how the study adopted them to conduct research.

4.8.1 Research philosophy

According to the onion, the first layer indicated the research philosophy. Philosophy plays an important role in the research process as it opens a researcher's mind to other possibilities leading to an enrichment of the researcher skill and enhancement in the researcher's confidence in using the appropriate methodology (Holden and Lynch, 2004: 15). An appropriate philosophical stance is important, as it supports the study to conduct successful research. It underlies critical decisions in a research process and provides the perception of the truth, reality, and knowledge of the researcher (Coates, 2021: 172; Basias and Pollalis, 2018: 99; Gemma, 2018: 14). It determines the starting point of the research process by using a research paradigm (Ragab and Arisha, 2018: 2). Žukauskas, Vveinhardt and Andriukaitienė (2018: 123), confirms that a research philosophy is:

> *"…a method which, when applied, allows the scientists to generate ideas into knowledge in the context of research."*

Research philosophies establish assumptions about reality and knowledge. These are then translated into procedures that govern the study.

Table 4.3: Research philosophies and their views

Philosophy	Views
Ontology	What is the nature of reality?
	What is the world like?
Epistemology	How can we know what we know?
	What kinds of contributions to knowledge can be made?
	What is sufficient knowledge?
Axiology	What is the role of values in research?
	How can we deal with the values of research participants?

Source: Khatri (2020: 1438); Melnikovas (2018: 37); Ragab and Arisha (2018: 4); Fleetwood and Ackroyd (2004: 11)

Table 4.3 presents the key research philosophies of ontology, epistemology, and axiology and their fundamental views. The red box highlights the research philosophies that guide studies, including ontology, epistemology, and axiology.

Ontology concerns itself with the nature of reality and how it is perceived. Gruber (1993: 3), argues that Ontology refers to a systematic account of existence. Ontology simply seeks to answer a research question by indicating that knowledge exists and can be found (Alharahsheh and Pius, 2020: 40). In the multidisciplinary setting, the idea of ontology draws upon knowledge information organisation, natural language processing, information extraction, artificial intelligence, knowledge representation, and acquisition (Ding and Foo, 2002: 123).

Epistemology focuses on the nature of knowledge, how it is acquired, and what constitutes valid knowledge. Epistemology is the internal factor within the researcher concerned with how a researcher distinguishes between right and wrong, depending on the researcher's perception of the world around them, is epistemology (Alharahsheh and Pius, 2020: 40). In other words, epistemology discusses the origin, source, criteria and differences between knowledge and science (Napitu, Simanjuntak and Khair Amal, 2021: 257). According to Harrison (2012: 136),

Axiology, on the other hand, deals with the role of values in research, examining how the beliefs and biases of both the researcher and participants influence the study. It is more concerned with what place emotions, expectations, and values that the research has in the research process (Pryce and Spencer Jill Walsh, 2014: 83).

These philosophies provided a structured approach to understanding and interpreting research findings of this study as explained in the next sub-section.

4.7.1.1 Research philosophies adopted by this study

As indicated in Table 4.3, this study was grounded in three key research philosophies: ontology, epistemology, and axiology. It explored stakeholder perspectives, capturing their knowledge and experiences in the field. The researcher analysed the knowledge gathered from stakeholders, whose interpretive skills played a role in shaping the findings. The study contributed to the existing body of knowledge, by presenting a validated best practice framework in Chapter Seven to determine whether it was fit for purpose. By applying these philosophical foundations, the study ensured that its findings reflected a well-contextualised understanding of value creation in PPP projects. The study adopted the philosophies as follows:

a) Ontology: Reality was understood as socially constructed, with the value creation process in PPP projects shaped by stakeholder experiences and interactions.
b) Epistemology: Knowledge was obtained through direct engagement with PPP-project stakeholders from among the project managers and project end users.
c) Axiology: The study acknowledged the researcher’s role in interpreting participant experiences and recognised the influence of their values on the research process.

The next section discusses the concept of research paradigms.

4.8.2 Research paradigms

A research paradigm explicitly states the researcher's philosophical perception of ontology, epistemology, methodology and axiology of the study's research work (Khatri, 2020: 1439). Zaidi and Larsen (2018: S1), argues that a research paradigm influences the research process through research questions posed by researchers and shaped by how studies view the world. Bogdan, Knopp Biklen and Boston (1998: 22), define a research paradigm as:

> *"...a loose collection of logically related assumptions, concepts, or propositions that orient thinking and research."*

Research paradigms include positivism, interpretivism, pragmatism, and critical realism, and these are often examined through a philosophical lens to view data collection methods as illustrated in Table 4.4:

Table 4.4: Comparison of research paradigms, philosophies, and data collection methods

	Positivism	Interpretivism	Pragmatism	Critical Realism
Ontology	Objective is external and independent of social actors	Reality is created through social interaction and is not objective but highly subjective	Reality is non-singular and is a function of the conceptual schemes of an individual, and a wide variety of individual experiences are considered real	Casual mechanisms operate in open and competing systems, which require manipulation of variables to test their effects
Epistemology	Phenomena is observable and can provide credible data	An in-depth insight into phenomena gains an empathetic understanding of seeing the world from their perspective	Knowledge is gained through actions	All knowledge is fallible, incomplete, and unpredictable over time
Axiology	Social norms generally explain people's actions depending on their exposure.	Phenomena is experienced and understood by individuals differently, since individuals are intricate, different, and complex.	Value-free or biased	Phenomena under investigation shaped by experience and context

Data collection Techniques	Quantitative approaches like surveys, statistics, structured questionnaires	Qualitative methods like interviews	Qualitative or Quantitative	Mixed methods (quantitative and qualitative methods)

Source: Yucel (2018: 413); Heeks and Wall (2017: 163); Naveed (2015: 73)

From the presentations in Table 4.4, the study examined the different paradigms, philosophies, and how they influenced the choice of research methods as explained in the next sub-section.

4.7.1.2 Research paradigm adopted by this study

This research adopted a qualitative research method to attain a deeper understanding of the phenomena under study. This required an interaction with stakeholders of PPP projects. As a result, the interpretivism paradigm was used as a more appropriate lens for this study's qualitative data collection and analysis. The interpretivist approach focuses on recovering ideas as they are expressed in their meaningful acts in the first place and then elucidating these beliefs by setting them against the backdrop of traditions and beliefs (Bevir and Rhodes, 2012: 4). In research, studies look at techniques that let them fully comprehend how people interact with their surroundings and how they contribute to the social structure of which they are part (Cao Thanh and Thi Le Thanh, 2015: 26).

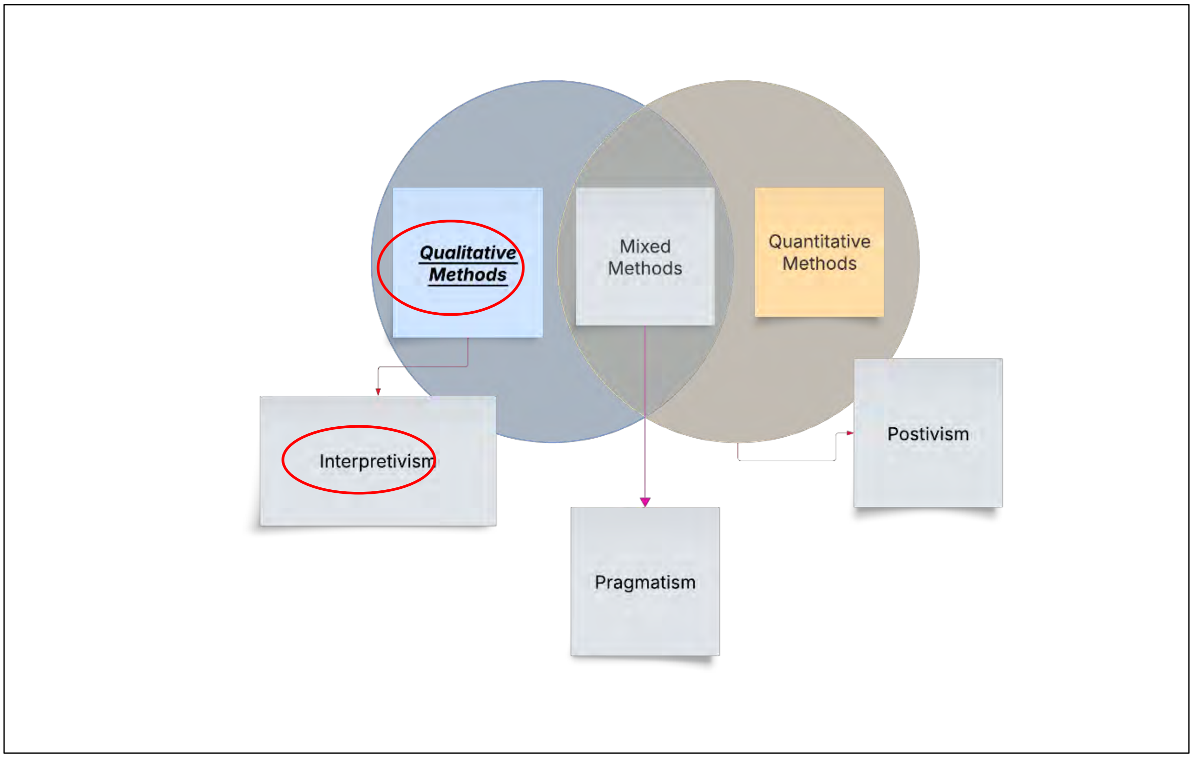


Figure 4.3: Research paradigm

As presented in Figure 4.3, this study adopted an interpretivist research paradigm, which sought to understand the subjective meanings and experiences of stakeholders in PPP projects. Given that value creation in PPP projects involves complex interactions among multiple actors, this paradigm provided an appropriate lens for qualitative data collection and analysis.

The study adopted an interpretivist approach, to investigate the experiences of project managers and end users within the PPP-PLC.

The next section discusses the research approach to the formation of theory.

4.8.3 Research approach to the formation of theory

Specifically, within the context of management, scholars have proved highly attentive to the role of theory in research (Shepherd and Suddaby, 2016: 1). In the process of theory building, the study has to consider testing the theory as the two go hand in hand. This helps the study to establish which theory is useful to researchers as well as managers (Meredith, 1993: 10). Gioia and Pitre (1990: 387), define the concept of a theory broadly, as,

"… *any coherent description of explanation of observes or experienced phenomena*"

Building a theory starts by the observation of a pattern and then more and more explanations for the pattern are built (Shepherd and Suddaby, 2016: 6). So, studies build theories by capturing, clarifying, or supplementing, to some degree, on an existing theory or introducing relationships and constructs that serve as foundation for new theory (Colquitt and Zapata-Phelan, 2007: 1283). Aneta and Jerzy (2013: 585), argue that it is not enough for a study to supplement knowledge based with parameters from previous experiences but rather, it is important to describe the cases supplementing the knowledge based with information. There are three approaches to theory building. These include deductive research approach, abductive approach, and inductive approach.

In deductive research goes from general to specific helping a study to align coherence across stages in the research process and providing ways of critiquing strengths and weaknesses of a study (Casula *et al*., 2021: 1705).

In abductive research, a study does not necessarily require starting with a theory or hypothesis but rather with unanswered questions about particular phenomena of interest (Woiceshyn and Daellenbach, 2018: 8). It is used more in exploratory and qualitative studies (Bougie and Sekaran, 2016: 26).

Inductive research is less concerned with generalisations and rather provides better understanding of research phenomena by uncovering patterns and structure in data within context while adopting more flexible investigation structures (Jebb, Parrigon and Woo, 2017: 10). Thomas (2003: 1), argues that the major purpose of using inductive approach is to,

i. Summarise a large amount of diverse and vast raw text data in a concise manner.
ii. Clearly connect the goals of the study with the conclusions drawn from the raw data summary.
iii. Create a theory or model explaining the fundamental organisation of events or procedures that are visible in the raw data.

4.7.3.1 Research approach adopted by this study

This study adopted a deductive approach to qualitative methods. Deductive approach in qualitative research takes the form of a priori theory to examine meanings, processes, and narratives of individual and relational phenomenon. It essentially advances science by allowing literature that was previously published to be re-examined so as to gain greater support, refinement, or refutation (Fife and Gossner, 2024: 1). The motivation for the adoption of this approach was:

(i) To develop propositions created by the researcher that describe what they think will emerge from the data (Bingham, 2023: 3).
(ii) To empirically examine and revise existing theory (in this case the propositions) such that they are more precise or accurate to the present sample (Fife and Gossner, 2024: 8).
(iii) To use the pre-specified themes during analysis to code (Fazidah Elias, 2012: 332).

This approach thus enabled the research to prove the research propositions based on findings in the field ensuring that the conclusions drawn were grounded in the lived-in experiences and perspectives of participants. This was essential in capturing the complexity and context-specific nature of value creation in PPP projects presented in Chapter Six.

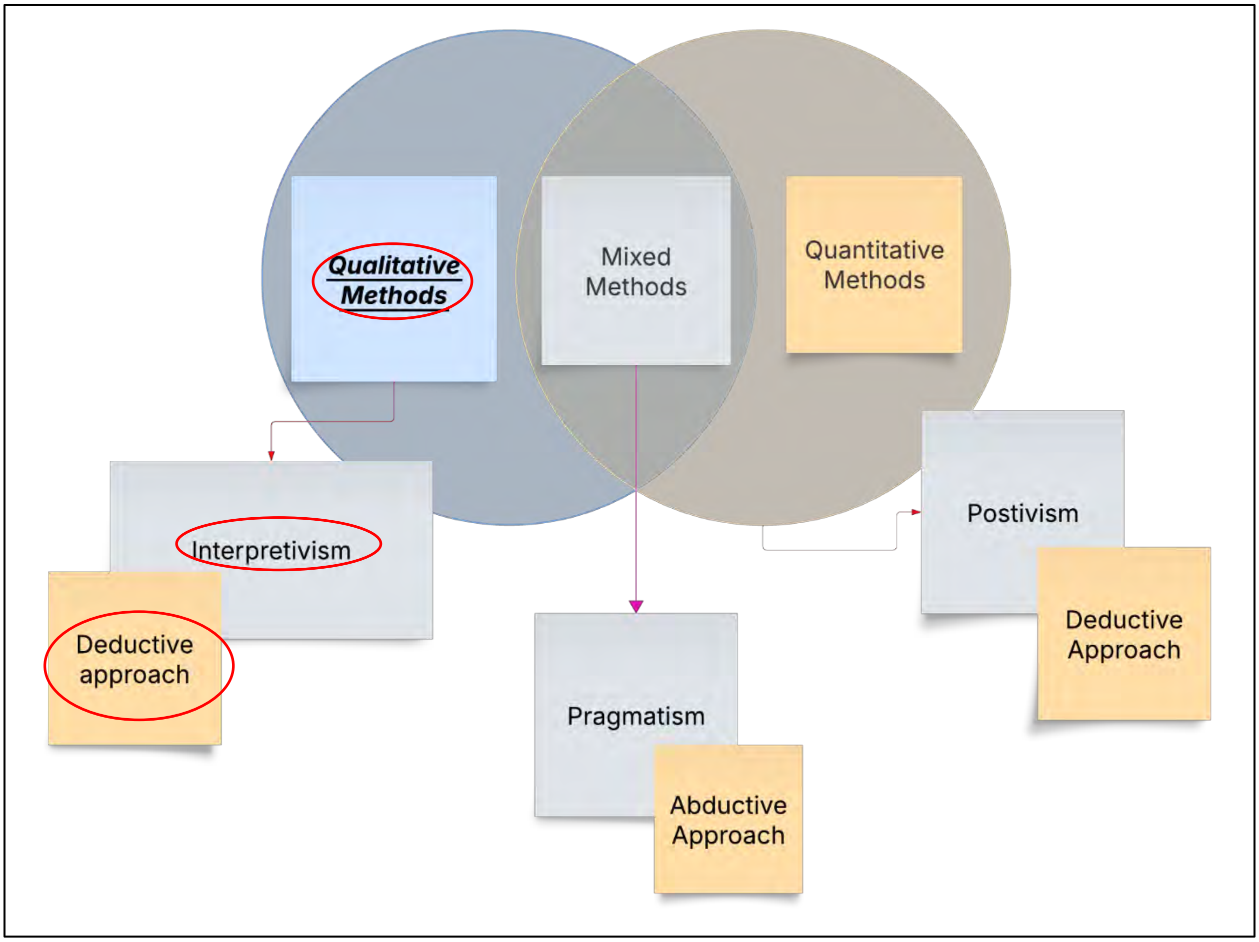


Figure 4.4: Research approach

The next section presents a discussion of time horizon in research studies.

4.8.4 Time horizon

When introducing academic concerns for studies, conception of time is important (Brier, 2005: 834). A time horizon is *that* distance into the future which a decision maker looks to when evaluating consequences of actions proposed (Ebert and Piehl, 1973: 35). There are different time horizons adopted to study either the entire population or a subsect of a population and from these individuals from which data is collected to answer research questions (Olsen and St. George, 2004: 7). The time horizons are either longitudinal design or cross-sectional time horizons as described in the section. Table 4.5 presents the strengths of each time horizon.

Table 4.5: Strengths of cross sectional and longitudinal design

No	Cross sectional Design	Longitudinal Design
1.	Low cost due to short period of time	High costs related to duration of the study
2.	Easy to conduct	Requires consideration of a variety of parameters
3.	Faster to implement over a short range of time	Spans over a long range of time
4.	All subjects examined at a single and same point in time	Subjects are examined at different time points in time

Source: Cummings (2021: 3); Galbraith, Bowden and Mander, (2017: 375)

4.7.4.1 Time horizon adopted by this study

Given the time constraints and the nature of the data required **this study adopted cross-sectional research horizon and as thus, collected data as a snapshot at a single point in time** from the sample population within PPP projects in Uganda.

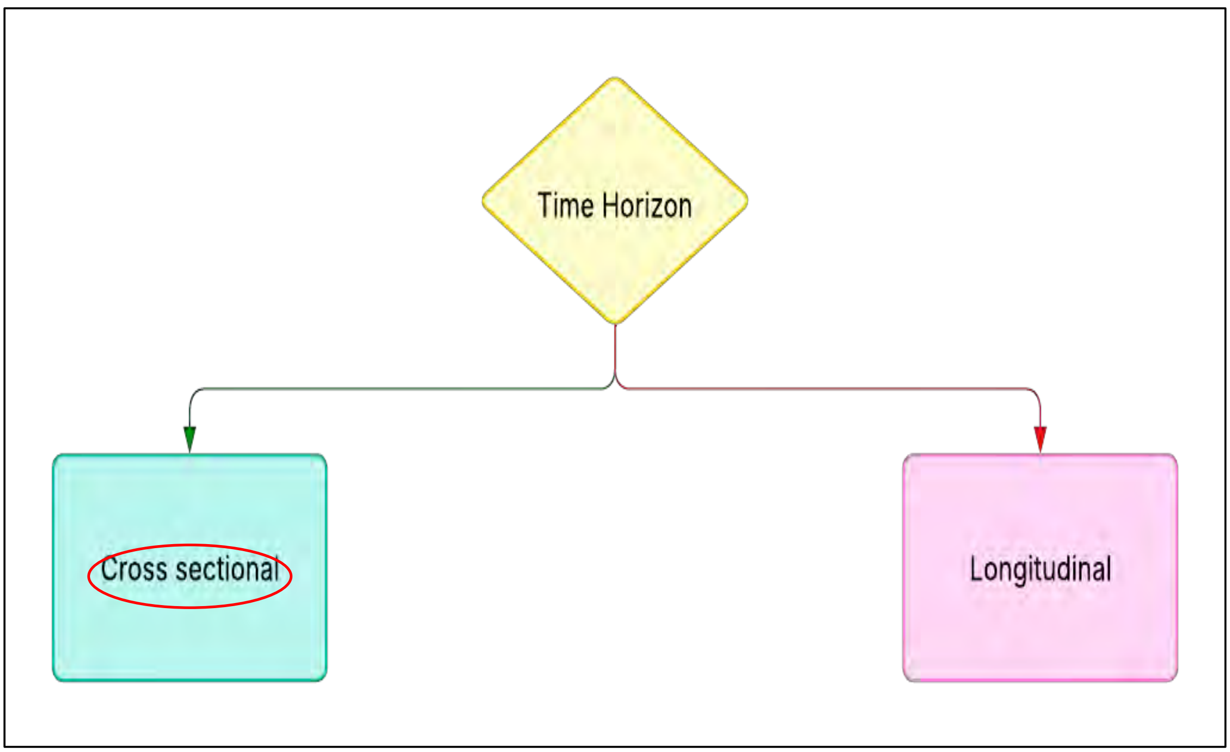


Figure 4.5: Time horizon

The next section presents the data collection techniques for the different research methods.

4.9 Data Sources

For a study to conduct research, it must collect data (Mazhar, Anjum, Anwar and Khan, 2021: 6). Data can be either primary or secondary depending on the sources. Secondary data comes from secondary sources and primary data is produced directly by the researcher from the field (Gunawan, Marzilli and Aungsuroch, 2022: 277).

4.9.1 Data source for this study

This study relied on **primary data sources** to capture first-hand insights from stakeholders in PPP projects. Primary data allows for a real-time, context-specific exploration of value creation in PPP projects. Further, given the exploratory nature of this research, primary data is crucial in understanding the experiences, perceptions, and challenges faced by project managers and end users within the PPP-PLC.

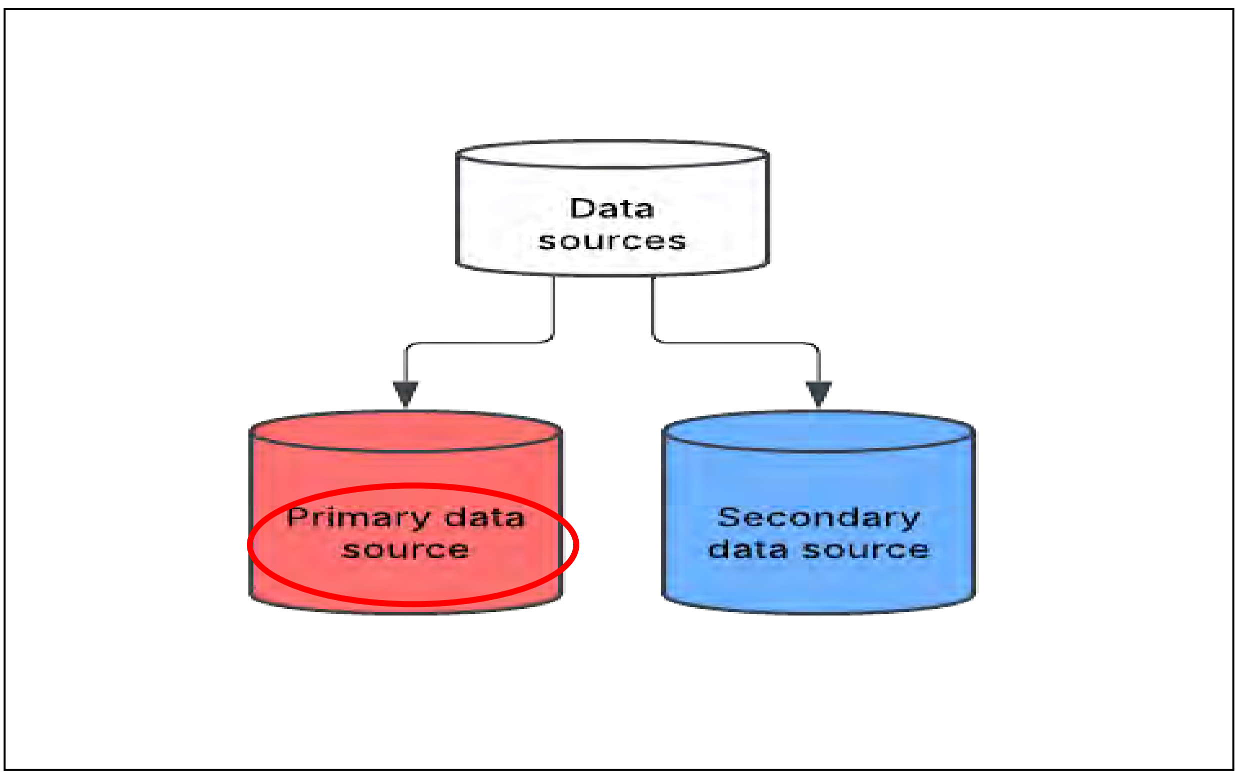


Figure 4.6: Data sources

According to the illustration in Figure 4.6, there are two distinct types of data sources. These are categorised in two different categories as primary data source and secondary data source. The primary data source, depicted in red, refers to original, first-hand data collected directly from research methods such as surveys, interviews, and experiments. The secondary data source, shown in blue, consists of data that has already been collected and published by others, such as reports, books, articles, and government records. This diagram visually distinguishes between these two fundamental data sources used in research and analysis.

This study relied on primary data as the source of data for the qualitative study, and this data was collected from a sample population of PPP project stakeholders as presented in section 4.10.

4.10 Sampling

Research studies strategise to investigate a problem in the whole population. It is, however, not always practically possible to study the entire population (Acharya, Prakash, Saxena and Nigam, 2013: 330). Studies therefore conduct sampling to obtain a statistically representative sample from the population of interest (Majid, 2019: 5). Zapata-Barrero and Yalaz (2018: 151), defines sampling as,

> *"...decisions about the research site (where?), the unit of analysis (what?) and the participants to a study (who?)."*

To commence the process of sampling, the study requires a sampling plan. Baltes and Ralph (2022: 2), stresses that researchers need a sampling plan to define the appropriate process to study the phenomenon effectively and efficiently. A sampling plan is utilised in a research study to represent the population from which it is selected accurately (Landreneau, 2009: 1). A sampling plan involves how the study will select a sample, carry out the selection process, encourage participation of the sample and assess the extent to which departure from expectations may affect the findings of the study (Henry, 2005: 77). As a process, sampling has as several steps that a study needs to take. According to Rahman, Salamzadeh and Abduli (2022: 46); Taherdoost (2016: 19); Rai, Alkassim and Tran (2015: 3), the steps include,

(i) Defining a sample population,
(ii) Selection of the sample,
(iii) Choosing the sampling technique,
(iv) Collection of data and
(v) Assessment of response rate

The steps are expounded upon in the next sections.

(i) Definition of sample population

A sample population serves as a representative of the entire population under study (Acharya, Lee and Moon, 2022: 330). Studies often choose a sample of the population, based on resources (Lakens, 2022: 1). A study selects a sample based on how closely the data that will be collected reflects the study's goals, objectives, and research question (Ames, Glenton and Lewin, 2019: 4). Sampling is dependent on characteristics of the study population such as access, time, vulnerability, and the nature of the stakeholders under study (Korstjens and Moser, 2017: 11). Consequently, the sample population can only be defined by the target population from which the study intends to draw broad generalisations (Rahman *et al*., 2022: 46). According to Klopper (2008: 67), the selected population is determined by commonalities of participants across context. At the beginning of the study, in a qualitative study, for planning purposes, a preliminary estimate of the sample size is needed because the study will concentrate on providing new knowledge, and information power dictates that the more information the participants hold, the fewer participants are needed (Malterud and Siersma, 2016: 4).

The sample population was stakeholders from among the 28 officially listed PPP projects in Uganda as documented by the World Bank (2017c: 20)**. These projects span various sectors including transport, health, energy, education among others, and represent PPP projects under the PPP framework. From this sample, the study targeted key participants from among project managers representing both the public and private sectors and end users, who played a critical role and were directly involved in the value creation process within**

PPP-PLC. For each project the study set out to interview 28 participants, from either project manager or project end user, totalling to 28 participants targeted until point of data saturation. A purposive sampling strategy was applied to select respondents based on the participant's direct involvement, experience, and role in the PPP value creation process.

(ii) Selection of sample population

In the selection of the sample population, the studies rely on sampling techniques because they may not be able to test all individuals (Sharma, 2017: 749). Individuals that form part of the sample are chosen either through probability or non-probability sampling, depending on the study preference. Probability sampling, according to Etikan Ilker and Bala (2017: 2), is,

> *"…sampling which permits every single item from the universe to have equal chance of presence in the sample."*

Probability sampling requires that the sample be representative and convenient, and as a result, the sample may therefore be random, systematic, stratified or cluster (Sheilds, 2008: 37). Nonprobability sampling according to Etikan Ilker and Bala (2017: 1) is,

> *"…a sampling procedure that nor bid a basis for any opinion of probability that elements in the universe have a chance to be included in the study sample."*

Both probability and non-probability sampling techniques are common in quantitative studies, although non-probability sampling techniques are more common in qualitative studies (Berndt, 2020: 224). **Since this study was qualitative, a non-probability sampling was chosen.** Non-probability sampling can be quota, purposive, self-selection and snowball sampling.

Figure 4.7 illustrates the different sampling plans and sampling techniques.

(iii) Choosing data collection techniques

Data collection techniques describe how the research *finds out* and *how* data are collected, depending on a researcher's induction or deduction technique or strategy (Klopper, 2008: 69). The techniques are driven by the research questions (Sahun and Mete, 2021: 8; Apuke, 2017: 44; Watson, 2015: 46). Quantitative research methods usually adopt techniques like hypotheses testing and manipulation of independent variables by studying their effect on the dependent variable, as well as establishing causality through manipulation, control, and randomisation (Klein and Müller, 2019: 265; Curtis, Comiskey and Dempsey, 2016: 24). Non-experimental research, mostly social science research, focuses on finding linkages between variables (Reio, 2016: 680). In qualitative studies, the most commonly used techniques are interviews, focus group discussions and participant observations, whereas for quantitative research, the most commonly used method is surveys, so it depends on the study's choice of research method (Korstjens and Moser, 2017: 11; Reio, 2016: 680).

For this study specifically, **the sample population were targeted because they possessed information and played the role vital to addressing the research questions. The sample was deliberately and purposefully selected from stakeholders within PPP projects in Uganda**, and this called for purposive sampling techniques. Purposive sampling is employed when the study is oriented towards a clear-cut research interest (Zapata-Barrero and Yalaz, 2018: 162). **The study therefore adapted purposive sampling, guided by the need to access participants with direct involvement in PPP projects. Project managers were selected based on their leadership roles, while end users were chosen based on their interaction with the outputs and outcomes of the PPP Projects. This ensured that the sample included participants with relevant knowledge and experience concerning value creation.**

There are several reasons for the adoption of purposive sampling techniques by studies, as presented in Table 4.6.

Table 4.6: Justification for using purposive sampling

It allows the study to evaluate whether the phenomenon is worth investigating, especially since the sample population is exclusively selected
When a study population cannot be completely studied or included in data collection, it is crucial, especially when the study is constrained by time and resources
Facilitates targeted data collection from participants with specialised knowledge, making the study more efficient and focused.

Enables the researcher to ensure that the sample has the specific qualities or experiences necessary to address the research questions.
Useful for exploring rare or hard-to-reach populations where only a few individuals are likely to have the relevant knowledge or experience.

Source: Ames, Glenton and Lewin (2019: 4); Rai, Alkassim and Tran (2015: 9); Henry (2005: 78)

For the same reasons highlighted in the Table, this study adopted a non-probability sampling method using a purposive sampling technique.

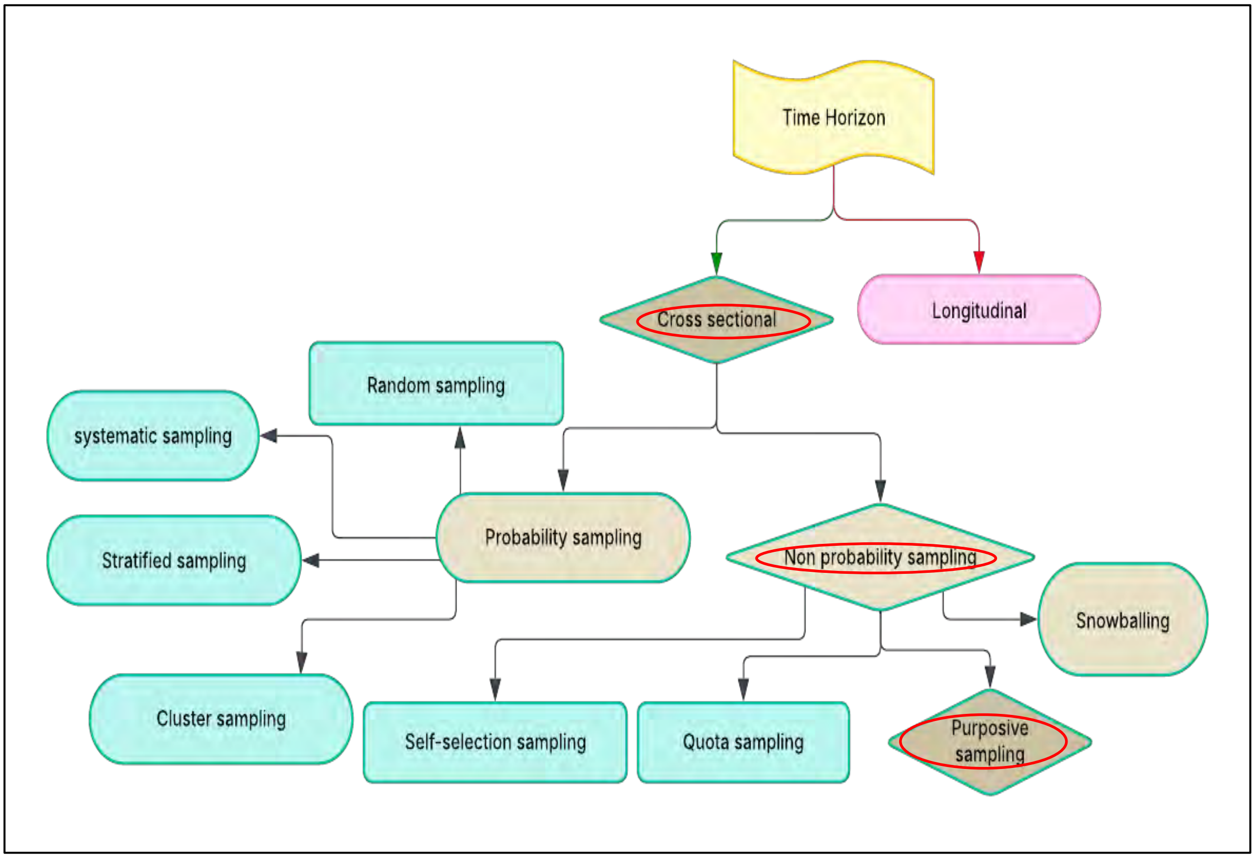


Figure 4.7: Probability and Non-Probability Sampling Techniques

Source: Louis, Lawrence and Keith (2018: 179); Etikan Ilker and Bala (2017: 1)

Figure 4.7 shows that a cross-sectional study can use either probability or non-probability techniques.

(iv) Data collection

For a study to conduct research, it must collect data (Mazhar *et al*., 2021: 6). The process of collecting data is called data collection. Gunawan, Marzilli and Aungsuroch (2022: 277), refers to data collection as,

> "*...the process of gathering information on variables of interest using accurate, authentic, systematic and appropriate techniques to answer research questions, hypotheses and desired outcomes.*"

Data collection in qualitative studies

The most commonly used data collection techniques for qualitative studies are interviews, focus group discussions and participant observations. In quantitative research, the most commonly used method is surveys. The choice of technique therefore depends on the study's research method (Korstjens and Moser, 2017: 11; Reio, 2016: 680).

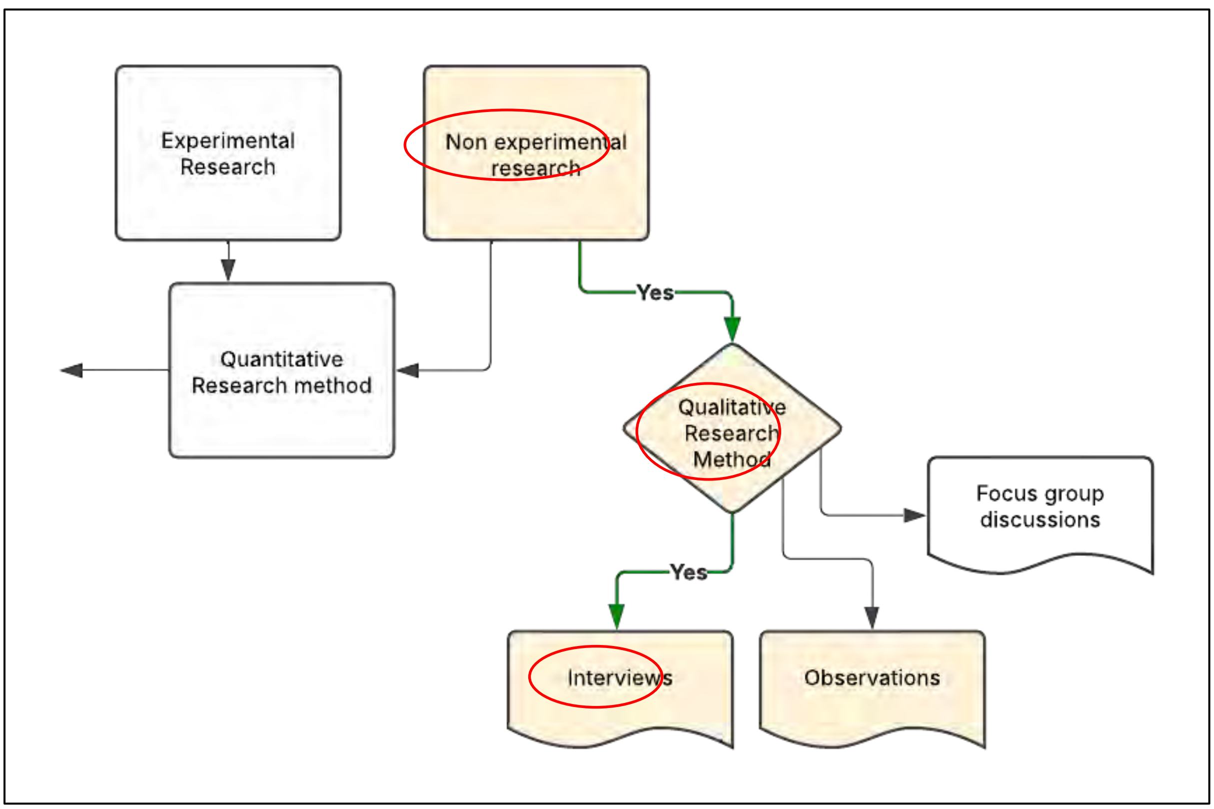


Figure 4.8: Data collection techniques

Based on the illustration in Figure 4.8, this study adopted a qualitative research method and utilised **interviews** as the primary data collection technique.

4.11 Interviews As A Tool For Data Collection

Interviews are the most common data collection tool adopted by the qualitative research method in order to access what people do and with whom (Dimond, Fiesler, DiSalvo, Pelc and Bruckman, 2012: 227). They are in-depth and exploratory in nature, designed by the researcher to uncover and explore participant perceptions and desires about a phenomenon (Kothari, 2004: 110). Salmons (2011: 1), asserts that the study is unique in qualitative research because the researcher is the instrument for data collection during the qualitative interview. Liu (2016: 132), adds that the interview brings forth the perceptions of the world by the participant, which are used to understand social reality. According to Cypress (2018: 304),

> *"An interview is a conversation with a purpose."*

The nature of the MRQ for this study required an in-depth exploration of the concept, for which interviews were the most effective method. **Therefore, this study used interviews as the most suitable method to allow for the direct engagement with stakeholders to explore the concept of value creation within the PPP-project context.**

For a study to collect data using an interview technique, the researcher is required to prepare beforehand. During preparation for an interview, a study requires an interview schedule to conduct the interviews. But the interviews can be structured, semi-structured, or unstructured (Baumbusch, 2010: 255). The next section presents a discussion on the different types of interviews.

4.11.1 Interview types in data collection

Studies adopt different types of interviews to gain an in-depth understanding of the phenomena under study. Interviews may be structured, semi-structured or unstructured as presented.

a) Structured Interviews

Conform to a standardised list of questions which are presented in a uniform sequence of questioning and systemised ratings of participant responses (Mueller and Segal, 2015: 1).

b) Unstructured interviews

Unstructured interviews are where the researcher chooses a topic to explore, but the questions are not in order, and neither are they predetermined (Merriam, 2002: 13).

b) Semi-structured interviews

This interview type is guided by a list of questions whose wording is not meant to be read verbatim in the same order but rather to focus on the natural flow of conversation for each unique interview (Adeoye-Olatunde and Olenik, 2021: 1362; Merriam, 2002: 13). With semi-structured interviews, the interviews correspond with qualitative methods to answer questions related to *"how"* and *"why"*(Azungah, 2018: 387). To answer the MRQ, the study needed to collect in-depth data.

This study adopted semi-structured interviews to collect data from KIs. Since project managers and end users were the targeted sample population, but they often have demanding schedules, Key Informant Interviews (KIIs) further provided a flexible and efficient means of gathering insights while accommodating participants' schedules.

4.11.2 Interview modes in data collection

Qualitative research relies a lot on interviews as a data collection method. Qualitative research is unique due to its reliance on direct, usually immediate interaction between researcher and participant, drawing the finest of human attributes of trust, thoughtful questioning, perceptive probing, empathy, and reflective listening (Salmons, 2011: 1). Further, there is no argument that the rapid evolution of digital communication has greatly impacted research methods, compelling the re-evaluation of traditional interview practices (Guo, Ramos and Wang, 2024: 1). This has changed the dynamics of data collection using interviews. Online interviews and face-to-face interviews are some of the modes employed by studies, as they are preferred by some sections of participants (Peasgood *et al*., 2023: 10). Barrett and Twycross (2018: 63), add that interviews can be conducted via telephone or face to face, lasting forty-five minutes to one hour, to collect verbal and non-verbal data, depending on the participant's convenience. Some participants prefer telephone interview experience as they are comfortable using a telephone for social interaction, and studies indicated that the phone interview was acceptable and yielded rich data similar to a face-to-face interview (Enoch, Subramanian and Willig, 2023: 3).

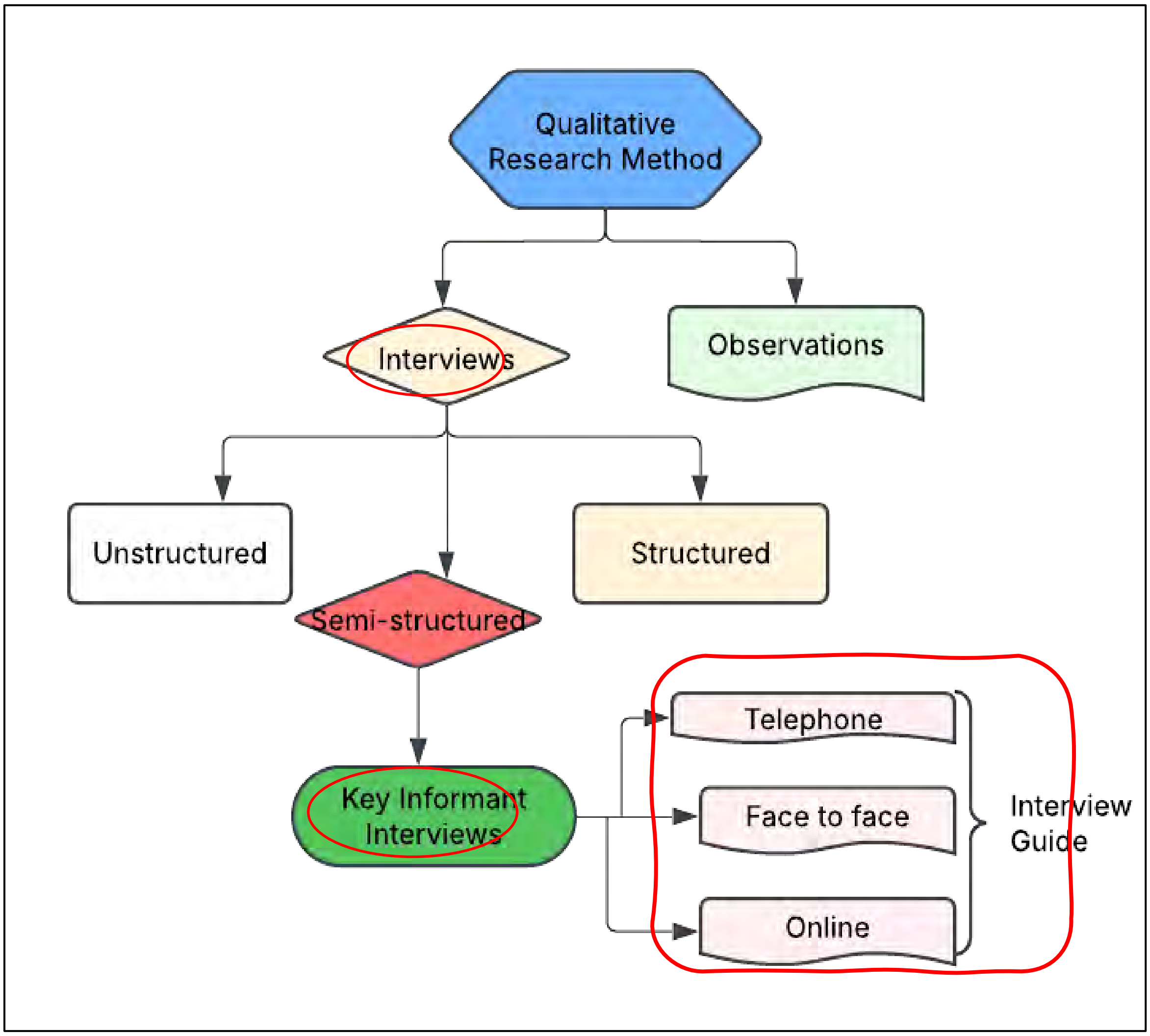


Figure 4.9: Interview type, mode, and guide

Modes of conducting interview adopted by the study

Online interviews, telephone and face-to-face interviews are some of the modes employed by studies, as they are preferred by some of the participants (Peasgood *et al.*, 2023: 10). The study adopted these three different modes to accommodate flexibility, inclusiveness and convenience of all the participants from different locations, within their pre-set schedules and depending on their preferences. Singh, 2019: 15; Barrett and Twycross (2018: 63), confirms that interviews can be conducted via telephone or face to face, lasting forty-five minutes to one hour, to collect data depending on the participant's convenience. All three modes effectively served the study's purpose, though each of the modes had inherent limitations that were addressed before or during the interviews. For example, face-to-face interviews, although rich in non-verbal cues, were time- and resource-intensive as they required commuting by either the participant, the interviewer, or both. To mitigate these challenges, the interviewer covered participants' logistical needs, selected accessible, distraction-free locations, and scheduled interviews according to participants' availability.

Telephone interviews were the more cost-effective and useful mode of interview especially when participants were available on short notice. However, this mode limited the observation of non-verbal cues. To compensate, rapport was carefully established both before and during the interview, with attention paid mostly to tone of voice and maintaining a conversational style by the interviewee. The interviewer also ensured minimal distractions to keep both parties focused throughout the session.

For online interviews, a major advantage was the ability to record sessions and obtain real-time transcription support, which enhanced data accuracy and ease of analysis. However, this mode also presented challenges, primarily related to technical difficulties such as poor internet connectivity and high data costs. To address these issues, participants were offered a choice of online platforms they were most comfortable using. For those unfamiliar with the technology, the interviewer provided guidance and technical support. Additionally, the study covered internet data costs to facilitate smooth and uninterrupted interviews. In situations where internet problems became significant, the interviewer switched to telephone interviews to ensure continuity and adherence to the scheduled interview timeline.

This study adopted the three interview modes, face-to-face, telephone, and online applications, to achieve flexibility and engagement with participants. Participants chose between the three interview modes, depending on their preference and convenience.

Typically, upon selection of the appropriate interview mode, studies proceed to collect data with the help of an interview guide. An interview guide at this point is very crucial for studies, especially those that collect data through interviews. A guide fundamentally affects the quality of the data collected and the results (Kallio, Pietilä, Johnson and Kangasniemi, 2016: 2).

4.11.3 Data collection tool

Having selected the mode that is most appropriate for a study, it is important to collect data. An interview guide is very crucial for any study. It fundamentally affects the quality of the data collected and the results (Kallio *et al*., 2016: 2).

a) Interview guide

An interview guide is a tool used in studies to collect data from participants. It is made of a list of questions designed to clarify research topics, broad themes and categories investigated in the interview process, but relevant to the study (Dalati, 2021: 98). It serves as a checklist to help researchers systematically explore key areas aligned to the study's goals. The researcher organises the questions using a basic checklist to cover relevant areas as indicated in the research questions and allows for in-depth probing while permitting the interviewer to keep the interview within the parameters mapped by the study (Alshenqeeti, 2014: 42). As presented in section 4.11.1.2, there are different types of interviews ranging from structured to semi-structured and unstructured.

In this study, the type of interview dictated the nature of the interview guide selected to collect data. This study, in line with the semi-structured interview type, selected and adopted a semi-structured interview guide to collect data.

The study, therefore, collected data using semi-structured interviews, a method that allowed for the researcher's active involvement and control. This approach enabled the researcher to probe deeper into stakeholder perceptions of the value creation process. The researcher actively facilitated the interview process, ensuring that the responses from KIs aligned with the research goal while maintaining neutrality. **The detailed structure of the semi-structured interview guide adopted by this study is presented in Appendix 1**.

The next section summarises the guide further illustrating how the guide linked with the SQs and research propositions.

Section A: Gathered demographic data to provide contextual background about participants and their roles in the PPP-project.

Section B: Focused on participant experiences and perceptions regarding value creation in PPP projects in alignment with the main research goal, sub-goals, and key propositions presented in section 4.4.

Each interview question was mapped to the corresponding research sub-questions and propositions to ensure a structured approach to data collection. A summary of the interview guide is presented in Table 4.7.

Table 4.7: Mapping of interview questions to research sub-questions and propositions

Sub-Question (SQ)	Research Proposition (P)	Interview Questions Addressing the SQ and P
SQ1: What is the potential of PPPs to create value for stakeholders?	P (1): PPP projects have the potential to create value for stakeholders throughout the project life cycle (PLC).	Section B (Questions 1, 2, 4,6,7)
SQ2: What are the current practices within Uganda's PPP projects that create value for stakeholders?	P (2): Current practices within Uganda's PPP projects can create value for stakeholders.	Section B (Questions 5, 6, 7,8,9)
SQ3: What are the barriers to value creation within PPP projects in Uganda?	P (3): There are barriers to value creation within PPP projects in Uganda.	Section B (Questions 10,11,23)
SQ4: What are the best practices within PPP-PLC to create value for stakeholders?	P (4): Best practices within PPP-PLC enhance value for stakeholders.	Section B (Questions 10, 11, 12, 13, 14, 15)
SQ5: What is the relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders?	P (5): There is a relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders.	Section B (Questions, 23, 24, 25)
Participant background information (Section A), though not related to research SQs or Propositions, supports the study by breaking the ice with participants and establishing a connection between interviewee and interviewer		Questions 1,2,3,4

Table 4.7 presents the five SQs and research propositions, illustrating how the study derived interview questions to guide the researcher in establishing rapport and supporting the study to address them.

In some qualitative studies, including this study, data was not only collected in isolation but was also further analysed concurrently with the collection until the point of saturation was reached. In other words, as the study progressed in data collection, codes were derived and themes emerged progressively until the study reached saturation point (Mwita, 2022: 415).

The next section discusses the saturation point in qualitative studies, further exploring the research methodology used to ensure comprehensive data collection.

4.11.4 Point of Saturation

In qualitative research studies, the criteria for discontinuing data collection and or analysis is called "*saturation*" (Saunders *et al*., 2018: 1894). When studies find that the last transcript of interviews shows similarity in the findings, the study can stop the data collection and argue that they have reached the saturation point (Asadul Islam and Mazyed Aldaihani, 2022: 9). Saturation point assures the validity and credibility of information for the study, and saves researchers time and energy in collecting the same information (Mwita, 2022: 414). However, saturation can only be operationalised during data collection, but before that, sample sizes need to be advanced on research proposals and protocols (Hennink, Kaiser and Marconi, 2017: 592).

Point of saturation for this study

This study targeted 28 KII from stakeholders of 28 PPP projects in Uganda. The stakeholders were selected purposefully in line with the purposive sampling technique as indicated in section 4.10.1. In the data collection process, the **study analysed the data collected concurrently, to extract themes in line with the SQs and research propositions towards addressing the MRQ. The study continued until the point of saturation when no new themes emerged. For this study, the saturation point was reached at the sixteenth KII when no new themes emerged, and at this point, the study stopped the data collection and analysis**.

For any data collected from the field, it is the responsibility of the study to secure it, store it and manage it well so as to maintain its anonymity and integrity (Corti, Day and Backhouse, 2000: 3).

The next section presents the concept of data storage.

4.12 Data Storage

Data storage begins with the manual collection of data from individuals using devices, and then consolidating it into a central repository (Sarkar, Kandogan, Haber and Magoutis, 2008: 349). This study's process encompassed collecting and storing audio recordings from interviews conducted using the different modes.

As the study collected the data, it handled it in strict adherence to ethical standards. Furthermore, to ensure data security, the data was anonymised, password-protected, and stored on encrypted hard drive devices in accordance with Rhodes University's policies.

The next section presents the data analysis process of the study.

4.13 Data Analysis

Data analysis aims to identify underlying patterns, themes, or processes within the collected data (Guerrero, 2019: 60). This process involves systematically sorting data through identification, coding, categorisation, clustering, and labelling. To ensure accuracy and depth in analysis, various tools such as field notes, transcription protocols, and specialised software programs are employed for precise documentation and interpretation of data.

This study collected and analysed data simultaneously, using qualitative data analysis tools to support the process. A structured approach was followed to identify patterns and themes, providing insights into the value creation process of PPP projects in Uganda. Audio recordings were transcribed, coded, and thematically analysed using Atlas. it 24 software, ensuring systematic organisation and interpretation of the data, as discussed further in this section.

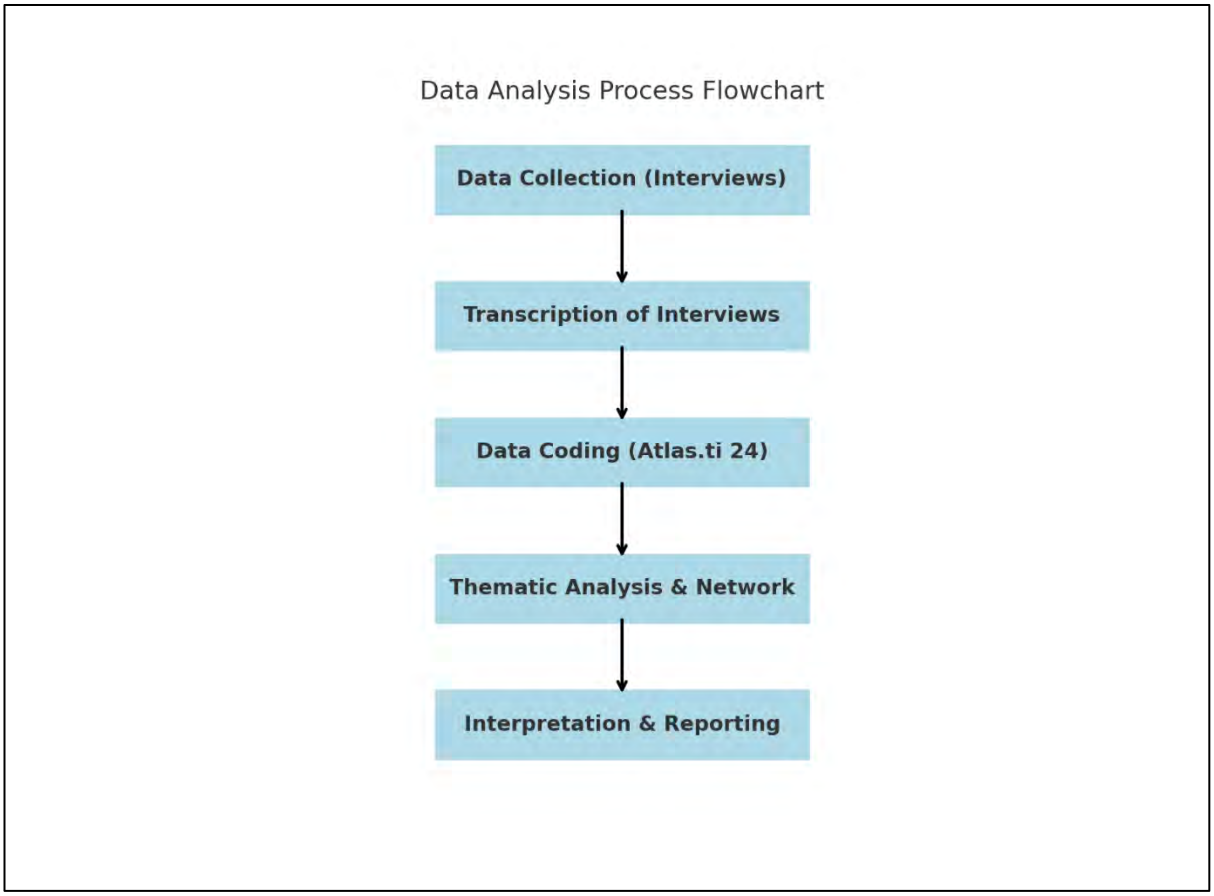


Figure 4.10: Overview of the data analysis process adopted by this study

As highlighted in Figure 4.10, the study collected data (step one), transcribed interviews (steps two), coded the data (step three), adopted thematic analysis and network (step four), interpreted, and reported the data (step five). Since data collection was conducted as presented in the previous sections, the next sub-sections present the next steps undertaken by the study.

4.13.2 Transcription

Transcription involves converting audio recordings of participant interviews into written text (Abid, Medani, Toktassyn and Manni, 2023: 15). Puji Widodo (2014: 106), suggests the following steps for transcription to ensure accuracy and completeness.

a) Repeated and attentive listening to the audio files for precise documentation
b) Structuring the transcript with participant details, for example, the role of the participant, the PPP project, among others.

c) Identifying themes such as frequently mentioned phrases related to value creation so as to extract meaningful insights.

The study employed a structured process to transcribe audio recordings from participant interviews, resulting in the generation of sixteen transcripts from sixteen participants.

4.13.2 Data coding and categorisation

After transcription, the study analysed the data with the support of tools like Atlas. Ti 24 software to code the data in the transcripts. The study followed steps.

i. Each interview transcript was reviewed, line by line, to identify recurring key words related to the value creation process and other concepts related to the study.
ii. The study then grouped the codes into broader themes based on interconnections and these were clustered together accordingly.
iii. The thematic categories were refined and aligned with the SQs and research propositions.

As highlighted in Section 4.14.1, the study transcribed audio recordings from the KIIs, which served as the foundation for data coding and thematic analysis. To ensure a systematic organisation and analysis of qualitative data that directly addressed the research sub-questions, the findings presented were structured according to these sub-questions in Chapter Five.

4.13.3 Thematic analysis and network development

Thematic Network Analysis supports studies to organise themes into structured insights (Swanson and Holton, 2005: 239). The study adopted thematic network analysis, and the process involved:

i. Identifying key themes from coded data (Jain, 2021: 545).

ii. Mapping relationships between themes, subthemes, and participant responses that reflect concepts in the SQs and research propositions for example, participant profile, potential of PPP projects to create value, current practices, best practices, barriers, PPP-PLC.

The thematic analysis in this study followed a structured process to identify patterns and themes within the data. Further, the process involved categorising themes, and interpreting findings to align with the research objectives. The detailed synthesis and analysis of these results are presented in Chapter Six.

4.13.4 Interpretation and reporting

Following thematic analysis, the study interpreted the findings by examining relationships between themes and research propositions. This stage involved synthesising coded data to uncover insights into value creation, best practices, and barriers in PPP projects and other concepts in line with the study's SQs. The results are presented in Chapter Five and Six of the study using descriptive methods such as tables, graphs, vignettes, and thematic models as required, ensuring clarity and alignment with the MRQ. The data interpretations formed the foundation for development of the Best practice Framework for Value Creation in PPP projects, presented in Chapter Seven.

4.14 Ethical Considerations In This Study

Consciousness of ethical considerations is a key concept of research, especially since it frequently includes the exploration of sensitive material (Donalek, 2005: 125). In research, ethics govern the quality of behaviour of researchers (Hasan *et al.*, 2021: 1). There are a number of ethical issues that arise, requiring procedures that govern data collection (Cypress, 2018: 303). Further, there are ethical standards to be followed by studies, and this study followed the standards as presented.

a) A consent letter was obtained from the gatekeepers (PPP Unit) and from individual participants to ensure a confidentiality agreement (Korstjens and Moser, 2017: 278).

b) Ethical clearance was obtained from institutions to ensure institutional protection and to further facilitate the process through which information was generated for the benefit of the public and society broadly (Balon *et al*., 2019: 285).

c) The study obtained informed consent and voluntary participation of participants in line with research by (Josephson and Smale, 2021: 1305).

d) The researcher explained that the study is voluntary, and that participants could opt out of the study anytime (Arifin, 2018: 30).

e) Consent was obtained prior to the start of the interview. The consent was either verbal or written depending on the participant (Lin *et al*., 2019: 5).

f) Permission was sought from participants to audio record the interviews. Recording was an option consented to prior to the commencement of interviews (Henry *et al*., 2015: 850).

g) A formal introduction was provided by the research entailing an explanation of the aim of the research and request stakeholder participation (Mason, Augustyn and Seakhoa-King, 2010: 440).

h) The study utilised anonymous data collection instruments ensuring that the disclosure of responses does not expose participants to any risk. Additionally, confidentiality was strictly adhered to throughout the research process (Gajjar, 2013: 13).

This study applied and obtained ethical clearance from the Rhodes University Human Ethics Standards Committee through the University's Ethical Review Applications System and permission was granted- **Review Reference Number 2023-7172-7535, Appendix II.**

The study adhered to ethical standards as highlighted.

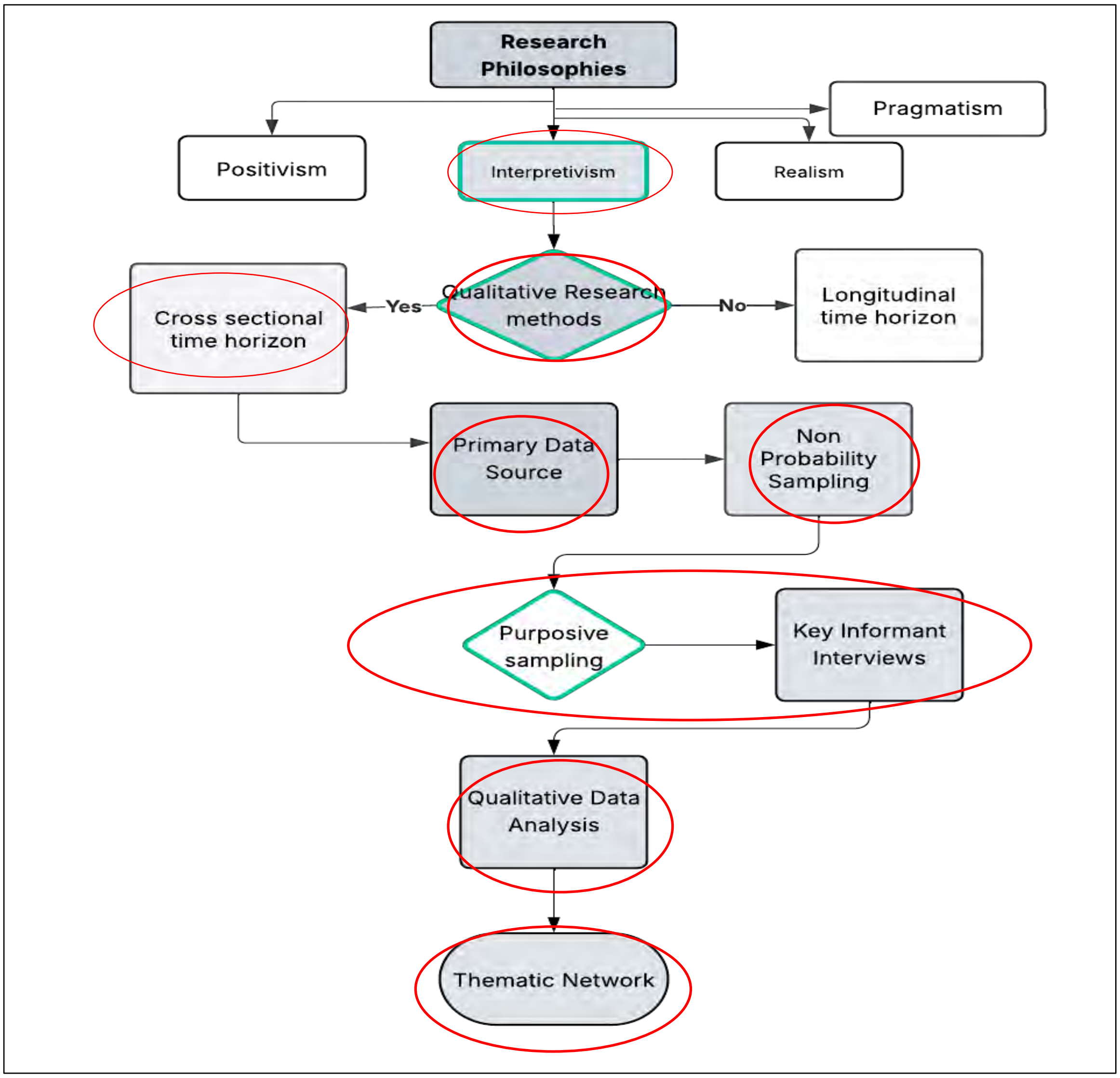


Figure 4.11: Research methodology

4.15: Chapter Summary

This Chapter outlined the research methodology adopted by the study to examine how value is created in PPP projects in Uganda. The study adopted a qualitative research method, using an interpretivist paradigm. Further the study selected the sample using a purposive sampling technique and collected data using a semi-structured interview guide from KIs. Ethical considerations were adhered to, ensuring confidentiality and participant protection. The data collected using the research methodology is presented in the next Chapter to answer the SQs.

CHAPTER FIVE : RESEARCH RESULTS

5.1 Introduction

Chapter Four discussed the research design and methodology adopted by the study to collect and analyse data to address the MRQ. The chapter discussed the MRQ and sub-questions, research goals and sub-goals, philosophy, paradigm, time horizon, sampling, target population, data collection and analysis methods, and ethical considerations. The study collected data, analysed it, and this chapter represents the findings from its qualitative data collected through KII.

The following sections of the chapter outline the outcomes of KIIs conducted by the study. It describes the data, explains how the research sub-questions and research propositions were addressed, and presents the research results obtained using the semi-structured interview guide as the primary data collection instrument.

5.2 Research Setting

Chapter One, section 1.3, presented the statement of the problem, which led to the MRQ and the five SQs (SQ1-SQ5). From the SQs, the study derived the five Research Propositions (P (1)-P (5) and the research goal. Chapter two conducted a detailed literature review and found gaps summarized among the salient issues in section 2.15, thus prompting the MRQ. To answer the MRQ, qualitative data from the targeted population was collected using the research design and methodology illustrated in Chapter four. The data was then analysed in line with section 4.14 of the study to present the results in this chapter. The approved semi-structured interview guide used to collect the data was as presented in Table 4.7. The purpose of the questions presented in the interview guide was to guide the interviewer in collecting data from participants in a guided and friendly manner to answer the MRQ.

5.3 Results From The KII

This study adopted qualitative research methods with an interpretivist paradigm, exploring how value was created in PPP projects in Uganda. It sought to understand stakeholder experiences within the PPP-PLC by collecting in-depth and context-based insights into their value creation process. To ensure a rigorous and systematic selection of participants, a purposive sampling technique was adopted to select and engage with key stakeholders who were actively involved in the value creation process. The study targeted project managers and project end users from 28 PPP projects where data was collected, analysed, and used to generate themes to a point of saturation at 16 participants. For purposes of this research, the study adopts the following abbreviations used to code study participants, which are indicated in Table 5.1.

Table 5.1: Abbreviations adopted by the study to categorise stakeholders/participants

No	Code	Abbreviation
1.	PM	Project Manager
2.	U	Project End User

According to Table 5.1, the codes assigned to participants are *"PM"* for Project Managers and *"U"* for Project end users. The numbers following these themes, such as PM01 and U01, were randomly assigned as variables and do not reflect the order of interviews or the data analysis sequence.

5.3.1 Profile of the participants

Data was collected through KIIs, guided by the pre-approved semi-structured interview guide. The interview type adopted was semi-structured, allowing participants to share experiences freely. The guide steered the study to collect data that provided rich, in-depth insights related to the study. From the 16 KII interviews, 13 were PMs while 3 were Us as presented in Table 5.2.

Table 5.2: Number of participants and categories

Code	Abbreviation	Number
PM	Project Manager	13
U	Project End User	3
Total		16

The study used different interview modes to conduct the 16 KIIs based on participant convenience. Out of the 16 KII interviews conducted, eleven (11) were face-to-face, three (3) were online using the Zoom platform, and two (2) were via telephone. All interviews were recorded using a recording device with consent from the participants. The audio recordings were later transcribed verbatim, and data was extracted using themes.

Section A of the semi-structured interview, although not part of the SQs and research propositions, played a crucial role in the study. It explored the demographic information, including educational background and project experience, which are vital for establishing rapport between the interviewer and interviewee, and provided valuable insights. Some of the results were used to explain concepts like project experience for the U and PMs presented in Table 5.5, to support the study in understanding the length of the Us in the usage of project products which had implications on sustainability. The themes that emerged from the information are presented in Table 5.3, 5.4 and 5.5.

5.3.2 Participant Education Background

Out of the 16 participants, meaningful data was obtained from 13, revealing a central theme related to the participants' highest academic background. The diversity of educational backgrounds, ranging from bachelor's degrees to PhDs across different fields such as economics, engineering, law, and management, suggested a comprehensive and inclusive study. However, three (3) out of the 16 participants did not provide any information to answer this question. The themes that emerged from the results by the 13 participants are presented in Table 5.3.

Table 5.3: Participant educational background

Count of Degree	**Participants Groups**	
Degree Type	Project Manager	End Users
Masters	07	02
Bachelors	02	01
PhD	01	00
Subtotal	13	03
Not provided details educational back ground (N/A)	03	
Grand Total Participants	16	

Note: O*ut of the 16 participants who were interviewed 13 participants provided their educational background while 3 did not respond to this specific question. However, all 16 participants fully engage with the core interview questions related to the research objectives and their responses were included in the analysis.*

From the results presented in Table 5.3, out of the 16 participants, 13 participants responded to this interview question and out of the 13 participants, nine (9) held a master's degree, three (3) held a bachelor's while one (1) held a PhD. Seven (7) out of nine the (9) master's degree holders were project managers, while two (2) were project end users. Furthermore, two (2) out of (3) bachelor's degree holders were project managers while one (1) was an end user. The only PhD holder in the group was a Project Manager.

5.3.3 Specific participant academic qualifications

Table 5.4 presents the details of academic qualifications attained by participants at different education levels.

Table 5.4: Qualification of the participants

Participant	Participant	Bachelors' Degree	Post Graduate Diploma	Masters' Degree	PhD
Project Manager	PM01	Land Economics		-	-
Project Manager	PM02	Degree in Statistics	-	Master's in economics and planning	-
Project Manager	PM03	Degree in Quantitative Economics	Financial and Economic Risk Analysis of Public Investments	Masters of Energy Economics and Governance	-
Project Manager	PM04	Degree in Construction Management and Civil Engineering	Strategic planning and Management	Master's in project management	-
Project Manager	PM05	Bachelor's degree in agriculture Bachelor of Commercialisation and Agribusiness	-	-	-
Project Manager	PM06	Bachelor's degree in industrial psychology	-	-	-

Project Manager	PM07	Bachelor’s degree in civil engineering		Master’s degree in civil engineering	-
Project Manager	PM08	-	-	Master’s degree in business administration	-
Project Manager	PM11	Bachelor’s degree in law	-	Master of Laws in Energy and Natural Resources and Environment	-
Project Manager	PM12	-	-	Master’s Degree in Economic Policy Analysis and Planning	-
Project Manager	PM13	-	-	Master’s in construction management	PhD in Civil and Building Engineering
Project End User	U01	Bachelor’s degree in education	-	-	-
Project End User	U02	Degree in Education	-	Master’s degree in business administration	-
Project End User	U03	Degree in Education		-	

The results presented in Table 5.4 suggested that project managers had varied educational backgrounds, with qualifications ranging from bachelor's degrees to PhDs across different fields such as economics, engineering, law, and management. This diversity demonstrated that project managers came from multiple disciplines, and that their academic qualifications may or may not have reflected the specific requirements or focus areas of the projects they oversaw.

5.3.4 Project experience of the stakeholders

The results presented enabled the study to understand the nature of the stakeholders' project experience. Table 5.5 indicates the theme/ No of years’ experience by project managers and end users.

Table 5.5: Experience of participants on the project

Themes/No of Years' experience	Participants ID
0-9Years	PM01
	PM03
	PM05
	PM06
	PM08

	PM10
	PM12
	U02
	U03
10-19Years	PM04
	PM06
	PM11
20-29Years	PM07
	PM09
	PM13
	U01

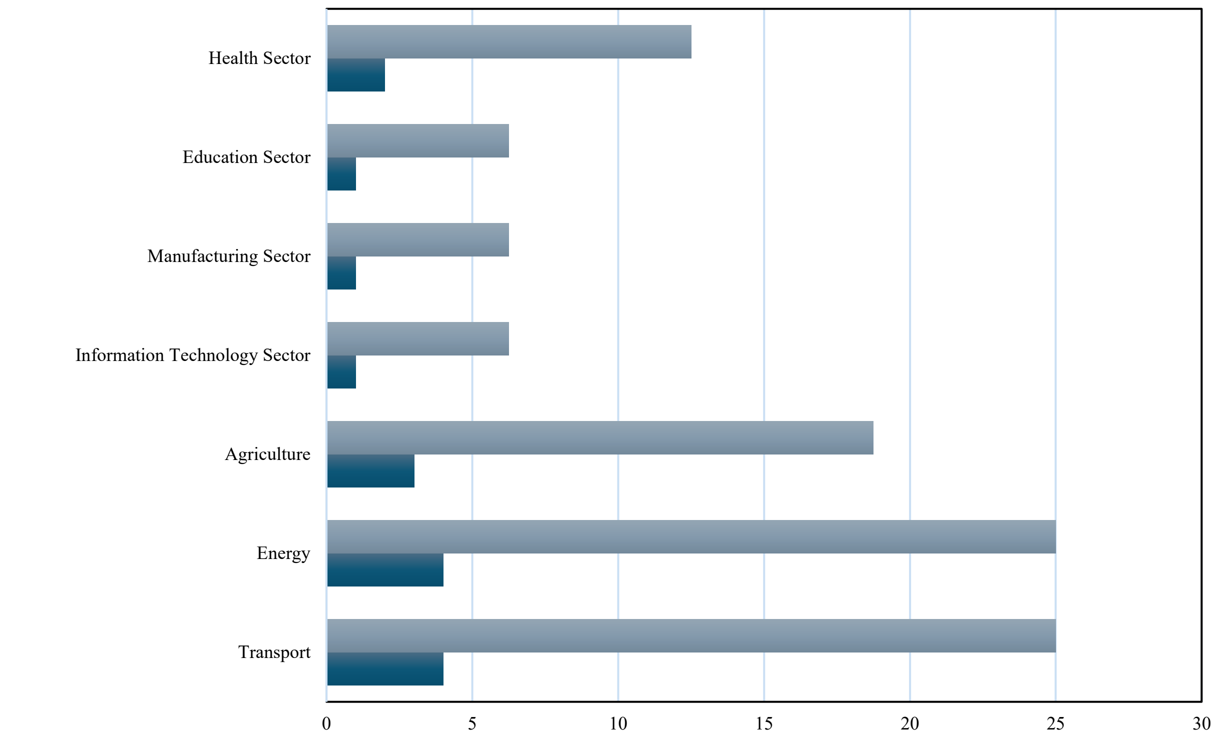
Results suggested that most participants had between 0-9 years of experience with the project, while fewer participants had between 20-29 years, and an even smaller group had between 10-19 years. This distribution provided critical insight into stakeholder involvement in PPP projects, drawing a similarity between length of project engagement and value realisation. For project end users, the duration of involvement highlighted the protracted length of their interaction with project services and offered a perspective on the sustainability of project benefits. The findings for project managers revealed varying levels of expertise, with many in the early stages of their careers, evidenced by a larger group with limited experience.

5.4 The Potential of PPP To Create Value Through Their Lifecycle (SQ1)

To address SQ1 and prove or disprove research proposition one P (1), Key Informants (KI) responded to questions in the **interview guide (Section B, Qns 1,2,3,4,5,6 and 7).** The study collected data to understand the sectors and phases of project activities, the roles and activities of stakeholders, their understanding, and expectations of the concept of PPPs, and the tentative benefits reaped from the projects.

5.4.1 Sectors of PPP project activity

A number of themes emerged on the sectors within which the participants and the projects were stationed. The data presented provides valuable insight into the magnitude of PPP project endeavours in Uganda's economic landscape. Results indicate the impact of PPP projects on Uganda's socio-economic landscape and its potential impact on stakeholders as presented in Figure 5.1.



	Transport	Energy	Agriculture	Information Technology Sector	Manufacturing Sector	Education Sector	Health Sector
Percentage of Participants in that Sector	25	25	18.75	6.25	6.25	6.25	12.5
Number of participants in the Sector	4	4	3	1	1	1	2

Figure 5.1: Percentage participants/projects per sector

Figure 5.1 illustrates the distribution of participants across various sectors where PPP projects were implemented. According to the results, the highest percentage of participants (25%) were engaged in the transport and energy sectors. This was followed by agriculture with 18.75%, and the health sector with 12.5%. The information technology, manufacturing, and education sectors each accounted for 6.25% of the participants. These findings suggest that PPP projects are spread across a wide range of sectors within Uganda's PPP landscape. The distribution supports the study's understanding of the nature of diversity and scalability of the PPP model in the country, further stressing its potential to deliver value across different sectors of the economy. The data also highlights the sectors that could be impacted if value is not adequately created through PPP projects. Given that the participants interviewed represent key stakeholders engaged in PPP projects, the results offer insight into Uganda's broader stakeholder landscape and reflect the importance of value creation across all involved sectors.

5.4.2 Phases of PPP project execution

This section presents the phases of the PPP-PLC at which the different projects in the various sectors executed their activities. The results are presented in Table 5.6.

Table 5.6: Phase of execution of activities by the PPP-project within the PPP-PLC

Project Phase	Sector	Number of Projects
Design and Implementation Phase	Transport Sector	2
	Energy Sector	2
Operation and Maintenance Phase	Energy Sector	2
	Agriculture Sector	1
	Transport Sector	2
	Health Sector	2
Project Identification Phase	Manufacturing Sector	1
	Agriculture Sector	1
Procurement Phase	Information Technology Sector	1
Transfer	Education Sector	1
	Agriculture Sector	1

According to table 5.6, the highest number of projects were recorded at the design and implementation phase, with a total of four projects, two in the transport sector and two in the energy sector. Similarly, the operation and maintenance phase also accounted for four projects, distributed across the energy (2), agriculture (1), transport (2), and health (2) sectors, indicating that some projects were found to be at this phase in more than one sector. The project identification phase comprised two projects, implemented within the manufacturing and agriculture sectors. The procurement phase had one project represented in the information technology sector, while the transfer phase included two projects, one in the education sector and another in the agriculture sector. The distribution of projects across the various sectors and phases of the PPP-PLC offers valuable insights into the scope, potential impact, and value-generating capacity of PPP projects at different phases. These findings increase the study's understanding that value is created in different sectors and at different phases, thereby affirming the versatility and strategic relevance of the PPP model within Uganda's socio-economic development context.

5.4.3 Role of stakeholders in PPP-PLC

To understand the role of stakeholders (project managers and project end users) in the value creation process throughout the PPP-PLC, the study explored their functions within the value creation process of the PPP-PLC. Table 5.7 presents the participant groups which informed the study to answer the research sub-question.

Table 5.7: Role of participants in the PPP-PLC

Participant Groups	Participants ID	Role	Partner Representative
Project End Users	U01	Project Consumer	End User
	U02	Project Consumer	End User
	U03	Project Consumer	End User
Project Manager	PM01	Project Team Leader	Private
	PM02	Project Manager	Private
	PM03	Senior Project Officer	Public
	PM04	Project Manager	Private
	PM05	Project Coordinator	Public
	PM06	Program Manager	Private
	PM07	Project Coordinator	Public
	PM08	Project Portfolio Manager	Public
	PM09	Project Administrator	Public
	PM10	Project Director	Public
	PM11	Project Principal Advisor	Private
	PM12	Field Officer	Private
	PM13	Infrastructure Manager	Public

Table 5.7 presents the role of participant and their groups within the PPP-PLC as well as the partner representative. The project end user group included participants U01, U02, and U03, while the project manager group consisted of participants PM01 through PM13. The study aimed to collect qualitative data from key stakeholders involved in PPP projects, specifically project managers and project end-users from the three main partners of PPPs. A purposive sampling strategy was employed, consistent with the study's objectives and the need to obtain rich, relevant insights from individuals with direct experience in PPP project value creation. The larger proportion of participants were project managers. Project end-users were also targeted to include the beneficiary perspective, central to assessing the impact of PPP projects. Although fewer in number, the

perspectives of end users were instrumental in providing context on the user experience and service delivery outcomes. The data collected reflect a balanced representation from both the public and private partners as well as the end users who represent the beneficiary perspective. Out of the 13 project managers, seven were from among the public partner and six from the private partners and these all represented diverse view points of the partnership. The perspectives presented from this point onward reflect insights gained from project managers from both the private and public sectors, offering a balanced perspective of stakeholder roles across the PPP-PLC.

The study collected data until point of saturation, which was reached by the third interview, as responses began to reflect recurring themes with little variation. For project managers, saturation occurred at the thirteenth interview, by which point a range of insights was captured. From the interviews, the study collected the role of the stakeholders.

The role of project user as a consumer was established when, as highlighted by PU01,

> *"... as a consumer, I..."*

The themes that emerged from the rest of the end users were in line with the term "consumer". Therefore, the results supported the study in understanding that stakeholders of a PPP project had roles to play within the PPP-PLC value creation process. And, that while other stakeholders from among the project managers coordinated or managed the projects, others benefited from the outcomes as consumers. The roles were therefore symbiotic.

5.4.4 Activities of stakeholders in PPP-PLC

The study conducted interviews to deepen the understanding of the project stakeholders' activities and how they perceived their role in the value creation process throughout the PPP-PLC. From the interviews, several themes that allowed the study to explore various meanings the participants attached to their activities emerged. From the results, the study inferred those stakeholders held diverse titles, especially under the project manager category, and these undertook diverse activities despite the varied titles that varied from the traditional title of "project manager".

One of the project managers who held the title of Infrastructure Manager was quoted to say,

> *"…I am directly involved as the contact person or manager…"*

Note: For this interview, the infrastructure manager was considered the contact person (PM) category for the project in which they were directly involved.

Another project manager PM08 who held the title of Manager, Portfolio, and Investment, said this about the role they played:

> *"... right now, we have one PPP that I am the project manager of...."*

From the project manager's submission, the study inferred that the project manager held the title of portfolio manager in anticipation of managing other projects under a portfolio but at the time of the interview, the participant was managing one project out of the anticipated projects in the portfolio and therefore the participant's narratives allowed the study to explore the various meanings attached to their experience as a project manager for that project, despite holding the title of portfolio manager.

Furthermore, project manager PM06 highlighted this, regarding their role on the project as program manager,

> *"I do site identification ...."*

The findings indicated that even though some project managers held diverse titles, at the core of their responsibilities, their roles aligned to some extent with those of conventional project managers and other PMs who had the title of project manager as presented Table 5.8. Their involvement in site identification, project oversight, and stakeholder engagement demonstrated that functional roles precede formal titles in PPP projects. Furthermore, the flexibility in the project management roles suggested that value creation in PPP projects was not solely tied to a fixed managerial structure, but rather to the expertise and responsibilities assumed by individuals within the projects.

For this study, the focus was more on the role of project managers as stakeholders in the PPP-PLC. Therefore, despite their titles, the results indicated that they were involved in the value creation process and that their roles and perceptions contributed to value creation and our understanding of the process. These results, therefore, supported the study in understanding the activities of stakeholders that contributed to the value creation process in the PPP-PLC.

Table 5.8 presents the titles and the activities that emerged as themes during the project manager submissions.

Table 5.8: Participants, their role on the project, and the activities engaged in under their role

Participant ID	Role	Activities
PM01	Team Leader	Community Sensitisation
		Demarcation of Land for the Project
		Coordination of Project Activities
		Land Acquisition
		Reporting
PM02	Project Manager	Community Engagement and Sensitisation
		Demarcation of Land for the project
		Reporting
PM03	Senior Project Officer	Project Preparations
		Project Appraisals
		Conduction of feasibility studies
PM04	Project Manager	Community Engagement
		Project Management
PM05	Project Coordinator	Coordination of Project Activities
		Project Research
		Commercialisation of Project Products and Services
		Stakeholder Engagement
		Coordinating Capacity Building
PM06	Program Manager	Community Engagement
		Conduction of feasibility Studies
		Submission of reports to government
		Facilitation of the feedback loop
		Coordination of Project Activities
		Coordination of Project Teams
		Project Assessment
		Project Leadership
		Coordinating capacity building
		Development of Terms of Reference
		Demarcation of project scope
PM07	Project Coordinator	Coordination of Project Activities
		Reporting
		Stakeholder Engagement
PM08	Portfolio and Investment Manager	Conduction of feasibility Studies
		Stakeholder Sensitisation
		Project Leadership
PM09	Project Administrator	Project Planning
		Budgeting
		Coordinating Project Activities
		Project Administration
		Project Management

		Project Leadership
		Framework Development
PM10	Project Director	Overseeing Project Implementation
		Overseeing Infrastructure Development
		Project Management
PM11	Principal Advisor	Project Leadership
		Project Legal Advisory
		Advise on policy
		Land Acquisition
		Document Preparation
		Link with Stakeholders
PM12	Project Field Officer	Overseeing Project Development
		Community Engagement
		Community Sensitisation
		Coordination of project activities
PM13	Infrastructure Manager	Overseeing Development and Implementation
		Project Advisor
		Project preparation
		Project leadership
		Project Appraisal
		Project Management
		Coordination of Project Activities
		Project Set Up
		Review of Projects
		Review of Project Infrastructure
		Contract Management
		Task Management
		Overseeing Infrastructure Development
U01	Project End User	Product and Services Consumer
U02	Project End User	Project User
		Product and Services Consumer
		Payment of tariffs for goods consumed
U03	Project End User	Payment of tariffs for goods consumed
		Provision of Feedback
		Product and Services Consumer

As presented in Table 5.8. project end users primarily played the role of product and service consumers, and their responsibilities extended to payment of tariffs for goods consumed, and providing feedback on service quality. The results presented supported the study to understand the interconnectedness of stakeholders, activities and how important their roles are within the PPP-PLC, contributing to value creation.

5.4.5 Definition of a PPP

To prove research proposition one P (1) the potential for PPP projects to create value for stakeholders through the PPP-PLC, the study collected data to gain an understanding of how stakeholders perceived PPP projects, their expectations, and the benefits they had gained from them. The results uncovered stakeholder perceptions of the definition of PPP projects. **These definitions contribute to the contextual understanding of the concept of PPPs within the infrastructure landscape.** Table 5.9 presents emerging themes from the multiple realities which shaped stakeholder perceptions and beliefs about the PPP concept. Figure 5.2 further illustrates the themes that emerged from the interviews, which allowed the study to draw meaning from stakeholder perceptions of the concept.

Figure 5.2: Participants' perspectives on the concept of PPP

The concepts identified by the study as emerging from the interviews were diverse in nature, as illustrated in Figure 5.2. From the interviews, the participants highlighted a number of issues, and the perceptions are indicated in Table 5.9.

Table 5.9: Percentage of participants per concept definition of PPP

Themes/ Definition of PPP	% Count of themes/ Count of Participant per definition of PPP projects
Joint Partner Participation	17.02%
Government Contracting Private Partners	14.89%
Private Sector Participation	12.77%
Leveraging Resources	8.51%
Infrastructure Development	6.38%
Project Financing	6.38%
Delivery of Goods and Services	4.26%
Community Development	4.26%
Efficiency	4.26%
Joint Investment	4.26%
Government Supervision	4.26%
Method of Procurement	2.13%
Achievement of Common Objective	2.13%
The government delegates its role	2.13%
Government Regulations	2.13%
Long-term Partnership	2.13%
Independence from Government	2.13%
Grand Total	100.00%

The results in Table 5.9, demonstrated **the perception of the participants' definition of PPP projects** and among the themes that emerged to define PPP projects participants indicated that PPPs were a Joint Partner Participation 17.02%, Government Contracting Private Partners (14.89%), Private Sector Participation (12.77%), Leveraging Resources (8.51%), as a source of Infrastructure Development (6.38%), Project Financing (6.38%), Delivery of Goods and Services (4.26%), Community Development (4.26%), Efficiency (4.26%), Joint Investment (4.26%), Government Supervision (4.26%), Method of Procurement (2.13%), Achievement of Common Objective (2.13%), Government delegates its role (2.13%), Government Regulations (2.13%), Long-term Partnership (2.13%) and Independence from Government (2.13%).

The results presented in this section illustrate the stakeholders' definition of PPPs, their perceptions of what PPP projects are intended for and what the attributes of PPP projects include. The results presented supported the study in gaining insight into the definition of PPPs and that stakeholders perceive PPPs to be, their purpose and their attributes in relation to value creation of the projects.

5.4.6 Expectations of PPP projects

Participants shared their expectations, and these enabled the study to explore the various expectations that stakeholders attached to PPP projects throughout the PPP-PLC. By understanding the expectations, the study gained insight into the multiple realities and individual beliefs and anticipated outcomes of PPP projects by stakeholder. The emerging themes from the interviews are illustrated in Figure 5.3.

Figure 5.3: Participant expectations from PPP projects

Whereas Figure 5.3 presents a summary of the expectations of the stakeholders/ participants anticipated from PPP project, Table 5.10 provides deeper understanding of these expectations by providing more detail and count of expectations as well as a percentage distribution of participants.

Table 5.10: Percentage distribution of participant expectations of PPP projects

Themes/ Expectations	Count of themes/Expectations
Commercial value	13.56%
Revenue	11.86%
Involvement of Expertise	11.86%
Undertaking Construction Works	11.86%
Acquisition of Project Financing	11.02%
Quality Products and Services Delivery	10.17%
Improved Access	5.93%
Affordability	4.24%
Efficiency	4.24%
Return on Investment	4.24%
Timely Delivery	3.39%
High-Quality Technology Usage	3.39%
Stakeholder Appreciation	2.54%
Environmental Sustainability	1.69%
Grand Total	100.00%

Table 5.10 presents the results from the data collected from participants about their expectations from PPP projects. From the results, out of the 16 participants 13.56% expect PPP projects to realise commercial value, Revenue (11.86%), Involvement of Experts (11.86%), Undertaking Construction Works by the project (11.86%), Acquisition of Project Financing (11.02%), Quality Products and Services Delivery (10.17%), Improved Access (5.93%), Affordability (4.24%), Efficiency (4.24%), Return on Investment (4.24%), Timely Delivery (3.39%), High Quality Technology Usage (3.39%), Stakeholder Appreciation (2.54%), Environmental Sustainability (1.69%).

The emerging themes on participant expectations enabled the study to understand the strong feelings of stakeholders about the potential of PPP projects to successfully deliver on their intended outcomes.

5.4.7 Benefits from PPP projects

Stakeholders shared the insights about the benefits they had reaped from the PPP projects within the PPP-PLC. Understanding the benefits supported the study to gain insight into how stakeholders had thus far benefited from PPP projects and what was central to them. A diverse range of themes in line with benefits emerged about participants' experiences and subjective realities as they constantly negotiated their identity within the PPP-PLC. The benefits reaped thus far from stakeholders are presented in Figure 5.4 and Table 5.11.

Figure 5.4: Benefits of PPP projects according to participants

The details of the benefits summarised in Figure 5.4 are presented in Table 5.11 deepening the study's understanding of the context.

Table 5.11: Benefits of PPP projects according to participants

Themes/ Benefits	% Count of themes/ Benefits
Knowledge Acquisition and Sharing	10.11%
Revenue Generation	8.99%
Employment and Career Growth	8.99%
Undertaking Construction Works	7.87%
Enhanced Experience and Exposure	7.87%
Innovation and Technological Advancement	7.87%
Enhanced Safety	6.74%
Economic Growth	5.62%
Local Content	5.62%

Stakeholder Compensation	4.49%
Capacity Building	4.49%
Market Opportunities	3.37%
Quality Goods and Service Delivery	3.37%
Enhanced Efficiency	3.37%
Profitability	3.37%
Resource Leverage	3.37%
Inclusiveness	2.25%
Risk Sharing	1.12%
Enhanced Experience and Exposure	1.12%
Grand Total	100.00%

Results presented in Table 5.11 suggested that PPP projects benefited 10.11% of participants with Knowledge Acquisition and Sharing, 8.99% with Revenue Generation, Employment and Career growth for 8.99%, Undertaking Construction Works was confirmed by 7.87% of participants, Enhanced Experience and Exposure (7.87%), Innovation and Technological Advancement (7.87%), Enhanced Safety (6.74%), Economic Growth (5.62%), Local Content (5.62%), Stakeholder Compensation (4.49%), Capacity Building (4.49%), Market Opportunities (3.37%), Quality Goods and Service Delivery (3.37%), Enhanced Efficiency (3.37%), Profitability (3.37%), Resource Leverage (3.37%), Inclusiveness (2.25%), Risk Sharing (1.12%), Enhanced Experience and Exposure at (1.12%).

The distribution of themes indicated the benefits that stakeholders had reaped from PPP project involvement clearly illustrating that PPP projects had benefited both categories of stakeholders.

This section presents results that supported the study to understand the potential of PPP projects to create value for stakeholders. The results included participants' background information, detailing their roles within the PPP-PLC, educational backgrounds, and varied stakeholder perspectives on PPP projects. These results provided a deeper understanding of how projects evolved throughout the PPP-PLC, highlighting the interdependent relationship between stakeholders and projects in the value creation process.

The next section presents the practices within Uganda's PPP landscape that create value for stakeholders.

5.5 The Practices Within Uganda's PPP Landscape That Create Value For Stakeholders

This section is built on the aim of the study to prove or disprove research proposition P (2) that the current practices within Uganda's PPP projects that create value for stakeholders. To achieve this, the study collected data from KI who responded to questions in interview guide in Section B (Questions 5, 6, 7,8,9). The data collected form the interviews supports the study to understand perceptions of participants as to what existed then within Uganda's PPP landscape, which phases PPP projects were executing their activities and at what phase the stakeholders were involved in the PPP-PLC. The results supported the study to gain insight into the evolution of Uganda's PPP landscape and the projects therein as well as how the stakeholders perceived future of PPP projects in Uganda. The results of the data collected are presented in Table 5.12.

Table 5.12: Current state of PPP landscape in Uganda

Current State	Distinct Count of Participant
PPP projects in their Infancy	5
Government systems still bureaucratic	3
Very costly to implement a PPP project due in the current regulatory framework	3
PPP projects are the way to go	3
Existing Regulatory Framework	3
Private sector shies away from working with government	2
Government is financially constrained	2
PPP projects in a number of sectors	2
Government comes in at Operation and Maintenance	2
The government is trying to attract private investors	2
Government needs to have lessons learnt from failed PPP projects	2
A number of PPP projects in Uganda are not classic PPP projects	2
PPP projects on a high Rise	1
PPP projects developing infrastructure	1
Private entities seek out projects in government	1
Government and Private sector working well	1
Government does not have the skills to implement PPP projects	1
Private Sector is ready to work with government	1
PPP projects not well appreciated by majority in public space	1
PPP projects in Uganda are ambiguous	1
Procurement through PPDA	1
Usage of PPDA regulations	1

Government not yet sophisticated to take on transfer phase effectively	1
Government needs to listen to the public	1
Unstable risk profile as an investment destination	1
Most investors from China	1
Lack of Information on PPP projects	1
PPP projects are long term Investment	1
Private partners undertaking project design and construction	1
Project managers brought onboard late	1
PPP projects are very risky	1
Existing PPP projects lack sufficient manpower	1
PPP landscape is fertile	1
PPP Unit needs to be active	1
PPP projects are a source of opportunity for government and private sector	1
Government is pushing for PPP implementation	1
Largely private sector driven projects are successful	1
PPP projects are in a miserable state	1
Implementation not as per regulatory framework	1
Partner Exploitation	1
Readily available market for PPP products and services	1
Difference in opinion about what PPP projects are	1
A lot of ignorance around the concept of PPP projects	1
Existing communication platform for PPP projects	1
Existing guidelines for the PPP Act	1
PPP regulations and guidelines 2019/20	1
PPP Unit in the process of Sensitisation of masses	1
PPP Unit offered capacity building services	1
PPP Act 2015	1
Projects have old technology or existing technology	1
Uganda's economy is still small	1
Uganda's private sector not sophisticated enough	1

The results presented in Table 5.12 highlighted the key themes identified from participant responses on the current state of PPP projects in Uganda. The data indicated that Uganda's PPP landscape was shaped by several factors, primarily regulatory frameworks, and legal considerations. Many stakeholders noted the presence of these frameworks both as a challenge and a basis for PPP development. Readiness for PPP project development within Uganda was also highlighted, although it was clear that the landscape still needed to make efforts to overcome the numerous challenges hindering effective PPP project implementation. These challenges, including bureaucratic delays and limited resources, were frequently mentioned as barriers to the success of

PPP projects. Participants furthermore expressed optimism about the potential of PPP projects. Additionally, the data further revealed a general consensus on the need for stronger collaboration between government and the private sector to ensure the long-term viability of such projects.

The submissions by participant provide insight into the landscape of PPP projects in Uganda.

5.5.1 Value creation activities throughout the phases of the PPP-PLC

During the literature review in Chapter Two, section 2.3.3, this study adopted a PPP-PLC illustrated in Chapter One. The data collected on the activities was in line with the different phases within the typical PPP-PLC adopted by the study. The emerging themes are presented as practices of the projects during these phases, within the value creation process. The results in this section are therefore organised according to the PPP-PLC framework adopted.

i. Current practices at the project identification phase

Understanding the strategies employed at the project identification phase of the PPP-PLC supported the study to uncover the different approaches employed by the projects at this phase. Table 5.13 presents the themes that emerged from the analysis.

Table 5.13: Current practices with the project identification phase

Themes/ Current Practice	Percentage of Participants per Current practice
Idea Conceptualisation	5.71
Needs Assessment	8.57
Stakeholder Identification	11.43
Feasibility Studies	11.43
Drafting of proposed project Budget	8.57
Strategic Planning to include planned project	8.57
Stakeholder Buy-In	14.29
Stakeholder Consent	5.71
Declaration of government intention	5.71
Disclosure to stakeholders	2.86
Attainment of approvals for the project	17.14
Grand Total	100.00

Results in Table 5.13 present themes that emerged, indicating the activities undertaken by projects at this phase. According to 17.4% of the participants, the projects acquired approvals at this phase. 14.29% of participants indicated that the projects engaged in activities towards stakeholder buy-in, according to 11.43% of participants, projects carried out a feasibility study, according to 11.43%, projects carried out stakeholder identification, 8.57% indicated that projects carried out a needs assessment. According to participants, as inferred from the interviews, 8.57% projects undertook activities of budgeting, 8.57% indicated strategic planning activities, 5.71% insisted that the projects attained consent, according 10 5.71%, projects went through activities where they conceptualised ideas, according to 5.71% partners declared their intentions to stakeholders and according to 2.86%, there was project disclosure.

ii. Current practices at the procurement phase

The themes presented in this section provide an understanding of the activities and processes that the projects undertook at this phase to create value. The results from the data are presented in Table 5.14.

Table 5.14: Percentage distribution of activities carried out during the project procurement phase

Themes	Count of themes
Scanning for private entities	21.43
Benchmarking with other Projects	11.9
Advertisement of the project	7.14
Invitation of Bidders	2.38
Engagement with Procurement Department or PPP Unit	7.14
Due Diligence by Procurement Unit	7.14
Proposals Solicitation	7.14
Bidding by Private Entities	11.9
Document Submission by private entities	7.14
Evaluation of Bidders	7.14
Special Purpose Vehicle Formation	4.76
Contracting of Private Entity	21.43
Total	100.00

Table 5.14 presents themes indicating a range of activities undertaken by stakeholders at this phase. The most frequently mentioned activities were, contracting of private entities, was emphasised by 21.43% of participants. Bidding by private entities and benchmarking with other projects emerged as prominent themes, with 11.90% of respondents mentioning each activity. scanning for private entities garnered attention from 9.52% of participants, while advertisement by the project, proposals solicitation, document submissions, and due diligence by government were each noted

by 7.14% of respondents. furthermore, evaluation of private entities, and the formation of special purpose vehicles were each cited by 7.14% of participants. invitation of bidders and the existence of a procurement department and PPP unit were mentioned by 2.38% of respondents.

The results highlighted the diverse range of activities undertaken by stakeholders, including both private and public partners, at the procurement phase.

iii. Current practices at the design and construction phase

This section presents the results on current practices undertaken during the design and construction phase of the PPP-PLC. The themes emerging from the data collected are presented in Table 5.15.

Table 5.15: Percentage distribution of activities undertaken at the design and construction phase

Themes/ Activity	Percentage Count of themes (Percentage of participants)
Project Commencement	8.33
Technology Incubation	16.67
Undertaking Construction Works	29.17
Contractor Engagement	4.17
Contract Compliance	12.5
Project Extension	8.33
Project Commissioning	8.33
Grand Total	100.00%

Table 5.15 presents the themes that emerged as activities carried out by projects during the design and construction phase. According to the Table, this phase involved various activities including undertaking of construction works, and this was noted by 29.17% of participants while technology incubation was noted by 16.67% of the participant. 12.50% of participants also identified taxation by government as an activity at this phase. Contract compliance was mentioned by 12.50% of participants while project extension was noted by 8.33%. Further, 8.33% of the participants emphasised project commencement while the same percentage also noted project commissioning. Further 4.17% of the participants also noted contractor engagement as an activity that is undertaken by projects during this phase.

iv. Current practices at the operation and maintenance phase

The study collected data to understand the practices of projects undertaken by stakeholders during the Operation and Maintenance Phase. The results, highlighting the activities carried out in this phase, are presented in Table 5.16.

Table 5.16: Percentage distribution of activities undertaken at the operation and maintenance phase

Themes (Activity)	Count of themes
Project Supervision and Monitoring	21.05%
Enhanced Safety of project users	15.79%
Tolling Aspects	13.16%
Performance as per the contract	13.16%
Capacity Building	10.53%
Project appraisals	5.26%
Human Resource Recruitment	5.26%
Operation Licencing Acquisition	5.26%
Project Product or Service Promotion activities	2.63%
Government Takeover	2.63%
Periodic Reporting	2.63%
Live User Satisfaction	2.63%
Grand Total	100.00%

According to Table 5.16, during the operation and maintenance phase, the following activities undertook Project Supervision and Monitoring as mentioned by 21.05% of the participants, Enhanced Safety noted by 15.79%of participants, Tolling Aspects by 13.16%, Contract Performance emerging from 13.16% of the participants, Capacity Building presented by 10.53% of participant, Project Appraisal indicated by 5.26%, Human Resource Recruitment by 5.26%, Operation Licensing Acquisition by 5.26%, Product or Service Promotion by 2.63%, Government Takeover by 2.63%, Periodic Reporting by 2.63%, and Live User Satisfaction by 2.63%.

v. Current practices at the project transfer phase

Data was collected from the KII to gain an understanding into the practices carried out by projects at the transfer phase. The results of the data collected are presented in Table 5.17.

Table 5.17: Percentage distribution of activities undertaken at the project transfer phase

Themes (Activity)	Count of themes
Project Manual Development	21.43%
Human Resource Retention	7.14%
Succession Planning	7.14%
Transitioning to Handover	7.14%
Hand Over to Government	42.86%
Contract Closure	7.14%
Project Audit	7.14%
Grand Total	100.00%

According to the results presented in Table 5.17, in the Transfer Phase, Hand Over To Government emerged as most noted by 42.86% of participants, followed by Manual Development by 21.43% of the participants, Succession Planning by 7.14%, Human Resource Retention by 7.14%, Transitioning to Hand Over by 7.14%, Contract Closure by 7.14%, and Project Audit by 7.14% of the participants.

This section presented results from the data collected from the 16 participants to prove or disprove the research proposition two P (2) that, *there are current practices within the PPP projects create value for stakeholders*. This section therefore presented the current practices within the PPP lifecycle at the different phases by different partners and projects.

5.6. Barriers In The PPP Projects' Lifecycle That Hinder Value Creation.

To prove or disprove Research Proposition Three P (3) that stated that, *there are barriers to value creation in the PPP projects in Uganda*, the study collected data to prove or disprove the proposition and answer research SQ3. The data collected was to address questions in the interview guide in Section B (Questions 10,11,23).

This section presents the emerging themes on the barriers within the PPP-PLC that hindered the value creation process. Table 5.18 presents the emerging themes.

Table 5.18: Percentage barriers to value creation within PPP projects

Themes/Major Barrier	% Count of themes	Sub themes/Sub barriers
Bureaucracies	6.02%	• Payment Process delays • Poor Structure of government systems • Conflicting existing systems
Change of Scope	2.41%	• Change in Terms of References • Price Fluctuations
Climate Change	6.02%	• Delay due to Weather Changes • Global Warming
Communication Gap	7.23%	• Failure to use Feedback. • Poor Sensitisation • Lack of Transparency • Lack of Information
Corruption	2.41%	• Preference of Shortcuts • Lack of Honesty
Delayed Stakeholder Engagement	1.20%	• Delayed onboarding • Delayed provision of information to Stakeholders
Delays	12.05%	• Delayed financing • Delays by government • Delay in feedback. • Procurement delays • Delays in compensation of Project Affected Persons • Slow government decision making
Government Interventions	2.41%	• Interventions from various government agencies like IGG and PPDA • Effect on Decision Making
High Operation and Maintenance Costs	9.64%	• High fees in project preparation • High cost of repairs and equipment maintenance • Repetitive maintenance • Activist disturbance which increases project cost
High Tariffs	10.84%	• Not cost friendly to users • High cost of products and services like utility bills, transportation fares, or access fees • Layman cannot afford products and services. • Poor quality products as compared to cost
Human Resource Constraints	6.02%	• Lack of sufficient capacity • High cost of training personnel • High cost of maintenance of personnel • Lack of capacity to negotiate with private sector
Insecurity	7.22%	• Lack of security for users • Vandalism • Theft
Limited access to project products	6.02%	• Restriction of usage to some sections of the public • Failure to access due to high cost
Non-Contract Compliance	3.61%	• User noncompliance to regulations • Existence of competing fake products to public
Opportunistic Behaviours	8.43%	• Middlemen • Unclear Terms of Reference • Private sector profit mindedness • Lack of complete control by public sector

Partner Conflict	1.20%	• Conflict in management • Conflicting roles • Conflict in decision making
Poor Budgeting	1.20%	• Failure to budget for key activities
Profit Repatriation	2.41%	• Loss of bulk of profit to international contractors • Dependence on international contractors
Service Interruptions	2.41%	• Irregular supply to users • Customer Care Services not expeditious
Unstable risk Profile	1.20%	• Unstable risk profile in investment destination

Results in Table 5.18 present the themes that emerged as major and sub barriers that hindered the value creation of PPP projects. From the table, Delays were the most identified barrier by 12.05% of participants, followed by High tariffs at 10.84% of participants, high operation and maintenance costs at 9.64%, partner opportunistic behaviours at 8.43%, Communication Gap 7.23%, insecurity at 7.22%, bureaucracy at 6.02%, Climate Change by 6.02%, Change of Scope at 2.41%, Corruption 2.41%, Government Interventions 2.41%, Human Resource Constraints 6.02%, Insecurity 7.22%, Limited access to project products by 6.02% and Non-Contract Compliance 3.61%. Delayed Stakeholder Engagement 1.20%, poor budgeting at 1.20%, service interruptions at 2.41% and profit repatriation at 2.41%.

About some of the barriers to value creation, participants PM12 and PM13 highlighted that,

> "*You find in the framework, in the design of the project that everything, things look so good on paper but when it comes to implementation, because of the so many bureaucracies you find that actually what is reflected in the design is not what is actually given out on the ground. Why?"*

Project manager PM13 said,

> *".. but indeed, this is one of the major challenges we are facing. Because by nature of how government conducts its business, it is bureaucratic."*

The results indicated that barriers existed within the PPP-PLC that prevented stakeholders from attaining value from projects. From the results, stakeholders confirmed that the barriers that hindered their ability to fully benefit from the process. Identification and analysis of these challenges enabled the study to achieve the overarching goal by creating awareness to stakeholders of the existing barriers and highlighting them in the framework presented in Chapter seven.

The next section presents the best practices that emerged from KIIs.

5.7 Best Practices Within PPP projects' PLC That Create Value For Stakeholders

This section is posited on research sub-question (SQ4) and research Proposition Four P (4) which stated that, *there are best practices within PPP-PLC that enhance value for stakeholders*. The study set out to prove or disprove P (4) to gain a deeper understanding of the best practices within PPP projects that enabled projects to overcome barriers. The questions from the interview guide that steered this inquiry were in Section B (Questions 10, 11, 12, 13, 14, 15, and 23 – 25) which sought to establish the relationship between current and best practices within the PPP-PLC in the creation of value for stakeholders to prove or disprove P (5). Details of research proposition P (5) are presented in Chapter six of this study in the synthesis and analysis of the results.

The themes that emerged as best practices in PPP projects are illustrated in Figure 5.5 and further detailed in Table 5.19.

Note on Percentages in Figure 5.5

The percentages presented in Figure 5.5 were derived through analysis, where each sub theme/sub code presented in Table 5.19 was identified and categorized under a best practice and this was coded and counted based on its frequency of occurrence across the responses from participants. Each major theme formed a best practice including sustainability, risk management, engagement, efficiency, dispute resolution, communication, commitment and collaboration. The subthemes/sub codes were assigned a value of one (1) each time it appeared in a participant's response. The total number of coded instances formed the basis for calculating the percentage representation of each theme in relation to the total number of best practice mentions. The detailed breakdown is provided in Table 5.19.

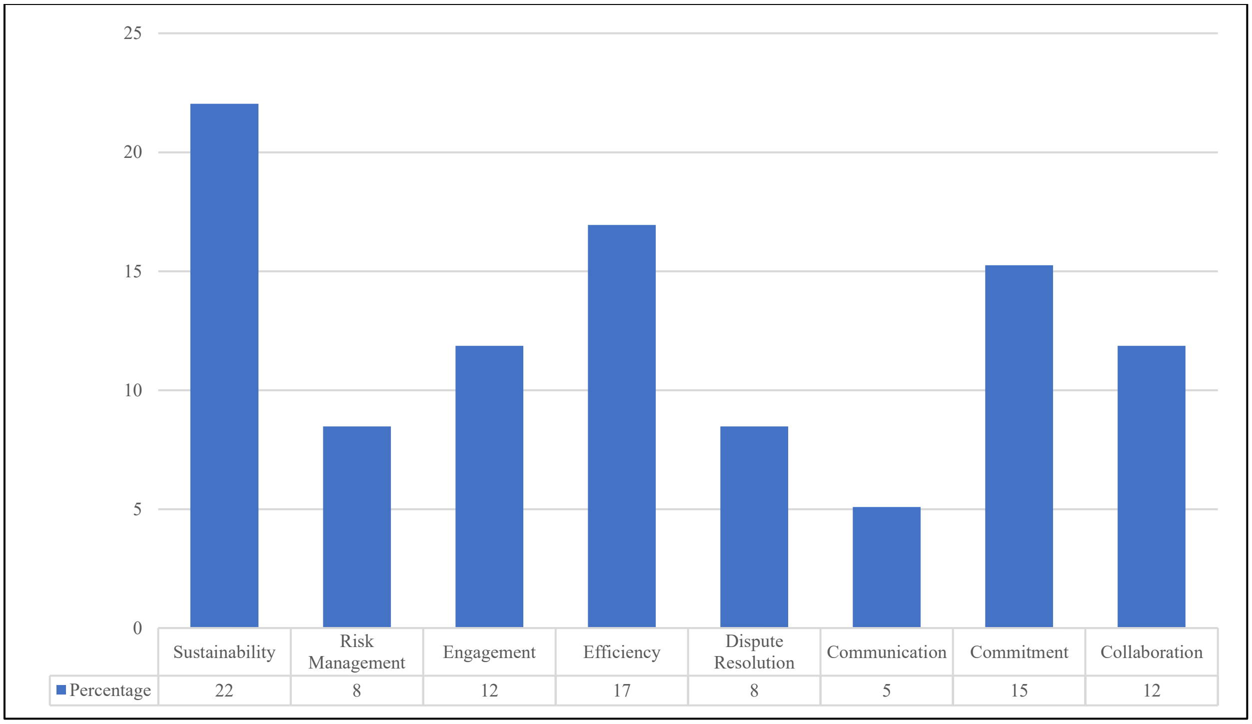


Figure 5.5: Percentage distribution of themes/best practices in PPP projects

Figure 5.5 presents the themes that emerged as best practices from the KIIs and this included sustainability which emerged from submissions by 22% of the participants, **commitment** by 16% of participants**, engagement** by 14%, **efficiency** by 12%, **collaboration** by 13%, **communication** by 9%, **dispute resolution** by 8% and **risk management** (6%).

Table 5.19 further presents the best practices in detail, showing the subcomponents of the best practices that emerged from the KII.

Table 5.19: Best practices of PPP project and subthemes of the best practices

Best Practices/Theme	Sub-themes on the Best practice
Sustainability	○ Commercialisation of products and services
	○ Environmental Safety
	○ Human Resource Retention
	○ Increased Access
	○ Internship
	○ Licensing
	○ Reverse Engineering
	○ Research
	○ Local Content

	○ Intellectual Property
	○ Joint Product Marketing
	○ Customer Appreciation
	○ Local Content
Risk Management	○ Contract Amendment
	○ Risk Mapping
	○ Risk Registration
	○ Risk Sharing
	○ Risk Insurance
Engagement	○ Hold Meetings
	○ Project Acceptance
	○ Stakeholder Awareness
	○ Stakeholder Involvement
	○ Stakeholder Mobilisation
	○ Stakeholder Onboarding
	○ Stakeholder Sensitisation
Efficiency	○ Clear and Effective Project Structures
	○ Effective Monitoring
	○ Framework contracting
	○ Good Leadership
	○ Introduction of New Innovative Technology
	○ Quality and Unique Products and Services
	○ Quality Customer Service
	○ Technical Expertise
	○ Timeliness
	○ Equipping Facilities
Dispute Resolution	○ Arbitration
	○ Discussions
	○ Investigation
	○ Third Party Intervention
	○ Waivers
Communication	○ Clear Communication Strategy
	○ Documentation
	○ Effective Information Sharing and Dissemination
Commitment	○ Capacity Building
	○ Compliance with Existing Regulations
	○ Creating an Enabling Environment
	○ Government Subsidies
	○ Land Acquisition
	○ Partner Readiness
	○ Political Will
	○ Regulatory Framework
	○ Resource Allocation
Collaboration	○ Achievement of Partner Objectives
	○ Compliance With Terms of Reference
	○ Contracting and Subcontracting other Partners
	○ Engagement in Negotiations

	○ Government Delegation of Roles
	○ Leveraging Resources
	○ Special Purpose Vehicle Formation

The results of Table 5.19 show that the best practices of sustainability, risk management, engagement, efficiency, dispute resolution, commitment, collaboration, and communication.

Sustainability encompassed various aspects including, commercialisation of products and services, ensuring environmental safety, retaining human resources, increasing access to resources and opportunities, facilitating internships for skill development, obtaining necessary licensing, implementing reverse engineering for innovative solutions, conducting research to address sustainability challenges, promoting local content and intellectual property rights, collaborating on joint product marketing efforts, and showing appreciation to customers. Risk management, included amending contracts, mapping out potential risks, registering identified risks, sharing risks with relevant stakeholders, and obtaining appropriate insurance. Engagement as a best practice incorporated the involvement of stakeholders, holding meetings, obtaining formal acceptance, raising stakeholder awareness, involving stakeholders in decision-making processes, mobilising support from key stakeholders, ensuring effective onboarding of new stakeholders, and sensitising stakeholders.

Efficiency as the best practice according to participants involved establishing clear project structures, monitoring progress effectively, employing framework contracts for streamlined procurement, demonstrating good leadership, introducing innovative technologies to improve efficiency, delivering high-quality products and services, providing excellent customer service, leveraging technical expertise, and ensuring timely completion and equipping project facilities. Dispute resolution included arbitration, engaging in discussions, conducting thorough, seeking third-party intervention, and considering waivers.

Communication as a best practice involved establishing a clear communication strategy, maintaining comprehensive documentation, effective sharing, and dissemination of information among stakeholders. Commitment as a best practice entailed building organisational capacity, ensuring compliance with relevant regulations and standards, creating an enabling environment, leveraging government subsidies, acquiring necessary land resources, preparing project partners for their roles and responsibilities, securing political will, establishing a robust regulatory framework, and allocating resources.

Collaboration included the alignment of project activities with partner objectives, ensuring compliance with agreed terms of reference, contracting and subcontracting arrangements among project partners, engaging in negotiations to resolve differences, delegation of roles and responsibilities, leveraging resources, and establishing special purpose vehicles.

The best practices are further detailed according to the phases of the PPP-PLC as illustrated in Table 5.20

Table 5.20: Best practices per phase of PPP-PLC

Project Identification	Procurement	Design and Construction	Operation and Maintenance	Transfer
Stakeholder Awareness	Contracting and Subcontracting other Partners	Clear and Effective Project Structures	Commercialisation of products and services	Arbitration
Stakeholder Mobilisation	Engagement in Negotiations	Effective Monitoring	Environmental Safety	Discussions
Stakeholder Sensitisation	Compliance With Terms of Reference	Framework contracting	Human Resource Retention	Investigation
Research	Government Delegation of Roles	Introduction of New Innovative Technology	Increased Access	Third Party Intervention
Local Content	Leveraging Resources	Quality and Unique Products and Services	Internship	Waivers
Risk Mapping	Special Purpose Vehicle Formation	Technical Expertise	Joint Product Marketing	Reverse Engineering
Risk Registration		Equipping Facilities	Customer Appreciation	Licensing
Risk Sharing		Timeliness	Quality Customer Service	
Risk Insurance		Environmental Safety	Intellectual Property	

This section focused on the outstanding role of best practices towards overcoming barriers in the value creation process throughout the phases of the PPP-PLC. The themes that emerged for best practices offered insight into the practices adopted and implemented by stakeholders within the PLC at different phases. Understanding the best practices was fundamental to the study, as they served as key components of PPP projects but also as building blocks for the development of the best practice value creation framework.

5.8 Chapter Summary

This Chapter presented the results of the study in answering the SQs and proving or disproving the research propositions on the potential of PPP projects to create value, the current practices across different phases of the PPP-PLC, the barriers hindering value creation, and the best practices that enable projects to overcome these barriers. The findings highlighted a **diverse range of activities undertaken by stakeholders in various phases of PPP projects throughout the PPP-PLC**, from project identification, procurement, operation and maintenance, design and construction and transfer phase. These findings were presented using tables, figures, textual analysis, and direct quotations from KIIs using the interview guide as presented, offering a comprehensive view of how value is created or hindered throughout the PPP-PLC. The results presented in this Chapter laid a strong foundation for Chapter six, which builds upon these results to synthesise and analyse the results so as to develop the best practice value creation framework presented in Chapter seven.

CHAPTER SIX : SYNTHESIS AND ANALYSIS OF RESULTS

6.1 Introduction

Chapter five presented the results from the data collected through KIIs with participants, using the pre-approved semi-structured interview guide. The study collected data from sixteen (16) participants including project managers and project end users from among the 28 PPP projects in Uganda. The results in Chapter five were presented using text, figures, tables, and excerpts, to capture and illustrate the emerging themes. The results were further organised in order of the research SQs (SQ1-SQ5), and research propositions P (1)-P (2) to achieve the main research goal: **To develop a best practice value creation framework for Public-Private Partnership (PPP) projects.** The inquiry was guided by the MRQ which sought to understand how PPP projects create value for their stakeholders, and further by the main research goal using the research design and methodology outlined and adopted in Chapter four.

This chapter presents a synthesis and analysis of data collected from KIIs to present a coherent narrative aligned with the study's MRQ. According to (Littell, 2013: 296), synthesis in qualitative research enriches the understanding of experiences, mechanisms of change or adverse effects of intervention. Consequently, in this chapter, the study critically examined the results presented in Chapter five to answer the SQs and research propositions.

6.1.1 Answering research questions and proving or disproving research proposition

In this chapter, the study presented the themes that emerged as patterns as they emerged to provide and give deeper meaning to the concept so as to enable the study make comparisons across the different other studies. The study systematically evaluated the research propositions, to answer SQs and address the MRQ. As Avan and White (2001: 52), noted that the concept of a research proposition justifies the existence of a concept, explains it, and establishes the relationship it has with other concepts. In the process of generating themes, the insights that resulted are presents as a contribution to academic discussions, to ensure that research results are valid enough and this is established through proving or disproving the research propositions of this study.

The next sections present the synthesis and analysis of results that was conducted in the order of the research sub-questions (SQ1-SQ5) and research propositions (P(1)-P(5)) concurrently.

6.2 Answering Research Sub Question One (SQ1)- What Is The Potential Of PPP Projects To Create Value For Stakeholders? And Proving Or Disproving Proposition One P(1) - PPP Projects Have The Potential To Create Value For Stakeholders

Chapter five, section 5.4 presented the results of the study, and themes that emerged from the data collected to answer research sub-question SQ1-*What is the potential of PPP projects to create value for stakeholders?* and to prove or disprove the proposition P(1)-*PPP projects have the potential to create value for stakeholders through the Project Lifecycle (PLC).* To achieve this, the study collected data about the sectors within which PPP projects were executing activities, the phases at which projects were within the PPP project lifecycle, the role of project managers, the role of project end users, the experience of the project managers and project end users, the job titles of project managers, activities undertaken by the project managers and project end users within the PLC, the education background of the project managers and the project end users, the stakeholder perceptions of the context of PPP, expectations of project managers and project end users, and the benefits reaped from PPP projects by Project managers and project end users.

The next sections 6.2.1 to 6.2.6 present the synthesis and analysis of the data in Chapter five, section 5.4 to answer the SQ1 and prove or disprove research proposition P (1).

6.2.1 Sectors within which PPP projects create value for stakeholders

The results presented in Chapter **five 5.4.1** revealed that there were diverse sectors that had adopted the PPP mode of project delivery. The spread of the projects in these sectors was a clear indication of the need for the products and services by the stakeholders in those sectors. Further the results suggested that public sector appreciated the PPP mode of delivery in the economy.

From the results, the study found that PPP projects were established and executed their activities within different sectors like agriculture, education, Information Technology, energy, manufacturing, and transport. The projects within those sectors had a diverse number of stakeholders spread out and executing project activities at different phases of the PPP-PLC. And, whereas some projects were found at the project transfer phase, other projects were at the project identification phase or another phase within the PPP-PLC which indicated that there was more than one project implemented in Uganda and that these projects were delivering value at those phases in those sectors. As a project progresses from one phase to the next, it creates value inform of outputs which then feed into the next phase. Evidently the progression of projects from one phase to the next indicated that there was value created at the end of one phase that necessitated the progression to the next phase. In some instances, though, some projects were at different phases of the PPP-PLC they delivered products and services within the same sector. For example, the results of the study indicated that within the agriculture sector, whereas one of the projects was at the project identification phase, another was at the operation and maintenance phase, and the other was at the transfer phase, but all were within the same sector delivering products at different phases. From this finding the study also inferred that some sectors had more PPP projects active than other sectors, and in some cases, these were spread across the spectrum of the PPP-PLC delivering different products and services for stakeholders.

Literature argued that PPP projects were initiated due to the inherent complexity of infrastructure projects which necessitated the public sector to share risks with the private sector while retaining a supervisory role, in the delivery of public goods and services. The recurring adoption of the PPP model to implement projects by more than one sector at different phases was therefore attributed to the financial burden that government had which prompted the need to deliver infrastructure products and services with reduced burden to government to deliver quality infrastructure that satisfied stakeholder needs. The study therefore understood that stakeholders like those in Uganda's agricultural sector benefited greatly from the execution of projects using the PPP method as evidenced by how the sector continued to partner with the private sector on different projects to satisfy stakeholders. This is in line with Anderson and Ratiu (2019: 215), who claimed that how stakeholders felt about a project influenced their purchase behaviour and caused them to either support or go to extremes to boycott the projects and that stakeholders were more open to engaging in PPPs that focused on their issues.

Based on existing literature, a normal PPP lasts for an extended period, usually ten years or longer. From the results, the study understood that projects at the transfer phase of the PLC had lasted at least ten years of execution of activities within the sector within which it was established. However, Alghamdi *et al*., (2022: 5), argued that some PPP projects extended ten years or more depending on whether the private sector had reaped profit from the collection of user fees or if the public partner had financed the project when it couldn't be financed through user-pay. The length of the concession depends on whether the private entity had reaped the profit due to them. This could elapse before ten years for those projects that were not based on user-pay but rather on capital agreements where the private sector had not directly collected user fees, but government made payments based on performance standards. However, the study could attest that the project existed for more than ten years since one of the project end users according to section **5.3(iii)** had used PPP products for between 20-29 years and was still using them. These results proved that PPP activities had existed within Uganda's landscape for longer than 10 years and users had benefited from them for more than 10years while they created value within the sectors where they were set up.

Regardless of the arrangement though, the delivery of products and services was evidence that the projects had the potential to create value for stakeholders in the PPP-PLC.
In some projects, there was evidence of transfer of assets by the private sector to government which indicated that value was created within those sectors as presented in Chapter **f**ive, section 5.4.1. Further, the existence of activities of registering intellectual property by government indicated that the public sector was preparing to take over project assets in preparation for future collaborations with other partners. Moreover, the presence of multiple projects within the same sector, along with the registration of intellectual property suggested that PPP projects had created value for stakeholders in the agriculture sector. Furthermore, there was evidence of expansion of the PPP project method of delivery to other sectors of Uganda's landscape and this demonstrated the appreciation of the model and its potential to create value for stakeholders within those sectors in which they were established and potentially to those where they had expanded. These findings aligned with Anshuman and Mallick (2024: 75), who emphasised that PPPs had the potential to

improve project delivery, service quality and cost saving in the sectors within which they were situated.

Furthermore, the results presented in Chapter five (5.4) indicated a presence of multiple PPP projects within the same sector that suggested that the projects had created value for stakeholders within the same sectors. Therefore, the expansion of the PPP mode of project delivery to other sectors demonstrated an appreciation and need to tap into the potential of PPP projects by the public sector, to create value for stakeholders in the diverse sectors. These findings also aligned with Anshuman and Mallick (2024: 75), who stressed that PPP projects had the potential to improve project delivery, service quality and cost saving in the sectors within which they were situated.

6.2.2 Phases of the PPP-PLC at which value was created for stakeholders

The results presented in Chapter five, Table 5.6, illustrated the various phases of the PPP-PLC in which PPP projects were actively engaged. The findings indicated that at least one PPP project was ongoing at a specific phase of the PPP-PLC, whether at the project identification, procurement, design and implementation, operation and maintenance, or transfer phase.

These results suggested that stakeholders demonstrated a strong appreciation for the PPP model and were actively engaged in executing projects using this approach. For example, in the agricultural sector, where three distinct projects (PM12, PM13, and PM07) were identified at different phases of the PLC, one at the project identification phase, another at the operation and maintenance phase, and the third at the transfer phase. This indicated that projects executed across various sectors, particularly in agriculture, generated value for stakeholders at different phases of their life cycle.

Furthermore, the presence of a PPP project at the transfer phase within the agricultural sector signified that the PPP-project had successfully created assets that the public sector regarded as sufficient for the delivery of projects that were of value to the sector and its stakeholders. Further, evidence from the field indicates that there were ongoing activities in projects at this phase and that these activities required the registration of intellectual property (IP) for the products generated by the project as assets. These results suggested that the government had taken preparatory steps toward the official transfer of ownership of projects to the government. The study thus concluded that stakeholders within the agricultural sector had effectively adopted the PPP model, generated tangible, and valuable assets through the PPP-PLC, which the government deemed significant enough to register as intellectual property.

These findings aligned with the work of Alexander, Ackermann and Love (2019: 682), who emphasised that while PPP projects engaged in long-term contractual arrangements, they also created assets that retained utility across different phases of the PPP-PLC and beyond.

Based on these results, the study attained deeper insight into the value that the public sector placed on the PPP model, as evidenced by the execution of multiple projects at various phases of the PPP-PLC across diverse sectors of Uganda's economy. Additionally, the findings indicated a sustained commitment among stakeholders towards the PPP project delivery model, which had facilitated the implementation of further PPP projects across different sectors.

6.2.3 Role of stakeholders In PPP projects PLC

The results in Chapter Five, Table 5.7, presented the key roles played by project managers and end users as stakeholders within the PPP project lifecycle. The results suggested that there were various activities undertaken by the stakeholders that demonstrated that they were active rather than passively involved in the projects. From the results, it was clear that project managers assumed diverse roles, of team leader, project director, senior project officer, coordinator, program manager, portfolio and investment manager, project administrator, field officer, and infrastructure manager. On the other hand**, project end users engaged in the projects through consumption of products and services of the facilities, tariff payment, budgeting, overseeing development and implementation, and providing feedback on the projects on their outcomes**. In the relationship between project managers and end users, the study interpreted that **the stakeholders maintained a symbiotic relationship where one party consumed, and another party performed activities that led to development of satisfactory products and services**. The results aligned with Harris and Clark (2024: 284); Saidin Misnan (2024: 2000), who stressed that project managers are tasked with multiple duties that required them to employ various skills. Further, their possession of a distinct set of indispensable soft and hard skills for project implementation, accurate estimation of funding requirements, and budg*et al*location enabled projects to achieve specific objectives.

The active participation of project managers in their various roles was further explained by the PV theory which stressed that public managers were not merely implementors but rather are part of the creators of value and that their roles demonstrated the proactive efforts towards the creation of value as they collaborated with other stakeholders, provided diverse perspectives all towards enhancement of value**. Similarly, project end users were not only consumers but participated in activities and played different roles beyond simply consumption.** These findings agreed with Ciu and Wijayanti (2024: 64), who contended that users played a fundamental role in paying service tariffs based on product value, prior satisfaction, convenience, and trust, all of which influenced purchasing decisions.

From the discussion, the study interpreted that the PPP project stakeholders participated throughout the PPP-PLC but whereas some were involved for shorter-term others were engaged over a long term that depended on their dynamic roles and expectations that changed as the projects progressed, to ensure that the projects were executed to satisfaction. Further the **titles of the project end users who emphasised their roles as *"consumers"* indicated that PPP projects were creating value for them at that point, from project outcomes**. The differentiation of roles between project managers and consumers suggested that value creation within PPP projects was perceived differently and depended on the stakeholder and their involvement.

6.2.4 Experience of stakeholders on PPP projects

Results presented in Chapter Five, section 5.3, subsection 5.3.1, and **Table 5.5**, of the study on project experience of project managers involved in PPP projects, revealed a diverse range of backgrounds. The results indicated that while some projects prioritised hiring project managers with extensive experience, others placed less emphasis on this factor. A similar trend was observed about prior PPP project experience where some managers possessed longer PPP project experience than others. Although Uganda's PPP Act and regulatory framework came into effect nearly ten years ago, some project managers reported more than 10years project related experience. This indicates a combination of PPP-specific experience and broader project management roles which included both traditional public sector and or donor funded infrastructure project experience which involved private participation before commencing in formal PPP project work. From the data, the study can infer that their experience often spanned different delivery models and that PPP project experience was the more recent addition. Furthermore, the findings suggested that the majority of the project managers had less than ten years of experience, and this indicated that some projects were open to hiring managers with varying levels of expertise. This finding aligns with the PPP projects that have reached financial close while under the current PPP Act

Montalbán-Domingo, Casas-Rico, Alarcón and Pellicer (2024: 7), emphasised the importance of experienced project managers in achieving project goals. Huang, Shi, Zheng and Zhu (2015: 27), argued that experience in management is progressively developed through an accumulation of knowledge, information, and insights. Additionally, the study found that even as project managers involved in the projects held different titles, their responsibilities aligned mainly with those of traditional project managers who oversaw conventional projects. Key duties included project development and implementation, advisory services, stakeholder sensitisation, research, and stakeholder engagements. This multifaceted nature of their roles required them to be adaptable, respond to the specific demands of their sector, the nature of the project, and its unique activities, which were similar to those of their counterparts in traditional project management. Layek and Koodamara (2024: 11), noted that professionals developed a broad skill set and greater confidence in their abilities over time, which enhanced their capacity to take on more complex responsibilities.

Based on these findings, the study concluded that PPP project activities in Uganda were more actively progressing toward value creation for stakeholders, even with the varying experience of managers. The results further suggested that within the dynamic environment, the project managers had developed necessary skills over that enabled them to navigate and effectively fulfil their objectives.

The study results presented in **section 5.3(iii) and Table 5.5,** in Chapter Five indicated varying levels of commitment among project end users toward PPP project products and services. While some end users consistently utilised and remained committed to these products for several yearsexceeding one year or even a decade, others abandoned them after an initial attempt as presented in section 6.3. This finding suggested that those users who continued using the products long-term were more satisfied, whereas those who encountered challenges or dissatisfaction discontinued their usage early. Consequently, the findings highlighted that those higher levels of satisfaction contributed to end user loyalty, while dissatisfaction led to product abandonment.

These results aligned with the studies of Aripin, Ermeila and Alfian (2024: 2); Zhang and Li (2024: 2), who argued that positive user experiences played a crucial role in fostering loyalty and increased long-term commitment to a product. However, the study also acknowledged the potential influence of monopolistic market conditions on extended product usage beyond ten years. In some instances, government policies allowed certain PPP projects to operate as monopolies, thus limiting competition and consumer alternatives despite the cost to the user. Hassan (2024: 1), supported this view and asserted that governments regulated monopolies by controlling product availability and pricing, thereby shaping consumer choices. Similarly, Bourguignon, Frys and Belleflamme (2022: 22), argued that monopolies centralised services to align with consumer preferences and enhanced satisfaction.

Given this perspective, the study understood that while some end users had continued their engagement with PPP-project products due to genuine satisfaction, others may have done so out of necessity or a lack of viable alternatives. This argument therefore challenged the assumption that prolonged usage alone signified satisfaction. However, despite potential monopolistic influences, the findings suggested that the continued engagement of end users was primarily driven by the need and value derived from the PPP project's products and services which was out of need for those products. This reinforced the argument that PPP projects had the potential to create meaningful value for stakeholders, addressed essential needs and sustained long-term service delivery.

6.2.5 Stakeholder expectations of PPP projects

Results presented in Chapter Five, Table 5.10, suggested that project managers and project end users, as stakeholders held a range of expectations of PPP projects. The expectations included infrastructure development, revenue generation, employment, expertise enhancement, quality products and services, and increased access among other expectations. The study inferred that stakeholders viewed PPP projects as vehicles to realise their expectations by achieving tangible outcomes and intangible benefits. Stakeholder expectations presented in this study thus served as the yardstick for the measurement of stakeholder satisfaction and the level of anticipation by stakeholders indicated stakeholders' steadfast commitment to the successful execution of PPP projects, driven by their individual interest in the investment and the potential outcomes.

Moreover, the expanse of the stakeholders' expectations reflected their confidence in the ability of PPP projects and their involvement in PPP value creation posed the possibility of PPP projects to surpass the achievements of previous endeavours by government by leveraging private sector resources to create benefit (value) for them. These results aligned to research by Silva, Nuzum and Schaltegger (2019: 205), linked stakeholder roles to their expectations. The alignment ensured the effective execution of PPP projects with expectations of stakeholders as a motivation for value creation, and understanding stakeholder expectations as a guide for project activities, essential for stakeholder satisfaction. Further, this finding aligned with Santos and Fernandes (2024: 2), who asserted that in sustainable project management, it was important to prioritise stakeholders, based on their anticipated benefits from the different perspectives. This was substantiated by Izakova, Kapustina and Drevalev (2024: 5), who reiterated that, by identifying factors which impacted consumer satisfaction, managers could assess consumer orientation and facilitate measures to improve project sustainability. The study therefore inferred that stakeholder expectations were crucial to value creation, and their consideration by PPP projects and involvement of the stakeholder by assigning roles in the PPP-PLC further suggested that stakeholders could create value suitable to them, enabling them to meet their needs.

6.2.6 Benefits of PPP projects to stakeholders

Results in Chapter Five, Table 5.11, indicated that stakeholders of PPP projects perceived PPP projects as a source of benefits. From the results of the study on the benefits reaped by stakeholders from PPP projects, the study inferred that the projects were a source of benefits for a diverse range stakeholders within different sectors, at different phases of the PPP-PLC. The acknowledgement of the stakeholders to reaping benefits/value indicated that PPPs were a source of value to them.

There are a number of benefits that the stakeholders highlighted, and these included the development of infrastructure, community development, employment, enhanced livelihood, delivery of quality goods and services, fostering of learning and innovation, and a source of revenue. These benefits were reaped by stakeholders within their respective spheres or sectors. This indicated that wherever PPP projects were established, they earned value for the stakeholders. These aligned with

Tajani, Locurcio, Di Liddo and Wojewnik-Filipkowska (2022:9), who asserted that PPPs were expected to deliver a wide range of benefits related that ranged from technical aspects, politics, and culture. Castelblanco, Guevara, Mesa, and Hartmann (2022:12); Çıdık, Garfias Royo, Mulligan, K'oyoo and Parikh (2024:2) also asserted that value transcended mere delivery of infrastructure, extending beyond economic worth and immediate outcomes to value.

From these results and discussion, the study gained an understanding of what constituted value to stakeholders, established that stakeholders benefited with value and further that the value was not only about infrastructure delivery but also other benefits like employment. This synthesis and analysis also enabled the study to answer research sub-question one (SQ1) on the potential of PPPs to create value for stakeholders. The following salient issues were noted:

Salient Issues:

a) PPP projects in Uganda were established across various sectors to create value for stakeholders both within and outside those sectors.
b) PPP projects conducted activities at different phases of the PPP-PLC, like project identification, procurement, design and implementation, operation and maintenance and transfer and these were inherently value-creating.
c) Stakeholders in PPP projects were not static, and their roles and levels of engagement were dynamic, changing over a dynamic period of time.
d) Stakeholders had varied perceptions of what constitutes a PPP project and indicated the dynamic nature and role of stakeholders throughout the PPP-PLC
e) PPP projects were perceived as a response to deficiencies in the public sector that required collaboration between the public and private sector to deliver goods.

f) Stakeholders were involved in the various PPP project phases and had reaped benefits like employment, infrastructure, community development, training, and exposure, among other benefits.
g) Various stakeholders within different PPP projects across multiple sectors played roles including project management, feedback provision, consumption, leadership, and sensitisation among others in a bid to create value within different sectors.
h) PPP projects engaged in long-term arrangements which stretched ten years and more and resulted in the creation of assets, which stakeholders operated within the PPP-PLC.
i) Stakeholders engaged in the PPP-PLC had dynamic roles which were diverse with differing projects, sectors, and contexts.
j) Stakeholder satisfaction or dissatisfaction was related to the number of years spent using the products and services.
k) Stakeholders had diverse expectations like employment, exposure, quality products and services, infrastructure development and professionalism which were crucial in guiding project activities towards value creation.
l) While some projects hired project managers with extensive experience, others hired those with less extensive experience but most experience acquired by project managers who managed PPP projects was acquired on the job.
m) PPP projects hired project managers with advanced educational backgrounds mostly at the Masters' Master's degree level.
n) Stakeholders benefited from the projects either through infrastructure development or other benefits like employment, a source of income and these were also directed to them and match the expectations that they had of PPP projects.

The synthesis and analysis of results presented in this section addressed research sub-question (SQ1) and proved research proposition P(1) that PPP projects have the potential to create value for stakeholders through their PPP-PLC.

6.3 Answering Research Sub Question Two (SQ2)-What Are the Current Practices Within Uganda's PPP projects That Create Value for Stakeholders? And Proving or Disproving Proposition Two (P(2))- Current Practices Within Uganda's PPP projects Create Value for Stakeholders

Results in Chapter Five section 5.5 formed a basis to answer the research sub-question (SQ2) - *What are the current practices within Uganda's PPP projects that create value for stakeholders?* And to prove or disprove Proposition 2 (P(2)) that there *are current practices within Uganda's PPP projects that create value for stakeholders.* The next sub-sections present a synthesis and analysis of the results to answer the research sub-question and prove or disprove the research proposition.

6.3.1 Stakeholder perceptions of the current state of the PPP landscape in Uganda

As presented in Chapter Five (section 5.5), stakeholders' perception of PPPs in Uganda highlighted a growing recognition of PPPs as a viable mechanism for addressing the country's financial constraints while leveraging private sector investment. The findings indicated that Uganda had established systems and a regulatory framework that favoured the implementation of PPPs like the enactment of the PPP Act (2015) and the establishment of the PPP Unit, which guided PPP activities. Additionally, PPDA regulations had supported PPP implementation, particularly at the procurement phase.

Despite a regulatory framework and ongoing project implementation, Uganda's PPP landscape was not without challenges. Participants cited bureaucratic inefficiencies, institutional capacity gaps, and governance issues identified in Chapter Five continued to constrain the efficiency and effectiveness of PPP projects. Whereas the government actively sought private sector collaborations, stakeholder confidence in the PPP model was inconsistent ranging with mixed feelings, shaped by mixed experiences, policy misalignment, and poor execution.

The finding that participants felt that Uganda's private sector was sophisticated enough to participate and that evidently many private entities remained reluctant to engage in PPP projects was also tagged to persistent bureaucratic inefficiencies, poor governance, and Uganda's unstable risk profile. Some local private investors had actively sought government collaboration but failed to partner though PPP projects. Results from participants indicated that the majority of the private partners engaged hailed from China and not within the region. The poor governance structures further highlighted the inadequate capacity of government to effectively implement which meant that the gaps contributed to failure by projects.

Literature reviewed in Chapter Two (section 2.4) confirmed the findings that while Uganda's PPP landscape presented opportunities, it was also fraught with challenges which were deep-rooted in the system for example the rigid regulatory framework which even affected the registration of PPP projects that existed prior to the PPP Act, with the PPP-Unit. Yet, despite these constraints, PPP projects were becoming increasingly prevalent in various sectors of Uganda’s economy and overall, the morale about the engagement in new PPP projects among the project managers was high. However, on the other hand due to lack of sufficient awareness, the public appreciation and awareness of PPP mode of delivery especially among end users remained low, riddled with ambiguity surrounding their role and impact.

Results presented in Chapter Five Table 5.6, further illustrated the various phases of the PPP-PLC where active projects were situated. At least one PPP was ongoing at each phase, whether at project identification, procurement, design and implementation, operation and maintenance, or transfer, which provided evidence of PPP activities creating value within Uganda’s economy. Moreover, the existence of project managers who executed different roles within the projects and project end users who consumed the projects, coupled with the benefits reaped from the projects, PPP projects had evidently proved that they had the potential and had thus far created value for stakeholders. Results indicated that there were more opportunities for private sector engagements in the PPP landscape.

The findings suggested that Uganda's well-defined PPP structure facilitated value creation. However, failure to address existing barriers indicated a persistence in challenges in stakeholder engagement, governance, and execution and limitations in the ability of PPPs to achieve their full potential. Results showed that the success of PPP projects depended on how well the government and private sector aligned their interests to drive long-term development and enhancement of value creation across Uganda’s economy.

6.3.2 Practices undertaken within PPP projects at different phases of the PPP-PLC

Results presented in Chapter Five, section 5.5.1, indicated that PPP projects in Uganda adopted a range of practices across different phases of the PPP-PLC to enhance value creation for stakeholders.

The results indicated that current practices reflected the activities undertaken by stakeholders across different phases of the PPP-PLC and how projects navigated the complexities of a dynamic environment. Whereas some activities were prescribed by the PPP Act of 2015, PPP policies, PPP regulations, PPDA guidelines, and unique PPP arrangements, among other regulatory frameworks, other practices were executed in alignment with the existing PPP regulatory structure.

The findings further revealed that projects adopted various PPP arrangements, including Build-Operate-Transfer (BOT) and Operate-and-Maintain (O&M) models. These depended on the project objectives and stakeholder interests. Within these arrangements, the PPP Unit played a critical role, particularly in coordinating project activities. The results showed that the unit was actively involved in some projects especially during the project identification and procurement phases to maintain government's supervisory role.

Further, from the results, it was clear that as projects progressed, their operational models evolved in response to environmental dynamics, project goals, and scope. While some practices were prescribed by the regulatory framework, others were adapted over time to meet emerging challenges and opportunities within the PPP-PLC. These findings aligned with Biygautane and Clegg (2024: 146), who confirmed that governments developed regulatory and institutional frameworks to support and administer PPPs effectively. The current practices across the PPP lifecycle, while clearly effective in getting things done and had evidently delivered value, were nonetheless riddled with issues that, if left unaddressed, could hinder the long-term sustainability and optimal value creation of these projects. The activities undertaken during each phase showed that despite the challenges and shortcomings, projects still managed to move forward to achieve their intended goals. However, these successes often came at a cost of inefficiencies, gaps in strategic alignment, and missed opportunities for more profound value creation.

At the project identification phase, approvals are secured, and stakeholders engaged, albeit sometimes more as a formality rather than a genuinely collaborative process, and this demonstrated that projects were able to move forward. Stakeholder buy-in, despite being a critical aspect, was therefore often a reactive step, aimed at securing support rather than building enduring relationships for long-term success. The value here was evident in terms of progression with the project, but the lack of a more robust, inclusive strategy at this phase meant that some potential value was missed, especially to ensure stakeholder trust and alignment with long-term goals.

Similarly, in the procurement phase, while the focus on contracting private entities was on bidding processes, and due diligence, this ensured that projects got executed, but these practices prioritised compliance and transparency over fostering deeper partnerships with private sector players. Although these activities led to project completion and value delivery, there was an underlying lack of strategic foresight in terms of partner selection based on broader value creation goals, such as innovation, sustainability, or community impact. This process therefore while functional, lacked the depth engagement that could lead to even greater value being unlocked throughout the life of the project.

During the design and construction phase, the successful execution of construction works, and contractor engagement showed that the projects were progressing towards completion. However, the lack of a comprehensive, value-driven approach, such as use of technology incubation or building more flexible project management techniques, presented a missed opportunity for deeper innovation. The result is that while projects were built and delivered on time, the potential for incorporating cutting-edge practices or responding more dynamically to emerging challenges was not fully realised.

In the operation and maintenance phase, while the project was being closely monitored and performance tracked, the focus was more on compliance with contractual obligations rather than on continuous improvement or long-term sustainability. Projects at this phase delivered the services expected, but without the implementation of more innovative strategies, such as performance-based incentives or an enhanced system for stakeholder feedback. Consequently, the potential for maximising value was not fully tapped. The projects did what they were designed to do, but they did not incorporate more sophisticated methods for engaging with stakeholders and optimising operations at that phase.

Finally, the transfer phase where projects technically "wrap up" and while the handover to government was in the process of being achieved, the transition was more often procedural than strategic. The project evidently was being transferred, and the handover at completion, but the lack of focus on long-term oversight and knowledge transfer posed a threat of lost opportunity for post-transfer value creation. Despite this, the projects still delivered the intended outcomes, albeit without the lasting benefits that would have been achieved through more comprehensive transition practices.

In essence, while the PPP projects did indeed deliver value and successfully complete the tasks at hand, the underlying issues revealed that much of the success was achieved through sheer determination and by meeting the basic requirements of the phases involved. Despite the issues that permeate these practices, the ability to deliver remained a significant achievement, but one that could be vastly improved by addressing the gaps highlighted and incorporating best practices at every phase of the PPP lifecycle.

To answer SQ1: What are the current practices within PPP projects that create value for stakeholders? the study synthesised and analysed the results, highlighting the following key issues:

Salient issues:

a) Uganda faced financial constraints that necessitated the attraction of private investors to collaborate with the public sector through PPP projects
b) Uganda's private sector lacked the sophistication and adequate resources to effectively execute the PPP projects.
c) A number of private investors were willing to partner with government and some even had proactively sought the establishment of a partnership with government to deliver products and services.
d) Ugandan government established systems and a regulatory framework to attract private investors and regulate activities of the private sector for development including the PPP Act 2025, PPP regulations and guidelines 2019/20, PPDA regulations, subsidies, Tax waivers and

PPDA regulations and a PPP Unit responsible for overseeing PPP projects and these formed a basis for structuring PPP projects.

e) While some PPP projects implemented by Uganda's government were registered by the PPP Unit, other projects most of them were not registered by the PPP Unit.

f) There are a range of practices throughout the project PLC which involved stakeholders and whereas some were mandated, others were developed adaptively by projects to navigate the dynamic environment.

g) Some projects were struggling to create value for stakeholders and stakeholders in those sectors were sceptical about their ability to create value for stakeholders.

h) Many projects were creating value for stakeholders within the PPP landscape, and these were being scaled within the same sector by increasing the number of PPP project activities.

i) The project identification phase involved activities that laid the groundwork for PPP projects and this supported project viability.

j) Procurement phase involved rigorous processes for identifying and selecting capable partners and ensured that partners were protected from the opportunistic behaviour of other partners and that the projects generated benefits from the competitive practices.

k) The design and implementation phase presented activities or efforts towards the integration of practices that enhanced the creation of assets while adhering to contract terms for smooth operations.

l) The operation and maintenance phase represented the commitment of partners towards the delivery of products and services that ensured end user safety and project acceptance by partners and the end user.

m) At the transfer phase, projects had amassed assets which the private sector was in the process of handing over back to government.

n) The current practices were value-creating but riddled with challenges that posed a barrier to value creation calling for structured practices to be adopted from other successful projects in Ugandan context.

The synthesis and analysis of data presented in this section addressed research sub-question (SQ2) and proved research proposition (P(2)) that there are current practices among PPP projects in Uganda that create value for stakeholders as presented in section.

6.4 Answering Research Sub Question Three (SQ3) And Proving Or Disproving Proposition Three P(3)- There Are Barriers To Value Creation Within PPP Projects In Uganda

The results presented in **Chapter Five, section 5.6**, confirmed the presence of significant barriers that hindered value creation across different phases of the PPP-PLC in Uganda. This section addresses *SQ3: What are the barriers to value creation within PPP projects in Uganda? while also proving or disproving research proposition Three P(3): There are barriers to value creation within PPP projects in Uganda.*

The findings indicated that while PPP projects are designed to create value for stakeholders throughout their lifecycle, multiple barriers impeded this process at different phases. These barriers were multifaceted and manifested as either internal or external to the PPP-PLC, within or beyond the control of project partners, affected the entire lifecycle or only specific phases, and impacted some or all stakeholders differently. The study categorised these obstacles based on their scope and influence, as highlighted in **Chapter Five, Table 5.18.**

The barriers identified within Uganda's PPP-PLC revealed systemic inefficiencies that hindered project implementation and sustainability. Among the most significant challenges were bureaucratic inefficiencies, governance gaps, and financial constraints, all of which created bottlenecks at different phases of the PPP process. Bureaucratic delays, particularly in payment processing and government approvals, slowed down project execution, leading to financial losses and diminished investor confidence. The existence of conflicting government systems further complicated decision-making, creating an environment where projects struggled to navigate regulatory frameworks efficiently. Additionally, corruption remained an underlying issue, with shortcuts and a lack of transparency undermining the integrity of PPP engagements. These governance challenges mirrored findings from previous studies that highlighted weak institutional capacity as a major constraint in Uganda's PPP framework.

Financial barriers also played a crucial role in limiting the effectiveness of PPP projects. Moreover, the high costs associated with project preparation, maintenance, and regulatory compliance made these partnerships less attractive for private sector participation. Coupled with delays in financing and compensation of PAPs, these financial burdens created uncertainty, often leading to cost overruns and extended project timelines. Furthermore, high tariffs that imposed on end users rendered essential services unaffordable for the general public, thereby contradicting the fundamental objective of PPP projects, which was to enhance access to infrastructure and services. The issue of profit repatriation compounded this problem, as a significant portion of earnings from PPP projects were transferred to international contractors, leaving limited economic benefits for the local economy.

Another critical challenge was the capacity and operational limitations within both the public and private sectors. The lack of sufficient skilled personnel to manage and negotiate PPP contracts weakened the government's ability to secure favourable agreements. High costs associated with training personnel and maintaining qualified staff also further strained resources, leaving gaps in project oversight and execution. At the same time, opportunistic behaviours among private sector players, including middlemen interference and profit-driven motives, introduced inefficiencies that reduced the overall value derived from these partnerships. Compliance issues also emerged, as some users failed to adhere to project regulations, while counterfeit and competing products in the market challenged the viability of public services.

Beyond institutional and financial barriers, environmental, social, and political risks posed additional threats to PPP projects. Issues of climate change were significant factor, with unpredictable weather patterns causing delays in infrastructure projects. This also affected the quality of products and services. Similarly, insecurity, particularly vandalism and theft, jeopardized the longevity of investments, forcing project owners to allocate additional resources for security measures. Political interventions from oversight agencies such as the Inspectorate of Government (IGG) and the PPDA further complicated decision-making, as their involvement, though necessary for accountability, often resulted in additional layers of bureaucracy that slowed down project approvals. The unstable risk profile of Uganda as an investment destination further discouraged potential investors, who viewed the unpredictable regulatory environment as a deterrent to long-term commitments.

The complexity of executing PPP projects was further exacerbated by challenges in project scope management, service delivery, and stakeholder engagement. Changes in Terms of Reference and price fluctuations disrupted financial planning, leading to contractual disputes between partners. Service interruptions, including irregular supply and poor customer service, eroded public trust in PPP initiatives, while poor budgeting practices resulted in the failure to allocate resources for critical project components. Additionally, conflicts between partners, whether in management roles or decision-making, introduced instability, making it difficult to achieve project objectives efficiently.

These results reinforced the argument that PPP projects in Uganda faced multiple obstacles across their PPP-PLC, requiring more refined systems. Despite these barriers, some projects developed mechanisms to navigate and mitigate these challenges, enabling them to achieve their intended value creation objectives. However, for some PPP projects, these barriers remained a cause for concern, potentially compromising stakeholder satisfaction.

For the purposes of this study, a deeper understanding of these barriers provided a critical foundation for developing the best practice value creation framework, ensuring that PPP projects in Uganda could create value for stakeholders throughout their PPP-PLC.

Salient issues:

a) PPP projects faced several barriers throughout the phases of their PPP-PLC.
b) Each project faced barriers, some more than others, during the execution of project activities.
c) Barriers that affected projects were diverse in nature, both short-term and long-term, unique, or general to the project, for example, service interruptions, or general, faced by all projects like bureaucracies; others were internal like human resource constraints; others were external like insecurities like vandalism, others faced at particular phases like high tariffs while others faced throughout the PPP-PLC like climate change.
d) Barriers hindered the execution of project activities and if not well managed would spill out onto the products and services for example change in scope which had the potential to affect project stakeholders, hindering value creation.
e) Barriers frustrated project end users and project managers among other stakeholders and needed to be addressed.

Based on the synthesis and analysis, the study answered the research sub-question (SQ3) and proved the research proposition three P(3), that there are barriers within Uganda's PPP projects that hinder value creation.

6.5 Answering Research Sub Question Four (SQ4), What Are The Best Practices Within The PPP-PLC That Create Value for Stakeholders? And Proving or Disproving Proposition Four P(4) - Best Practices Within PPP Project Life Cycle Enhance Value For Stakeholders.

Results presented in **Chapter Five, section 5.7,** presented the best practices of PPP projects as highlighted by stakeholders of PPP projects. The best practices presented according to stakeholders created value for them throughout the PPP-PLC. The results of the data were collected to answer research sub-question (SQ4), *What are the best practices within the PPP-PLC that create value for stakeholders?* and prove or disprove research proposition four P(4)- *There are best practices within PPP-PLC that enhance value for stakeholders.* The results of the study revealed that stakeholders perceived best practices as those exceptional strategies implemented within a specific phase of the PPP-PLC, often extending into subsequent phases. These practices were not uniformly present across all projects at all phases, as, whereas some projects thrived due to their successful adoption, others struggled in their absence. The study stressed that embedding these best practices consistently across PPP projects enhanced value creation and strengthened project outcomes.

A critical observation is the interdependence of best practices across project activities. No single practice operated in isolation; rather, they functioned as an integrated framework, reinforcing one another to drive value creation. The study identified the following key best practices, illustrated in Figure 6.1, as fundamental to value creation within the PPP-PLC:

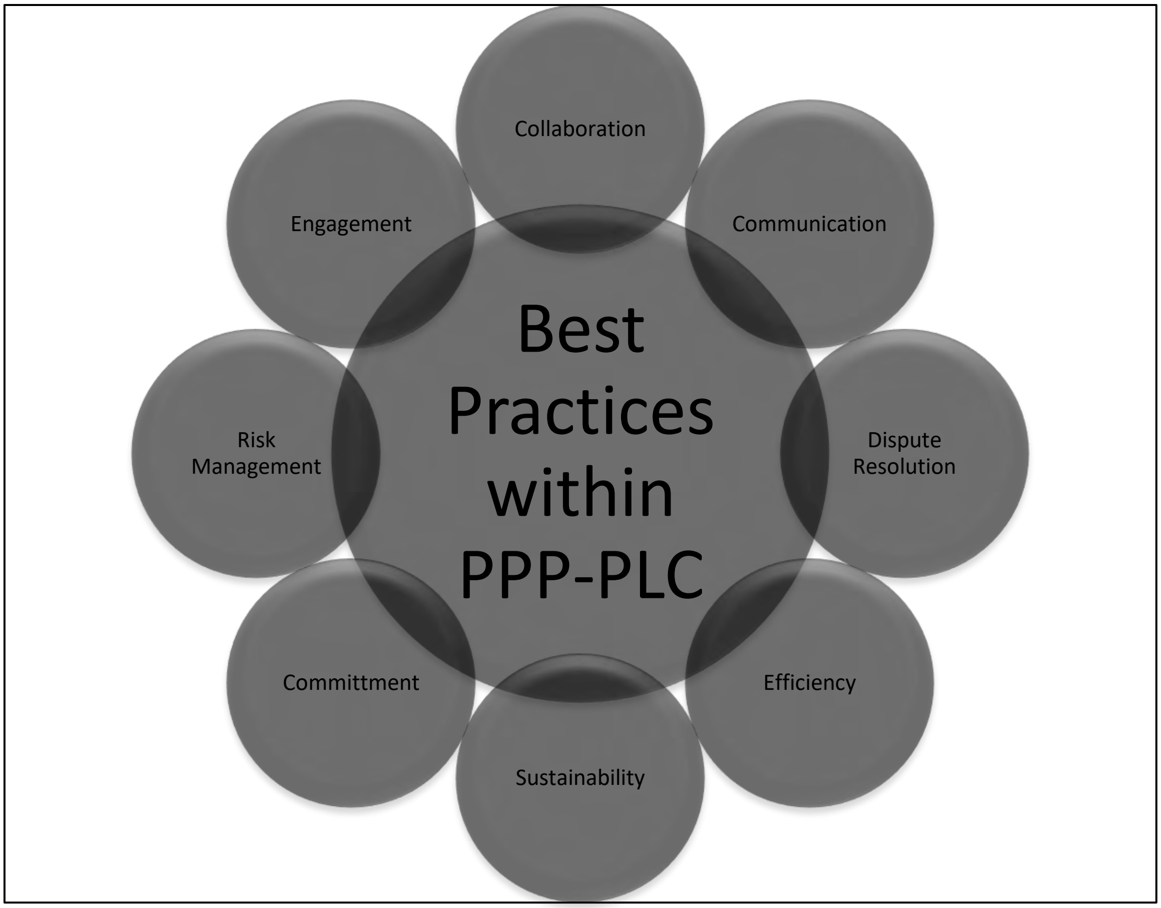


Figure 6.1: Best Practices Within PPP -Project Life Cycle (PLC)

Salient issues:

a) Best practices included practices that stood out from among the practices executed by stakeholders including engagement, collaboration, risk management, efficiency, dispute resolution, communication, commitment, and sustainability.
b) Best practices within all projects were present at all phases of the PPP-PLC despite some being more prominent than others.
c) Best practices were core for most of the projects as they were essential for the projects' exemplary performance and created value for the stakeholders, especially the end user. For example, as part of efficiency, some projects carried out activities that fostered timeliness at the operation and maintenance phase, and some projects benchmarked with others on their best practices, such as efficiency and communication.

d) For projects to create value for stakeholders, they need to incorporate best practices within their current practices in the PPP-PLC to stand out and create value for all stakeholders.
e) Projects that were sticking to current practices were still riddled with challenges in their practices.
f) Failure to incorporate best practices trickled down and had a negative effect on other stakeholders in the PPP-PLC, especially end users.

The synthesis and analysis of the results of the study answered research sub-question four (SQ4), by presenting the best practices which constituted elements of engagement, collaboration, risk management, efficiency, dispute resolution, communication, commitment, and sustainability within PPP projects that created value for stakeholders in the PPP-PLC and further proved research proposition four P(4) that there are best practices within the PPP-PLC that enhance value for stakeholders.

6.6 Answering Research Sub Question Five (SQ5)- What Is The Relationship Between Current Practices And Best Practices Within A PPP-PLC In Creating Of Value For Stakeholders And Proving Or Disproving Proposition Five P(5) - There Is A Relationship Between Current Practices And Best Practices Within The Project Life Cycle In The Creation Of Value For Stakeholders

This section of the study aimed at answering the research sub-question (SQ5)-*What is the relationship between current practices and best practices within the PPP-PLC in the creating of value for stakeholders* and proving or disproving the research proposition five P(5) that- *There is a relationship between current practices and best practices within the project lifecycle in the creation of value for stakeholders*. To achieve this, the study synthesised and analysed results presented in **Chapter Five, sections 5.4, 5.6, and 5.7** that demonstrated the intricate relationship between current practices and best practices undertaken by PPP projects during the phases of the PPP-PLC and how the practices collectively impact and enhance value for stakeholders. The results explored the various phases of the project lifecycle, meticulously examining how projects executed practices within the PLC phases and the extraordinary best practices that they engaged in within the PPP-PLC, which enabled them to navigate the dynamic environment to enhance value for stakeholders.

The results of the study suggested that at the project identification phase, the project engaged in current practices that exhibited basic stakeholder engagement and compliance within existing regulatory frameworks. The alignment of these current practices with best practices entailed a more intensive approach, encompassing the best practices of strong stakeholder mobilisation, comprehensive research, and proactive risk mitigation, further suggesting that projects needed to understand their stakeholders, establish their needs more effectively, mitigate risks, and establish a strong foundation to strengthen the value creation process for stakeholders' satisfaction.

Transitioning to the procurement phase, the study observed that projects engaged current practices that predominantly revolved around scanning the environment for opportunities and regulatory compliance, but best practices also required the project to embrace proactive measures like benchmarking with other countries, due diligence with other governments, and resource leveraging. Consequently, if aligned, only then projects would projects ensure efficient resource allocation, technical competence, and regulatory compliance, maximising stakeholder value project processes.

At the design and implementation phase, the study revealed practices that suggested a focus on project commencement and adherence to contractual terms by partners. In this phase, best practices required embracing full measures, including technological incubation, capacity building, and effective communication strategies, among others. The study inferred from the results that by integrating the current and best practices, projects fostered innovation, optimised resource utilisation, and maintained transparent communication channels, ultimately increasing stakeholder satisfaction and value creation.

During the operation and maintenance phase, the study noted that projects typically encompassed routine tasks like contract performance and reporting of project activities. Embracing best practices at this phase, like matching employee competence to pay, involved deeper engagement in areas of human resource retention and capacity building if projects were to attain more skilled manpower. Further, best practices like enhancement of safety measures enhanced live user satisfaction, enhanced issues of sustainability, quality service delivery, and stakeholder satisfaction and facilitated enduring value creation.

As projects transitioned towards completion, the transfer phase was extremely key, as, at this phase, the current practices centred on basic contract closure and project auditing procedures but embraced best practices that required the inclusion of activities like clear communication strategies, documentation, and succession planning for smooth transitions, effective knowledge transfer, and continued stakeholder engagement, ultimately creating opportunities for the projects to maximise value, resulting from project outcomes. Worth noting was that, even at this phase, just like in the previous phases of the PPP-PLC, the PPP Unit was instrumental in facilitating streamlined value-creating processes as the project transitioned from operation by the private sector to the public party and to achieve this, the unit served as a repository of data and guidelines, aiding projects in overcoming barriers.

This study offers an understanding of the interaction between current and best practices within the PPP-PLC, emphasising their collective impact on value creation for stakeholders. Christofi, Chourides and Papageorgiou (2023: 99), argued that the focus should be on applying efforts and actions in a systematic and ongoing manner within organisations. By providing actionable insights and a best practice value creation framework tailored to PPP projects. This study, therefore, contributed significantly to the discussion on value creation in project management, particularly within the context of PPP projects.

Salient Issues:

1. In some projects, current practices and best practices were incorporated concurrently during the implementation of project activities, and these were critical for projects to transition from one phase to the next.
2. While current practices were more intrinsic in nature, the best practices were deliberate to enhance the effectiveness of current practices for example whereas delivery of products and services to the end user during the operation and maintenance phase was a current practice, the timely delivery of the products and professionally was a best practice critical to ensuring that the end user continued appreciating the value acquired from the products.

The study answered SQ5 through and proved P(5) that there is a relationship between current practices and best practices within the PLC in the creation of value for stakeholders.

6.7 Answering the Main Research Sub Question (MRQ): How Can Value Be Created in PPP Projects In Uganda's Economy?

This section synthesised and analysed results presented in Chapter Five to address the MRQ (MRQ): *How can value be created in PPP projects?* The previous sub-sections of this Chapter presented a synthesis and analysis of results that established that PPP projects had the potential to create value across various sectors of Uganda's economy, including agriculture, health, transport, and ICT. The results further established that PPP projects undertook activities during phases of their PLCs, and they delivered products and services to stakeholders. Furthermore, stakeholders played a crucial role throughout the process, with their involvement and expectations serving as key drivers for PPP projects. As a result, stakeholders derived substantial benefits from the projects.

However, the study pointed out the existence of barriers within the PPP-PLC that hindered value creation. The barriers varied in nature and impact, with some more common across the PPP-PLC while others were unique to specific sectors or projects. Yet, despite the barriers, many projects had adopted best practices that facilitated their ability to adapt to the dynamic environment in which they operated, to achieve their objectives and create value for stakeholders. The best practices were characterised by elements of engagement, collaboration, risk management, efficiency, dispute resolution, communication, commitment, and sustainability, which are all key to value creation. So, projects that successfully navigated the barriers incorporated best practices tailored to their specific contexts.

For the study to answer the MRQ: *How can value be created in PPP projects in Uganda's economy?* It was important to recognise that value creation required an understanding of how best practices were deliberately incorporated with current practices to equip stakeholders with the necessary tools to create value. Table 6.1 presents a summary of the themes that emerged on "*how*" projects created value for stakeholders by presenting how the study answered SQs and proved or disproved research propositions in the different chapters. The data presented in Table 6.1 further forms the building blocks that enabled this study to develop the best practice value creation framework for PPP projects in Uganda.

Table 6.1: Summary of research propositions, data presentation and analysis

Research Propositions proved or disproved	Presentation of results and sections	Synthesis and Analysis of data and sections	Conclusion
P(1): PPPs create value for stakeholders through the Project Life Cycle (PLC).	Chapter Five, section 5.4, 5.3	Chapter Six, section 6.2 (Subsections 6.2	Proved
P(2): Current practices within Uganda's PPP projects can create value for stakeholders	Chapter Five, section 5.5, 5.5.1 (i, ii, iii, iv)	Chapter Six, section 6.3	Proved
P(3): There are barriers to value creation within PPP projects in Uganda.	Chapter Five, section 5.6	Chapter Six, section 6.4	Proved
P4: There are best practices within the PPP-PLC that enhance value for stakeholders.	Chapter Five, section 5.7	Chapter Six, section 6.5	Proved
P(5): There is a relationship between current practices and best practices within the project lifecycle that create value for stakeholders	Chapter Five, sections 5.4, 5.6, and 5.7	Chapter Six, sections 6.6	Proved
Main Research Question (MRQ): How do PPPs create value for stakeholders?	Chapter Five section 5.2 - 5.7	Chapter Six, section 6.2- 6.8	Answered

Table 6.1 presented the findings of the study illustrating how the study addressed the SQs and research propositions to answer the MRQ. The Table details the various ways that value was created by PPP projects throughout the PPP-PLC. By answering the SQs and proving or disproving the research propositions, the study demonstrated the determinants of the structure of a practice framework presented in Chapter Three, section 3.4, (the actors, the devices, the issues, and practices) that the study needs to develop a best practice value creation framework presented in Chapter Seven.

The next section presents how the study built towards the development of a best practice framework in the next chapter.

6.8 Building Towards A Best Practice Value Creation Framework

Reflecting on the chapters in this study, the foundation for the best practice value creation framework was systematically developed throughout this study, with each chapter contributing essential building blocks.

The groundwork was laid in Chapter One and Two, section 2.15 where a review of existing literature revealed gaps in value creation within PPP projects. These gaps established the need for a structured approach to guide projects toward creating value for stakeholders. The study identified that a best practice framework would enable projects facing value creation challenges to draw insights from those that had successfully navigated similar hurdles.

In Chapter Three, the study theorised the necessary steps for developing the framework. A structured approach was designed, culminating in a checklist presented in section 3.9, that outlined key steps towards building a practice framework, including data collection. This checklist served as the guiding structure for the research process. Following the methodological framework outlined in Chapter Four, data collection and analysis was conducted rigorously, ensuring alignment with the study's objectives. The results were then systematically presented in Chapter Five, forming the empirical foundation upon which the framework would be built.

Chapter Six advanced this process further by synthesising and analysing the data, extracting the essential building blocks required for framework development. The analysis demonstrated how the SQs were addressed and how the research propositions were proved in Table 6.1.

The key themes identified by this study, such as the impact of a project manager's educational background and the importance of stakeholder expectations and benefits as stressed, provided the much-needed insights that informed the design principles and operational strategies of PPP projects. The themes were integrated into the proposed framework, further providing direction for the study to build the value creation framework. This chapter, therefore, synthesised the findings into actionable best practices broken down and intertwined at the different phases to further enhance value creation. For example, engagement as a best practice was incorporated within the PPP-PLC, at different phases at the Project Identification Phase through stakeholder buy-in or stakeholder identification and can enhance efficiency. Similarly, the diverse roles and extensive experiences of project managers were some of the critical factors that formed part of efficiency, a best practice. Further, hiring of competent project managers as a practice executed at the project identification phase or at, the design and implementation phase or any other phase, depended on the nature of the project arrangement. But the assumption was that, by hiring a competent project manager, a project was assured of competent project management practices during the duration of engagement of the competent project manager. Further, at any of the phases of the PPP-PLC, the project manager's competence could be enhanced through capacity development and continuous training to boost the efficiency of project systems. Whereas all these practices exhibited elements of efficiency, a project could incorporate the practices required to enhance value for stakeholders at any point within its PPP-PLC.

This synthesis and analysis, therefore, confirmed that the necessary elements for constructing a best practice framework were now firmly in place. Figure 6.2 illustrates the steps that the study took towards building a framework.

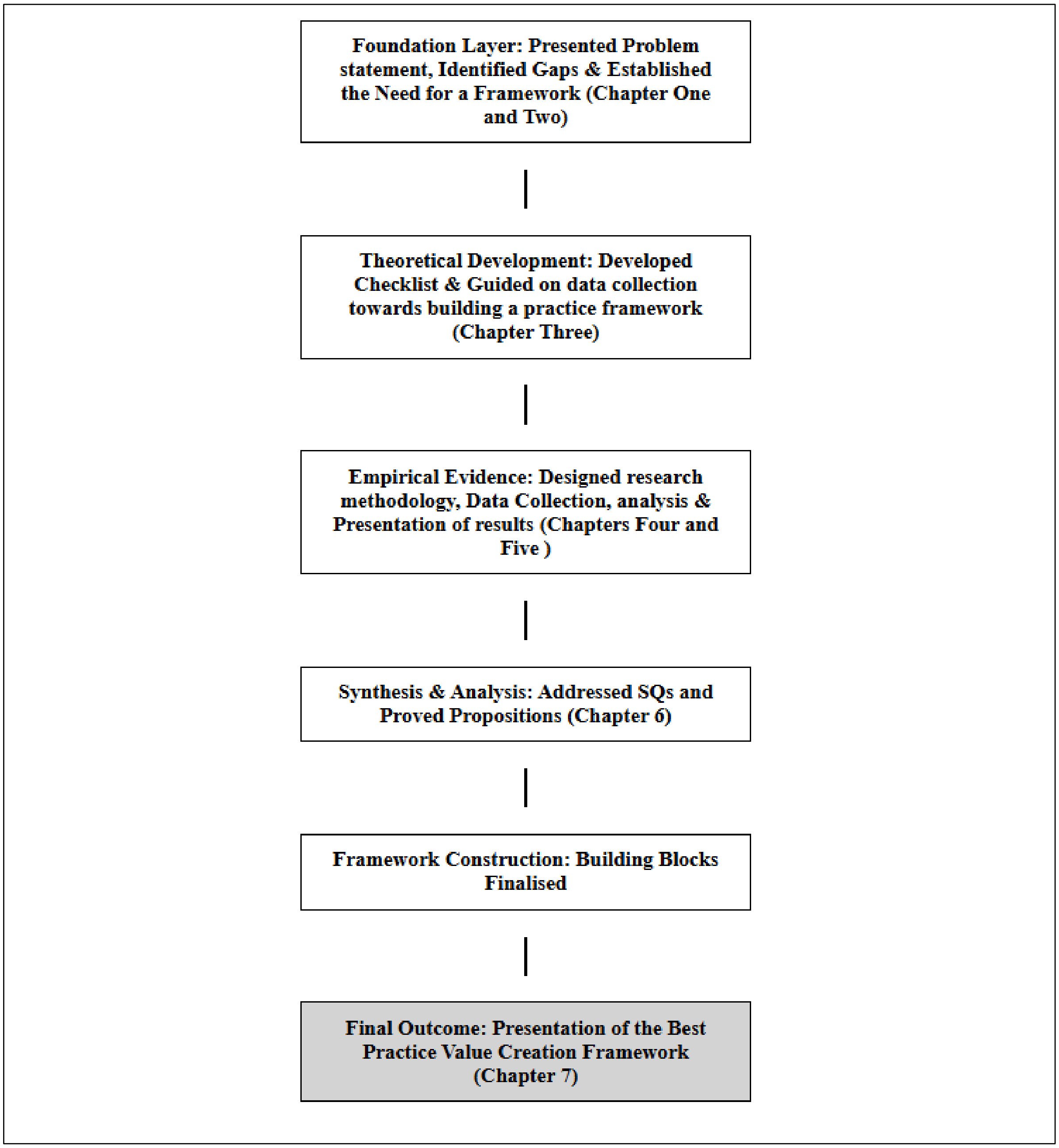


Figure 6.2: Building towards the best practice value creation framework for PPP projects

Figure 6.2 visually illustrates how each chapter in this study built upon the previous one to ensure a logical approach towards the development of a best practice value creation framework

6.9 Chapter Summary

This chapter presented a detailed synthesis and interpretation of the findings discussed in Chapter Five, directly responding to the MRQs and corresponding SQs. It drew on data collected from among project managers and end users engaged in PPP projects in Uganda. The analysis demonstrated that as PPPs transitioned from one phase to another, they followed a structure, structured practices, adopted structured practices, and often encountered barriers which required the incorporation of best practices to create value. Although the challenges affected the project's implementation, stakeholder expectations were met and value delivered to them whether tangible or intangible.

This chapter therefore substantiated the research propositions and m*et al*l set objectives, thereby contributing to the realisation of the study's main research goal. The discussion presented in this Chapter showed how value emerged throughout the different phases of the PPP-PLC, as a result of applying best-practices to support stakeholder expectations.

The evidence confirmed that value creation is context-sensitive and an evolving process, largely influenced by roles of stakeholders and how their interests align with the project's goal. The insights gathered in this Chapter lay the foundation for the next Chapter, which presents the best practice value creation framework. This framework emerges from the knowledge derived in this Chapter and reflects on the key themes, shortcomings, and effective practices uncovered through the synthesis. The developed framework is shaped by the contextual realities identified by the study and offers a practical direction to policymakers, implementers, and other actors involved in PPP projects. It seeks to strengthen the value creation process in upcoming and ongoing PPP projects by building on the evidence and reflections established in this analysis.

CHAPTER SEVEN : THEORETICAL AND PRACTICAL CONTRIBUTIONS TO KNOWLEDGE: A PPP PROJECT VALUE CREATION FRAMEWORK

7.1 Introduction

This chapter advances the study's main research goal: **To develop a best practice value creation framework for PPP projects**. As established in Chapter One, the research sought to address the existing gaps in the value creation process of PPP projects by providing a structured approach to guide stakeholders in optimising project outcomes. The literature review in Chapter Two further highlighted the theoretical and empirical limitations in existing PPP value creation strategies, reinforcing the need for a systematic framework.

To lay the groundwork for this effort, Chapter Three examined the theory of practice frameworks as management tools, outlining a structured process for framework development in the form of a checklist. A checklist that was presented in section 3.9 of the chapter was formulated as a result of the review of literature to guide the study on this process, ensuring that the process remained methodologically rigorous and aligned with the study's goals. In Chapter Four, the research design and methodology were applied, facilitating a robust data collection and analysis process. The empirical findings were presented in Chapter Five, and in Chapter Six, the study critically synthesised the data to extract fundamental elements required for the framework's development.

Further, in Chapter Six, section 6.8, the study systematically demonstrated how each preceding chapter contributed to the construction of the framework. It established that the necessary theoretical, methodological, and empirical building blocks were firmly in place. This chapter, therefore, builds upon those findings to complete the final steps of framework development, integrating the insights derived from the study into a structured framework.

The organisation of this chapter follows the steps outlined in the checklist, ensuring a logical and comprehensive approach to finalising the best practice value creation framework. The next section presents a reflection on the purpose of this study, contextualising its contributions and setting the stage for the framework's final development.

7.2 Reflection On The Purpose Of This Study

As this study reaches its final stages, it is essential to reflect on how its purpose has been realised. This research, from the start, set out to develop a best practice value creation framework for PPP projects by addressing gaps identified in the literature. To achieve the goal, the research journey bridged academic discourse with evidence, while at the same time drawing upon lived in experiences of stakeholders involved in PPP projects. Through a structured approach, the study reviewed existing knowledge, collected and analysed data, and synthesising findings. In the process, it contributed practically to the understanding and improvement of the value creation process in Uganda's PPP landscape. Gradually, the study systematically built towards achieving the main research goal which it now presents in this chapter. Evidently, this study extended beyond descriptive analysis, to provide an actionable contribution to policy and practice. This chapter therefore represents both a culmination and a confirmation of the initial purpose of the study, and other contributions, which the study has been fulfilled through a rigorous and reflective process.

7.3 Justification Of The Need For A Best Practice Value Creation Framework

Literature asserted that best practices are those processes that are deemed better at delivering a particular result than any other (Cuentas, Pico and Arias, 2015: 861). By answering research question SQ4 and proving research proposition four P(4), the study was able to answer and prove these propositions and establish that there are practices within the PPP-PLC which were deemed better at delivering value for stakeholders. The phenomena of best practices within the PPP-PLC is not new, as previous studies indicated in Table 7.1 explored and presented it, using parameters against which they measured the concept, including but not limited to project success, and value for money, among other measures. Whereas the studies narrowed the gap they did not bridge it. This study builds on theirs to present a best practice framework specific to value creation which extend beyond measurements of project success, value for money to include communication, sustainability, commitment, partnership, efficiency, dispute resolution, risk management and collaboration. These concepts are illustrated throughout the PPP-PLC, enabling this framework to function as a management tool for stakeholders. Table 7.1 presents examples of studies that previously presented frameworks in the context of PPPs.

Table 7.1: PPP practice frameworks from literature

Author	Terms Used	Parameters	Framework organisation	Context
Cheung, (2009)	Critical Success factors of PPP projects	Favourable legal framework, commitment, strong and good private consortium, stable macroeconomic condition, Appropriate risk allocation and risk sharing), Value for money (Efficient risk allocation, Output based specification, Competitive tender, Private management skills, Private sector technical innovation)	Framework organised as steps of implementing PPP projects, which included mobilisation and development of a business case, Funding, Technical assessments, consultation and land requirements, Expression of interest exercise, Policy and funding approvals, Procurement and selection, Service commencement, and Payment and contract management.	PPP projects in Hong Kong and Australia
Boadi, (2020)	Creating an enabling environment for private sector to invest in PPPs	17 best practices not categorised according to themes but simply stated as challenges and	PPP-PLC (Inception Phase, Procurement Phase, phase, Operation, maintenance and transfer phase, PPP challenges, best practice and recommendations at project level, policy level and private investor	Road Projects in Ghana
Osei-Kyei and Chan, (2018c)	Success, drivers, criteria	Critical Success factors/criteria for PPPs Identified 151 best practices and incorporated them within the PPP process in Ghana. Practices further presented according to partner (public and private partner)	Best Practices (Project Inception Phase, Procurement Phase, Stage Phase, Operation and Transfer Phase)	projects in Developing countries, a case of Ghana
Liu, Sankaran, *et al.*, (2024)	Value cocreation	Practices Organisational enablers Institutional motivators Resource management practices Relationship management practices	Contextual antecedents Resource management practices Relationship management practices to facilitate Midterm value outcomes Longterm value outcomes	Value Cocreation in PPP projects
Haddadi, (2019)	Value creation	How value creation is conceptualised, the characteristics of value and enhancement of value creation	Communication and information, Project strategy, Involvement Innovation	Value and Value creation in project

Table 7.1 illustrates the studies that have focused on developing practice frameworks in PPP context. The studies, and their frameworks offered valuable insights that informed the development of this study's framework. The study analysed the frameworks as follows:

As shown in the table, Cheung (2009)'s framework detailed critical success factors that PPP projects adopt to succeed. The study presented steps as "d*os*" and *"don'ts"* and not according to phases. The study also further validated the framework upon its development. The current study builds on lessons learnt to adopt the validation process as presented by Cheung and further incorporates the "d*os"* as best practices in the framework.

Boadi (2020)'s framework proposed best practices specific to policy, and private investors levels. The framework addressed key aspects of attracting private investors which is critical to value creation. The study studied the concept of value creation as strengthening attraction of the private sectors. The current study builds on this perception to expand the lens and incorporate the attraction of other stakeholders into the value creation process, including the private sector. In practice, projects require mechanisms to ensure that the public sector manages the risks of bringing onboard the private sector investments while also balancing the broader needs of the public and other stakeholders. This study builds upon this framework to develop a robust framework that caters to all stakeholders especially the end user who is the fulcrum of this partnership throughout the PPP-PLC.

Another study that provided strong foundation for the current study was conducted by Osei-Kyei and Chan (2018b) who presented a best practice framework offering a critical review of past frameworks, deriving 151 best practices from literature across the PPP-PLC. The study identified gaps in previous studies and organised the practices according to the phases of the PPP-PLC and partner roles. The current study builds upon this framework by adopting the presentation of best practices in the phases of the PPP-PLC and further presents the partner roles in the framework. While Osei-Kyei's study analysed secondary data and focused only on construction projects, the current study widens the lens to present best practices in the diverse sectors like agriculture, transport, ICT, health, Energy, industry, among others.

Another study by Haddadi (2019), presented a framework focused on value creation in PPP projects. The focus was more exclusively to buildings with a specific type of functionality, and their value creation process therefore focused on specifically on the planning and operational phases the PPP-PLC. The study centred on building owners and users through a PPP-PLC, specifically concentrating on the technical and functional outcomes within the of the PPP-PLC. This study builds upon the study by Haddadi and offers a wider perception of the concept of value creation to include all phases of the PPP-PLC and in sectors like health, education, energy, transport, and agriculture.

Previous frameworks are an invaluable contribution to the field of PPPs and value creation with their lenses on the different concepts approached in diverse ways depending on the study. These previous works provide a critical contribution to guide this study in its own framework development. According to Kirk, Kelly, Yankey, Birken, Abadie and Damschroder (2016: 11), tools developed must be significantly redesigned to increase the likelihood of success. The current studies' perception of value from the different sectors and stakeholders contributes to the presentation of a more balanced framework that incorporates practices which address barriers to value creation by involving all stakeholders and making substantial contribution to the discussion of value creation as a collective endeavour of all stakeholders in the PPP-PLC.

Therefore, building on the gaps identified by in the review of literature, this chapter presents a framework based on:

a) Primary data collected from the field from among practioners within diverse PPPs to cater for public sector, private sector, and the general public (Chapter four, Chapter five, and Chapter six)
b) Elements of value creation including communication, sustainability, commitment, partnership, efficiency, dispute resolution, risk management and collaboration presented in Chapter five, section 5.7.
c) The typical PPP-PLC, Chapter six, section 6.2.2
d) An enhanced approach that broadens the scope of value to include all stakeholders and not only the private sector.
e) Diverse sectors within which PPP projects created value for stakeholders
f) Identification of barriers within the PPP-PLC which affects creation of value for stakeholders, Chapter five, section 5.6.
g) Broadened lens defining the concept of value creation that expands beyond the restricted confines of just project success, risk management, value for money, to include them among the measures of value in the PPP-PLC.

Therefore, the development of this framework extends and transcends beyond the limitations of previous studies to offer a more holistic approach that defines value and guides PPPs to create value for stakeholders.

Upon the establishment of the need for a best practice value creation framework for PPP projects, this study proceeds to develop it based upon the data presented in previous chapter and especially the checklist presented in Chapter Three of this study. The next section presents how this study applies the checklist developed in Chapter Three, explaining how this study has applied the steps in the checklist to develop a practice framework as a contribution to literature.

7.4 Applying The Checklist For The Development Of A Best Practice Value Creation Framework

Through a thorough review of literature on theory and practice of frameworks as management tools, this study established the need for a roadmap that enables studies to develop their own practice frameworks. The same roadmap guided this study from Chapter Three.

This study extends further than simply presenting theory, to extracting information from the results of the data collected and analysed in Chapter Six, incorporating it into a comprehensive contextually relevant practical framework which is a demonstration of the value creation process in PPP-PLC. The framework under development is underpinned by the Public Value Theory, presenting the dynamics of PPPs, recognising their importance as key drivers of creation of value in society, the importance of public managers, and stakeholder as well as partnerships in delivering public good to society. The theoretical underpinnings of the PV theory as presented in Chapter Three not only ensure that this study is grounded in theory but that it is also adaptable to the practical realities of managing PPP projects.

The developed and presented checklist provides a roadmap to guide the study towards answering the MRQ: *"How can value be created in PPPs in Uganda's economy?"* Table 7.2 re-presents the proposed steps in the checklist developed in Chapter Three and proceeds to illustrate how this study has so far addressed the steps. Table 7.3 goes the extra mile of focusing the study on the remaining steps that this chapter intends to finally complete, culminating in the presentation of the promised practice framework.

Table 7.2: Addressing the steps of the checklist to develop a practice framework

Step No	Description	Chapter and section
1.	Establish guiding principles based on the underpinning theory	Chapter Three, section 3.7
2.	Clarify the framework's goals to align with study needs and expectations	Chapter Three, section 3.4
3.	Collect data on steps taken by stakeholders	Chapter Five
4.	Name the practices	Chapter Five and Chapter Six
5.	Group the practices according to the preferred context e.g. Phases, dimensions, practitioners, partners, among others	Chapter Five and Chapter Six
6.	Design the framework to address vital stages/phases, considering challenges	Chapter Five and Chapter Six

Table 7.2 summarises several steps suggested in Chapter three. According to the table, the study has addressed some of the steps in previous chapters and others are presented further in this chapter, to complete the development process. Table 7.3 presents the remaining unaddressed steps towards framework development.

Table 7.3: Steps in the checklist that this chapter intends to undertake

Step No	Description
7.	Organise practices to reflect the framework user roles
8.	Establish the right framework design to adopt and customise
9.	Tailor the framework to the specific context, ensuring flexibility and adaptability, sustainability etc to address potential challenges and limitations that may arise.
10.	Ensure that guiding principles and elements are embedded at every stage/phase within the context.
11.	Develop clear guidelines with defined roles and responsibilities for framework users
12.	Design and address vital stages, considering challenges or limitations of applying the practices
13.	Provide clear instructions for framework users of the tool at every phase/dimension/stage

14.	Choose validation method and respondents for the validation
15.	Validate the framework.

The next section presents the steps, starting with Step 7 of the checklist.

7.4.1 Addressing step 7: Organise practices to reflect framework user roles

The framework is designed to reflect the roles in a clear, actionable way that guides stakeholders without ignoring their importance in the process. Whereas the framework does not explicitly distinguish between the roles with specificity to the private, public partners or stakeholders, the practices possess subtle indicators on who undertakes what activity and when the activity applies to a particular stakeholder. This intentional design ensures that no stakeholder is excluded and at the same time brings onboard the sense of accountability for all stakeholders towards the achievement of activities of a particular stage. The partners as stakeholders with roles which collectively drive towards creating value. The framework fosters a well-balanced understanding of the responsibilities of stakeholders, ensuring that they anticipate the next activities to create a synergy that ensures clarity, promotes inclusivity, and facilitates a seamless value-creation process throughout the PPP-PLC.

7.4.2 Addressing step 8: Establish the right framework design to adopt and customise

Frameworks developed can vary in complexity, with some more complex than others, depending on how many layers and elements are inside of each of them (Luís *et al*., 2015:869). So, selecting the right framework design is key as it determines the framework's effectiveness towards narrowing the gaps in literature. This study builds upon previous studies, particularly Osei-Kyei and Chan (2018) and Cheung (2009), adopting the diverse structures of their frameworks, and emphasising the phases of the PPP-PLC through which value can be created. This framework adopts some of these concepts and embraces the diversity in the designs.

The next section outlines how this study adapts the different designs to create a framework suitable for this study.

7.4.3 Addressing step 9: Tailor the framework to the specific context, ensuring flexibility and adaptability, sustainability, etc., to address potential challenges and limitations that may arise.

As indicated in the previous sections, the practice framework developed by this study benchmarks on frameworks presented by previous studies while also considering the different phases of the PPP-PLCs presented in literature in Chapter two. The framework under development intends to equip stakeholders with tools to anticipate and effectively address barriers while ensuring that they are not caught unprepared and, at the same time, enabling them to create value. This approach ensures that the framework is both flexible and adaptable to diverse contexts. Although this research was conducted within the Ugandan context, the framework is not designed solely for Uganda's PPPs but rather recognises diverse projects in Uganda that were initiated even prior to the enactment of the PPP Act and policy and, therefore did not strictly adhere to the typical Ugandan PPP model set out in the current regulatory framework. The current framework, therefore, subsequently provides a structured and systematic approach that incorporates essential elements of value creation as established by this study, including efficiency, risk management, sustainability, communication, collaboration, stakeholder engagement, dispute resolution, and commitment, each of which elements is integral to supporting and ensuring effective value creation in the PPP-PLC.

The next section presents how the framework ensures that guiding principles are embedded at different phases within the context.

7.4.4 Addressing step 10: Ensure that guiding principles and elements are embedded at every stage/phase within the context.

The review of literature in Chapter three on practice frameworks provided insight into the guiding principles guiding in the creation of value by stakeholder activities. This study addresses this step and embeds the principles by presenting them in this way:

a) The actors, who are the stakeholders of the PPP-PLC,

b) The devices, which include the regulatory frameworks which exist in the PPP landscape enabling PPP projects in the value creation framework.
c) The practices, which include key elements of engagement, communication, dispute resolution, risk management, sustainability, collaboration, and efficiency which are systematically embedded in the practices of stakeholders throughout the PPP-PLC
d) The issues, which include the barriers or gaps identified by the study as existing in the PPP-PLC, within the current practices PPP-PLC, but hinder creation of value for stakeholders.
e) The general aims and objectives which include the gaps identified by this study and which this study narrows to enable stakeholders to create value for stakeholders throughout the PPP-PLC.

The principles were identified by the study during the collection, synthesis, and analysis of data and these were addressed and presented in the previous chapters as follows.

Table 7.4: How Previous Chapters set out to answer research questions and proved research propositions

Research Question	Research Proposition	Determinants of the structure of a practice framework	section of the study
SQ1: What is the potential of PPP projects to create value for stakeholders?	P(1): PPP projects have the potential to create value for stakeholders through Project Life Cycle (PLC).	The Actors	Proved (Chapter Six, section 6.2)
SQ2: What are the current practices within PPP projects in Uganda that create value?	P(2): Current practices within Uganda's PPP projects can create value for stakeholders	The Devices	Proved (Chapter Six, section 6.3)
SQ3: What are the barriers to value creation within PPP projects in Uganda?	P(3): There are barriers to value creation within PPP projects in Uganda.	The issue	Proved (Chapter Six, section 6.4)
SQ4: What are the best practices within the PPP-Project Life Cycle that create value for stakeholders?	P4: Best practices within PPP-PLC enhance value for stakeholders	The practices	Proved (Chapter Six, section 6.5)

SQ5: What is the relationship between current and best practices within the PLC in the creation of value for stakeholders?	P(5): There is a relationship between current practices and best practices within the project lifecycle in the creation of value for stakeholders.4	The aims and objectives	Proved (Chapter Six, section 6.6)
The major research question	How do PPPs create value for stakeholders throughout the PPP-PLC?	The aims and objectives	Presented in Chapter Six, section 6.7 and presented in Chapter Seven

Table 7.4 presents the research questions and how the study answered them by proving the research propositions. The research questions and propositions were aimed at supporting the study to narrow the gaps identified as missing in literature. By answering the main research question the study was able to achieve the main research goal. This study presents the proposed framework as an illustration in tabulated format to ensure that the best practice framework not only addresses gaps in theory and in practice but also mentions them so that stakeholders can anticipate them, thereby providing a practical guidance for stakeholders. Moreover, this study contributes to literature by advancing previous works and emphasising the importance of a holistic and robust approach that builds upon previously developed frameworks to ensure:

i. A PPP-PLC specific structured approach that provide stakeholders with clear actionable value creating guidelines at each phase.
ii. Strategies to overcome barriers by enabling stakeholders to anticipate, identify, navigate, circumvent and or address barriers in the PPP-PLC that may hinder value creation. Results of the data collection indicated that the barriers in the PPP-PLC were categorised and rated such as bureaucracies (6.02%), change of scope (2.41%), climate change (6.02%), communication gap (7.23%), corruption (2.41%), high operation and maintenance costs (9.64%), high tariffs (10.84%), human resource constraints (6.02%), insecurity (7.22%), limited access to project products (6.02%), noncontract compliance (3.61%), opportunistic behaviours (8.43%), partner conflict (1.20%), poor budgeting (1.20%), profit repatriation (2.41%), service interruptions (2.41%), unstable risk profile (1.20%).
iii. Balanced focus and inclusion of stakeholders, including the overly neglected end user, thus bringing on board a 3Dimensional outlook of PPPs and extending the lens while giving

back the voice to the general public and presenting the importance of other stakeholders throughout the PPP-PLC so that even their needs and expectations are known. The results demonstrated the issues as barriers to the creation of value for stakeholders in the PPP-PLC, and these included issues like delayed stakeholder engagement (1.20%), delays in procurement (12.05%), government interventions (2.41%), among others, which have a direct relation to stakeholders.

iv. A holistic approach of PPP value creation process that extends beyond sector specific approach and broadens the context to be relevant across various sectors and phases of the PPP-PLC. Evidently, data was collected from stakeholders from diverse sectors of education, manufacturing, transport, agriculture, education, energy, health, and information technology sector.

v. Presents practical tools for stakeholders, which serves as a form of manual and a checkpoint for systems, allowing stakeholders to check each other and themselves, and at the same time verifying their progress towards creation of value at each phase of the PPP-PLC. Since this study collected, synthesised, and analysed data from stakeholders of projects that were implementing activities at different phases, from the project identification phase, procurement phase, design and construction phase, operation and maintenance phase and transfer phase, these activities are all included in the framework developed.

To note: *This study adopted the nomenclature of the "Design and Implementation phase" during the synthesis and analysis of results for inclusivity for projects that do not have activities of construction.*

During the synthesis and analysis of results, the study established that PPPs in Uganda carried out their activities within diverse sectors of the economy, including infrastructure, ICT, agriculture, education, and service delivery. Further, the study found that the activities that the projects implemented were not necessarily tied to the physical of facilities. For instance, in ICT-based projects, the focus was on systems development and deployment, whereas in the agricultural sector, PPPs were centred on production systems, value chain activities, production and capacity-building activities. The nomenclature therefore may not equally represent the activities of this phase when applied to the other non- construction related projects. Worth noting is that PPP projects are diversifying from strictly infrastructure construction to encompass other nonconstruction related activities. Therefore, to accommodate the diversity of activities implemented across the different sectors, this phase has been renamed to "*Design and Implementation Phase*". The term, "*Implementation*", broadly means, "the process of putting a decision or plan into effect; execution" deeming it broad enough to encompass a wide range of project activities, such as development and deployment of ICT systems, platforms, or software as well as establishment of agricultural systems, supply chains, or production processes or even in education for setting up educational systems. The study retains and maintains the term "*Design*" to signify planning and preparatory work. Consequently, to address the limitations of sector-specific terminology and enhance the adaptability of the framework, this study adopts the "*Design and Implementation Phase"* for purposes of developing an all-encompassing framework that preserves the logical sequence of PPP project phases.

The synthesis and analysis of results presented in Chapter six indicated the criticality of the data collected, presenting the study's major contribution to literature and its importance in narrowing the existing gaps that were revealed and identified by the study. The study therefore inferred from background information about the project managers and project end users that they held diverse competencies and that they had needs specific to them within their roles. The roles and competencies they held were therefore key to enabling them to become better placed to deliver or receive value as stakeholders despite the existing barriers within their current practices within the PPP-PLC that hindered the value creation processes. Derived from the themes generated from the data collected, the respondents cited barriers including bureaucracies, change of scope, climate change, communication gaps, corruption, delayed stakeholder engagement, delays in processes, government interventions, high operation and maintenance costs, high tariffs, human resource constraints, insecurity, limited access to project products, noncontract compliance, opportunistic behaviours, partner conflict, poor budgeting, profit repatriation, service interruptions and unstable risk profile. Furthermore, based on the barriers identified in Chapter two, section 2.6.4, the study uncovered best practices that projects can adopt to circumvent the barriers revealed in order to create value for stakeholders throughout the PPP-PLC. To achieve the study's major research goal, the study needs to follow the identified steps presented in Chapter three of the study in order to develop the best practice value creation framework for PPP projects. The next section of this chapter presents the building blocks that form part of the checklist and how the study adopts the checklist to develop the best practice value creation framework for PPP projects.

7.4.5 Addressing step 11: Develop clear guidelines with defined roles and responsibilities for stakeholders.

To develop the framework, the study collected, synthesised, and analysed data about the roles and responsibilities of stakeholders within the PPP-PLC that emerged as best practices. Since the managers were primarily responsible for operationalising the best practices, their roles and responsibilities overlapped the PPP-PLC to leverage the existing resources so as to create value.

7.4.6 Addressing step 12: Design and address vital stages, considering challenges or limitations of applying the practices

The study addressed this step by aligning practices which proved inhibit challenges or barriers that in the PPP-PLC highlighting those limitations that arose during value creation process. Results indicated that the barriers in the PPP-PLC had elements of bureaucracies (6.02%), change of scope (2.41%), climate change (6.02%), communication gap (7.23%), corruption (2.41%), high operation and maintenance costs (9.64%), high tariffs (10.84%), human resource constraints (6.02%), insecurity (7.22%), limited access to project products (6.02%), noncontract compliance (3.61%), opportunistic behaviours (8.43%), partner conflict (1.20%), poor budgeting (1.20%), profit repatriation (2.41%), service interruptions (2.41%), unstable risk profile (1.20%). The framework design, therefore, presents the barriers at the different phases of the PPP-PLC for consideration by stakeholders while applying practices.

7.4.6.1: Flow chart presenting relationships in the value creation process

This section presents the flow chart of the developed framework, how the PPP-PLC integrates the best practices presented and the outstanding themes that can enable PPPs to overcome the barriers during the value creation process.

Best Practices in the PPP-PLC	Project Identification Phase	Procurement Phase	Design and Implementation Phase	Operation and Maintenance Phase	Transfer Phase
Engagement	Plan and budget inclusive projects, conduct stakeholder buy-ins and consultations that align project objectives with public sector needs, ensuring all relevant voices are heard.	Benchmark, specify and articulate terms project requirements to ensure mutual understanding between partners and stakeholders, transparency, timeliness, and procurement of qualified, specialised private contractors	Actively ensure that the project represents stakeholder needs by involving stakeholders in monitoring progress to ensure the design and Implementation phase activities align with the agreed objectives.	Maintain regular interaction with stakeholders, including users and regulators, to gather feedback and improve service delivery.	Actively involve and maintain stakeholders relationships in preparation for the receiving party, to ensure continuity of delivery.
Communication	Establish roadmaps and strategies to share information and feedback on project goals, feasibility, and anticipated outcomes to build trusted relationships	Clearly specify stakeholder needs and requirements, maintain transparency in the bidding, evaluation, and tendering processes to acquire expert contractors	Update stakeholders regularly on progress and utilise feedback to address concerns and maintain transparency	Maintain contact with stakeholders, share updates, increase transparency, consume feedback, and rely on performance metrics to build public confidence.	Maintain systems that update stakeholders on projects and clearly outline processes, timelines, roles, and expectations of parties
Commitment	Secure public sector consent and plan to provide support to project objectives and conduct feasibility studies.	Ensure bidders demonstrate ability to meet project's goals to deliver quality services and adhere to project requirements.	Ensure resource availability and perform as per contract, meet deadlines, and adhere to project budgets.	Ensure operators are dedicated to providing consistent service quality and meeting contractual obligations.	Ensure parties fulfil responsibilities for a smooth transition.
Dispute Resolution	Establish mechanisms to address conflicts arising during project activities or consultations	Develop robust conflict resolution mechanisms to manage disagreements d and incorporate them into contracts	Implement onsite resolution mechanisms to address disputes promptly to prevent escalation.	Establish systems and processes for resolving operational and incorporating feedback to manage grievances especially from users	Address any outstanding disputes collaboratively to facilitate an orderly handover
Risk Management	Establish and update risk registers, identify, manage, and assign risks with preliminary mitigation strategies	Ensure that contracts assign risks to parties to assume, that is within their control or expertise.	Continuously assess and mitigate risks associated with delays, budget overruns, or technical issues.	Monitor and enhance systems and processes that manage risks in end user satisfaction, e.g. equipment maintenance, service disruptions	conduct audits, maintain and update a risk register, follow succession plans, maintain supply of projects products, reduce disruptions, enhance transfer of knowledge

Sustainability	Study and evaluate the long-term projects that appreciate cultural, social, environmental, financial, and economic impacts of the project and prioritise sustainable outcomes	Integrate sustainability benchmarks into bid evaluation criteria to encourage environmentally and socially responsible practices.	Incorporate sustainable design and implementation practices like local content, enhancing knowledge management e.g. ecofriendly materials, competitive and energy efficient technologies.	Enhance affordable live user satisfaction through resource efficient practices, knowledge management practices to minimise and support operations without disruptions	Conduct audits and follow succession plans to ensure facility and hand over of capable resources to deliver value over extended term.
Collaboration	Foster relevant relationship and practices to cement relationships that enhance teamwork between stakeholders to ensure alignment of resources.	Formalise relationships and attain support or partner representations to negotiate fairly towards innovative solutions for win	Promote teamwork among designers, contractors, and public agencies to ensure seamless project execution.	Encourage ongoing contract management to enhance service delivery and address challenges.	Foster relationships with stakeholders, for seamless transfer of knowledge, facility, and personnel.
Efficiency	Establish streamlined processes and tools to plan and support decision making to evaluate and expedite project activities	Benchmark and leverage resources and digital systems for timeliness and to ensure acquisition of competitive, specialised experts within available resources	Optimise resources in delivery of innovative, competitive products while optimising scheduling and performance-based contracts for monitoring	Augment relationships using data driven tools, allocate available resources and exhibit professionalism while serving end users with quality products and rely on data driven decisions.	Streamline hand over processes using checklists and standardise templates to manage resource.

Figure 7.1: Value creation process For PPP projects

Source: *Constructed by author*

Figure 7.1, was constructed by the author. It presents a synthesis of best practices observed across the phases of the PPP-PLC. The Figure is grounded in data collected from the field and captures the practical strategies and behaviours that contribute to value creation in PPP projects within the Ugandan context. The diagram is organised around the seven thematic dimensions of best practices of PPP projects including engagement, communication, commitment, dispute resolution, risk management, sustainability, collaboration, and efficiency. The diagram illustrates how each element manifests across the distinct phases of the PPP lifecycle.

7.4.7 Addressing step 13: Provide clear instructions for stakeholders at every phase/dimension/stage

The key elements that stakeholders need to centre their activities around include sustainability, commitment, engagement, efficiency, collaboration, communication, dispute resolution, and risk management. Results presented in Chapter five of this study presented results of best practices in value creation which included elements of sustainability at 22%, commitment (16%), engagement (14%), efficiency (12%), collaboration (13%), communication (9%), dispute resolution (8%) and risk management (6%). The clear instructions therefore that this study designed at every step of the PPP-PLC for stakeholders incorporated the elements to guide stakeholders on how to overcome the challenges/barriers. Vernon (1953: 158), argues that certain data are most effectively presented best by certain types of diagrams though those diagrams are better when accompanied by verbal explanation in addition to special training for the people to enable them best to understand the diagrams and make proper use of them. This study therefore presents the proposed framework in the next sections but recommends that stakeholders are furnished with required training to enable them to utilise the framework. The next section presents the best practice framework in diagram format and explained by the tables in tabulated format in order of the phases of the PPP-PLC.

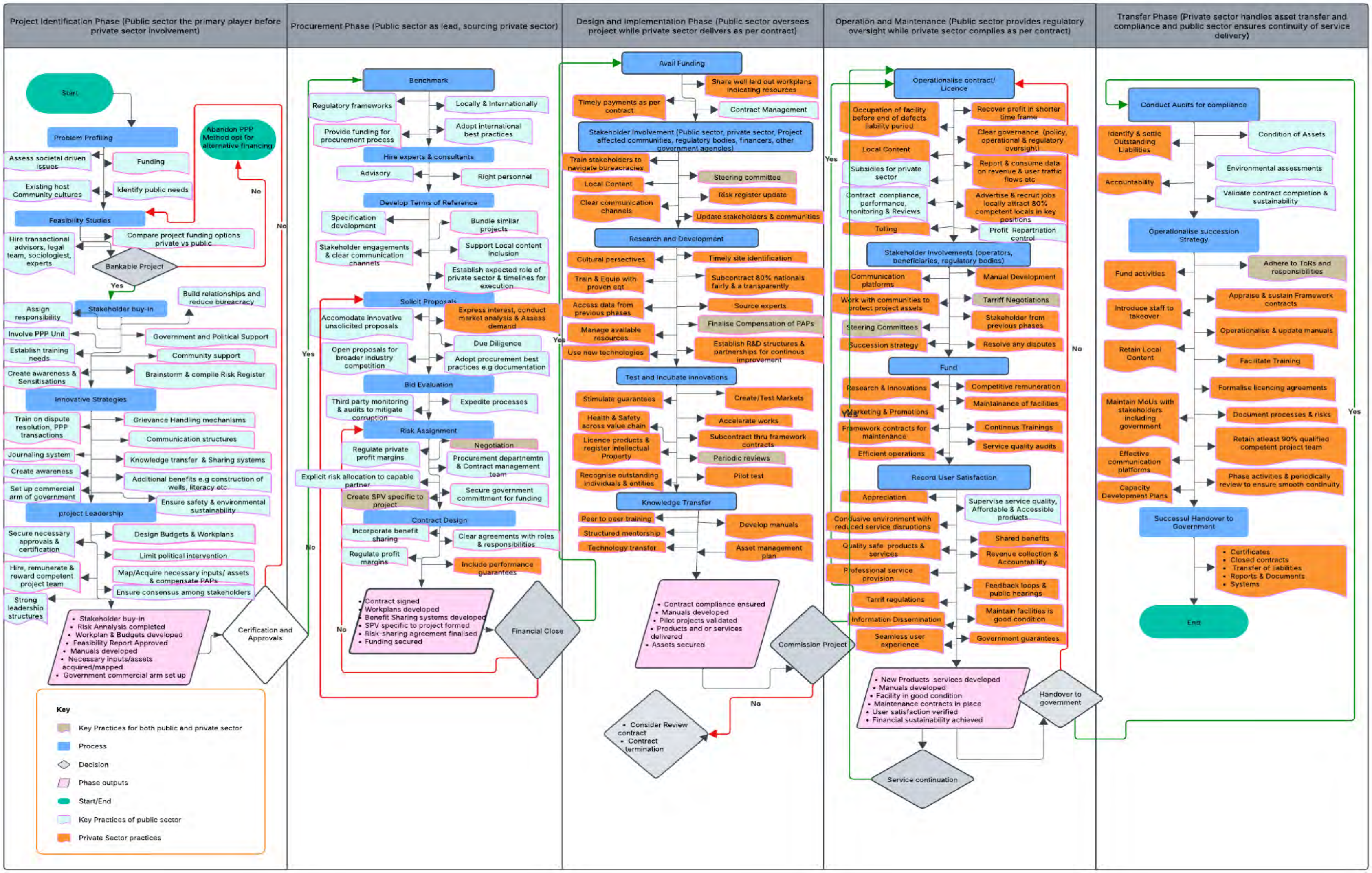


Figure 7.2: Best Practice Value Creation Framework for PPP projects

7.4.7.1 Best practices of the project identification phase

The project identification phase of this framework sets centre stage for the project, emphasising the practices of a strategic nature aimed at evaluating the viability of the project, that it aligns to stakeholder needs and involves the careful analysis of the project objectives, the risks and detailed assessment of both current and future needs of the project. During this phase, a number of stakeholders are engaged and the community with its representative are represented by the public entity which is responsible for undertaking the majority of the practices of this phase. Table 7.5 presents the practices of the project identification phase that were derived from the key informant interviews with project managers and project end users.

Table 7.5: Best practices of the PPP project identification phase

Best Practices	**Barriers**
<u>Problem Profiling</u> • Plan nationally using government statistics from ministries and planning authorities to inform project identification. • Bundle multiyear projects with similar needs • Diversify project portfolios to include overlooked sectors, particularly in hard-to-reach communities. • Profile the problem in detail while maintaining and considering existing social structures of host communities. • Assess societal driven issues • Allow private sector expression of interest to conduct market analysis and assess demand • Conduct studies on community cultures, values, and norms to avoid imposing external cultures and ensure community buy-in. <u>Feasibility Studies</u> • Compare the benefits and limitations of government or private sector funding to identify the most suitable financing approach. • Hire competent consultants, including legal analysts and transactional advisors, through competitive processes, and include arbitrators to manage conflicts. • Conduct detailed feasibility studies, risk assessments, and risk management plans while allocating risks to appropriate stakeholders. <u>Stakeholders' buy-in</u> • Ensure that existing laws support government partnerships with the private sector for PPP activities. • Attain government support, ensure government promises align with actions, and confirm full government commitment to the PPP delivery method. • Involve project stakeholders, including ministries, agencies, and communities, to influence and support project activities.	• Lack of clear government commitment to PPP projects. • Bureaucratic delays that hinder timely project commencement. • Limited active PPP projects despite government pledges. • Communities aggrieved due to unmet expectations or poor engagement. • Changing climatic conditions that disrupt project implementation. • Government failure to adequately sensitise the public about projects and their benefits. • Government discourages community support by openly citing a lack of funds. • Increased government borrowing to finance projects, raising sustainability concerns. • Community members lack information and frequently question project activities.

• Engage the PPP Unit and relevant resource centres for technical support on preparation guidelines and legal frameworks. • Identify and assess key stakeholders' interests, influence, and roles, and define their specific responsibilities, including the government's role. • Build relationships with stakeholders through networking events and regular engagement to reduce bureaucracy and encourage trust. • Establish public sector capacity building needs and outline them in the project's terms of reference for support. • Create awareness of project impacts, timelines, and commencement dates while maintaining a database of stakeholders and project affected persons • Establish and update a risk register monthly through brainstorming and focus group discussions, allocating risks to appropriate departments or individuals. <u>Innovative strategies</u> • Develop innovative strategies to secure stakeholder buy in, including from political parties and communities, to minimise disruptions. • Set up supervision measures aligned with clear terms of reference for all phases of the project. • Promote formal and informal communication structures through a clear framework e.g. establish communication team to stay with the project throughout the phases, structured to communicate to diverse forums like politicians, community leaders and these would also communicate timelines, attitudes, and a roadmap adopted by the project team. • Employ sociologists and conduct community education and sensitisation through townhall meetings and other communication platforms to improve understanding, for mindset change and support for the project. • Establish a robust digital communication platform for transparency, stakeholder engagement, and feedback throughout the project phases. • Engage the community in related project activities to foster ownership and support. • Document and develop systems for manuals, journaling by project staff, and for knowledge management of documents, record project activities to benefit future phases and other projects. • Establish grievance handling mechanisms to address and investigate complaints and resolve conflicts with aggrieved stakeholders or communities. • Assess and address other community needs during project implementation by providing benefits such as wells, financial literacy programs, or sanitary facilities. • Set up a government commercial arm to oversee and manage diverse PPP activities within their specific contexts. • Establish platforms or associations for those in the same context and shorten decision-making processes. • Train project teams on structuring PPP transactions, dispute resolution, teamwork, and appraisal, monitoring, and evaluation processes. <u>Project Leadership</u> • Establish strong project leadership structures, including hiring community liaison officers and learning common community languages. • Budget for project activities such as feasibility studies, professional fees, legal services, research, and training. • Attain consensus between contracting ministries, agencies, and other stakeholders involved in the project.	• Prolonged approval timelines that delay project execution. • Delays in compensating PAPs, sometimes lasting years. • False promises made to PAPs, leading to mistrust and dissatisfaction. • High legal fees associated with preparing agreements. • Limited national capacity to effectively structure PPP projects. • PPP projects often lack oversight, creating opportunities for exploitation. • Financing remains a significant challenge for planning and development processes. • Middlemen exploit the ignorance of stakeholders, such as landowners, for personal gain. • Entities often fail to budget for feasibility studies and broad-spectrum consultancy services. • Unstable risk profiles complicate project planning and management. • Projects often fail to consider the cultural values and norms of local communities during design and implementation.

• Confirm project bankability before proceeding with implementation. • Ensure qualified project managers with at least bachelor's degrees are hired and include local nationals of all ages and genders in the project team. • Ensure safety and environmental sustainability for project personnel, activities, and for the surrounding communities. • Design detailed work plans that outline resources, meetings, engagements, start dates, and completion timelines. • Recognise and reward project team members for performance, timely activity implementation, and project success. • Secure necessary certifications, such as environmental impact assessments, and approvals required for the project. • Plan and acquire land or assets in advance, fairly compensate project affected persons, and establish ownership through legal and survey processes. • Limit government and political interference to enhance private sector efficiency, reduce corruption and nepotism, and enable effective supervision.	

7.4.7.2 **Best practices of the procurement phase**

This phase addresses issues of selection of a suitable entity to deliver the much-needed project. The practices of this phase as presented in Table 7.6 indicate how the project ensures transparency, fairness, and adherence to existing regulatory frameworks so that the parties are competent and committed to enabling the project to achieve its objectives. Table 7.6 presents the practices engaged by the project of the procurement phase.

Table 7.6: Best practices of procurement phase

Best practices	Barriers
<u>Benchmark</u> Adhere to existing laws, regulations, and policies within the procurement process to ensure compliance and accountability in project execution. Benchmark procurement practices, existing facilities, and lessons learned from other projects and countries to refine requirements, enhance competitiveness, and adopt global best practices. Benchmark projects against other successful PPP projects domestically and internationally if they exist. <u>Hire consultants</u> Recruit a sophisticated project team with strong business acumen or source international private entities to negotiate on behalf of the government, ensuring government interests and compliance with international standards. Ensure the right professional personnel oversee procurement and evaluation processes, while training additional staff to enhance capacity and efficiency.	• Lack of transparency in project activities undermines trust and accountability among stakeholders. • Nepotism and corruption hinder fair processes and lead to the selection of unqualified partners, affecting project quality and execution. • Excluding the project management team prior to contract signing results in a lack of continuity, institutional memory, and project information. • Bringing in new project teams after contract signing creates information gaps and disrupts effective project execution. • Failure to update community stakeholders causes dissatisfaction,

<u>Terms of Reference</u> Bundle small projects together rather than treating them individually to reduce administrative costs and achieve economies of scale. Specify precise and realistic terms of reference and requirements that align with stakeholder expectations to avoid ambiguities during execution. <u>Provide Funding</u> Set aside funding to support and incentivise local developers and firms, enhancing local content and reducing profit repatriation while fostering economic growth. Involve the project team right from the project identification phase to ensure continuity, institutional memory, and smooth decision-making processes. Support local capacity building, knowledge transfer, environmental sustainability, and social responsibility for long-term project benefits. <u>Solicit Proposals</u> Accommodate innovative, viable unsolicited proposals from the private sector to encourage fresh and creative solutions for unique projects. Advertise broadly to attract a wide range of qualified private sector bidders, ensuring competition, diversity, and high-quality proposals. Conduct due diligence on private sector companies, verifying their proven experience, innovation, and compliance with high standards, such as those listed on global stock exchanges like NYSE, LSE, or Paris Stock Exchange. Adopt procurement best practices and documents from institutions like the World Bank or African Development Bank for global standards in unique projects. <u>Bid Evaluation</u> Establish efficient systems to shorten procurement processes, address delays at all levels, and align subcontracting practices to ensure timely, fair, and transparent project execution. Foster synergies between public and private sector roles through regulated subcontracting practices that align with overall project objectives. Evaluate bids based on technical expertise, financial capacity, and ability to mitigate risks like climate change, activist disruptions, or tariff impacts on project scope. <u>Risk Assignment</u> Secure government commitment to provide counterpart funding at contracting to guarantee financial readiness and timely project completion. Negotiate clear and comprehensive agreements that include performance measures to align contracts with project goals and eliminate ambiguities. Regulate private sector profit margins to ensure project affordability for end users while balancing profitability for investors. Establish a separate procurement department, alongside a contract management team, to provide independent oversight and adherence to contract terms. Create a special purpose vehicle (SPV) with an established board, representatives, and defined regulations to govern project activities and operations effectively.	resistance, and a lack of local support for the project. • Unnecessary delays, particularly from the public sector, affect project timelines, increase costs, and derail implementation. • Procurement delays hinder timely execution, causing setbacks in project development and delivery. • High legal fees associated with preparing agreements create financial burdens, particularly for smaller or local firms. • Local developers and firms often avoid participating in PPPs due to the high upfront expenses and perceived risks. • A lack of sophistication, business acumen, or the right personnel at the negotiating table weakens the public sector's position during negotiations. • The public sector's failure to adopt private sector thinking and strategies results in inefficiencies and misalignment of goals. • Overdependence on international contractors leads to profit repatriation, draining resources from the local economy. • Unclear or poorly defined terms of reference and project specifications fail to communicate public sector requirements effectively. • Failure to clearly define public sector needs and expectations creates misalignment between partners and delays project progress. • Governments' excessive reliance on private sector financing often overlooks community social structures, norms, and values, leading to negative local impacts.

Incorporate systems for benefit-sharing with communities throughout the project lifecycle to ensure positive social impacts and local stakeholder satisfaction. Engage stakeholders continuously through regular meetings and clear communication channels to anticipate challenges and maintain alignment with expectations. Implement clear structures for decision-making, financing, and procurement processes to ensure smooth project execution and accountability. Curb profit repatriation and promote local economic empowerment by mandating majority local contractors or subcontractors in project execution. Hold the private sector responsible for covering breakdown costs during the defects liability period to maintain project quality and accountability. Specify local content targets, e.g.., 80% of project staff being local nationals, to promote community involvement and economic development. Assign risks to the partner best equipped to manage them effectively, creating a win-win situation that fosters mutual benefits for all stakeholders. Sign legally binding contracts that clearly define roles, responsibilities, and obligations for all parties to ensure clarity and enforceability throughout the project lifecycle. Ensure that projects reach financial closure within specified timelines and terminate contracts after two extensions.	

7.4.7.3 **Best practices of the design and Implementation phase**

During this phase, the framework prioritises the meticulous adherence to quality standards enabling the project to meet standards expectations by involving experienced personnel, innovations and leveraging available resources to deliver outputs. Table 7.7 presents the best practices of the Design and Implementation Phase

Table 7.7: Best Practices of design and implementation phase

Best practices	Barriers
<u>Fund</u> • Benchmark with similar PPP projects and adopt or improve systems to handle complex projects efficiently. • Make timely or advance payments to contractors and ensure timely delivery of project materials. • Ensure that finances, particularly government counterpart funds, are available and remitted in advance or on time as per workplans. • Ensure performance-based management of contracts to enforce acceptable performance and manage risks so project costs do not escalate. <u>Stakeholder Involvement</u>	• Discrepancy between what is on paper and what is implemented • Bureaucracies in design but not on ground • Untimely inputs • Delays in financing despite available funds • Partner conflict • Unclear terms of reference • Opportunistic behaviour

Involve stakeholders from previous phases, maintain a comprehensive project information database, and ensure access to all prior project data and documentation, including journals, for the project team. • Ensure that subcontracts are awarded to at least 80% nationals and incorporate local content into all project activities, particularly engaging locals from the project area to boost community benefits. • Constantly update communities about project activities and develop and share well-laid-out plans linking to available resources. • Establish steering committees for the project team, ensuring deliberations of one committee feed into the other for synchronisation. • Advertise jobs locally and hire at least 80% competent local personnel in key project positions, such as project managers, ensuring inclusive participation and decision-making throughout the project. • Maintain good relations with government, stakeholders, and the project management team to reduce delays caused by approvals and political influences. • Maintain stakeholder engagements, establish clear communication channels, and effectively adopt them throughout the project by sharing terms of reference and updates on expectations. • Develop and share with stakeholders well-laid-out work plans indicating the required resources, and design systems to monitor, evaluate, and appraise performance of project activities. • Continuously update the risk register throughout the project and manage risks as they are identified. • Ensure visibility, transparency, and teamwork between all stakeholders by sharing project knowledge and updates. • Maintain stakeholder relationships and provide training for locals on navigating and mitigating bureaucracies in government and project processes. • Undertake community development initiatives such as constructing schools, hospitals, and roads to enhance social benefits. Research and Development • Subcontract and award framework contracts in a fair, transparent process through the procurement department, independent of the project management team, to prevent collusion. • Ensure timely identification of project sites if they were not determined in prior phases. • Incorporate cultural perspectives of host communities into project design and Implementation. • Compensate project-affected persons or finalise any pending compensations before project commences, particularly for projects requiring land acquisition. • Work with stakeholders to design a project that is attractive, functional, innovative, sustainable, accessible, and delivered on time, within budget, and with quality. • Support design and implementation activities by boosting teams through sourcing experts both locally and internationally, and training and skilling staff with peer-to-peer and mentorship programs. • Ensure security across the project value chain and implement stringent measures to protect communities and project sites, such as ensuring specialised equipment, fencing off project areas, installing surveillance systems, and engaging communities through signed ordinances against vandalism and theft.	• Change of scope • Bureaucratic ways of doing things • Fluctuations in cost of materials • Aggrieved communities • Climate Changes which affects activities and 3Dimentions of success including cost, time, and quality • Delays in timelines due to climate change • Failure to envision climate aspects at this phase • Delays in compensation • Lack of agreement between project and PAPs • Corruption and nepotism • People prefer to take shortcuts in activities • Delay in implementation of projects • Delay in remittance of project funds especially by government • Delay in advancing of funds • Struggle by companies to attain government funding • Borrowing of funds to run project activities • Long decision-making challenges especially for international companies • Delays in approvals of procedures by government • Lack of information to stakeholders in the community • Delayed approval processes which frustrate the private sector • Delays by pandemics • Delays in managing risks which ends up making them real • Reduce frustration to private partners by maintaining terms of reference. • Projects not entirely private which hinders more fluid decision making, since there are no manuals to guide the activities at this phase.

• Establish and empower a research and development department in a conducive environment, encouraging volunteers, postgraduate students, and collaborations to design innovative, competitive, and sustainable products. • Ensure that projects and products respect cultural practices, fostering coexistence with host communities while preserving their heritage. • Confirm that technology developed for the project is up to date, ensuring contractors use novel and competitive approaches comparable to those in developed economies. • Protect end users by ensuring that scope changes do not inflate project costs and lead to higher tariffs. <u>Test and Incubate innovations</u> • Stimulate supply guarantees and any guarantees from the government's side to ensure smooth functioning of project activities and minimise inflation and supply-demand issues. • Ensure that products or services developed for the project incorporate health and safety for both project staff and end users. • Recognise outstanding hardworking employees or entities that deliver quality within cost and time. • Test and incubate products before releasing them to users, ensuring better quality and affordability than traditional alternatives. • Mitigate time risks by accelerating design and implementation processes through resource reallocation to recover lost time. • Reduce frustrations for the private sector by strictly adhering to the agreed scope as per the terms of reference. • Innovatively create markets for local communities by sourcing locally available materials for and levying taxes on imported materials where alternatives exist locally. • Provide alternative access solutions, such as creating detour routes during road, to minimise disruptions for users. • Ensure comfort, convenience, and reliability of products, such as constructing roadside toilets and providing affordable car services for lower-income citizens. • Equip facilities with sustainable, easy-to-operate equipment and document knowledge for long-term maintenance. • License project-developed products, register intellectual property, and establish policies for royalty collections. <u>Knowledge Transfer</u> • Establish systems to support knowledge management and transfer e.g. maintain relationships with stakeholders in other ministries to support recruitment, retention, reduce conflict, ensuring harmony and reduce bureaucracies • Develop manuals to guide the project, especially for fluid decision-making. • Ensure transfer of knowledge, documentation, and relevant assets to the project team by contractors. • Provide training for local communities about the project to enhance their well-being and foster a sense of ownership, linking projects to tangible benefits like wells, schools, roads, and financial literacy programs. • Establish and ensure knowledge transfer systems for diverse technological innovations and project activities, such as creating opportunities for networking and peer-to-peer training between project staff and leaders in government entities.	• Financing is not cheap or readily available deterring the thriving of projects • Activists disturbing the project • Project activists becoming expensive as a result of activists. • Project expenses increasing overtime • Public sector work is to deliver a service and not run businesses. • Some of the project sites are really far and hard to reach • Partners failing to comply with their obligations and terms of reference. • Middlemen who hand on the ignorance of subcontractors to exploit them. • Occupation of buildings after defects liability period ends • Projects rely in international contractors • Highly technical projects requiring dependency on international contractors • Insecurity and vandalism of project items in and outside project site • Community selling assets as scrap • Failure to generate products and services due to vandalism • Failure of the project to respect or maintain the cultural perspectives of the community.

• Maintain transparency and consistently share knowledge about the project with stakeholders. Alternative Decisions • Award two extensions to projects for fulfilling contractual terms and terminate contracts upon failure. • Rectify any structural challenges that may have occurred during design and implementation phase. • Appraise contractors and consider extending their services to other PPP sectors for continued collaboration. • Commission projects only upon completion, ensuring all objectives are met and issuing completion certificates to contractors.	

7.4.7.4 **Best practices of the operate and maintenance phase**

This phase of the projects presents the practices that ensure longevity, performance, and satisfaction of the end user. At this phase, the project gets to attain direct connection between the project and the project end users, and this project is a culmination of the activities of the previous project phases. Table 7.8 presents the best practices of the operate and maintenance phase of the project lifecycle.

Table 7.8: Best practices of the operate and maintenance phase

Best practices	Barriers
Operationalise contract/Licence • Use and operate facilities before expiry of defects liability period so as to avoid extra maintenance costs. • Ensure projects are in use at the start of the defects liability period, utilising retention funds to address any defects. • Benchmark activities of other projects in different countries or sectors at this Phase • Ensure conducive and strong regulatory framework and policies that enables PPP activities e.g. control profit repatriation, tolling or tariff collection, regulate partner transactions and reduce exploitation • Set clear governance structures and controls for commissioning the project and the roles of all partners in the operational phase • Carryout activities in compliance with operational licence and develop system**s** and work plans with key performance indicators and performance-based activitie**s** to enable appraisal of activities • Set controls to curb excessive profit by the private sector to create a balance between partners.	Climate change, which leads to disruptions in the delivery of project activities, results in delays and higher costs. High maintenance costs, which lead to financial strain, affect the sustainability and longevity of the project. Failure to consider feedback, recommendations, and lived experiences, which leads to solutions that do not meet user needs, decreases the project's impact and effectiveness. Climate change, which affects end user satisfaction, results in poor performance and reduced support for the project. Lack of transparency in project activities, which leads to mistrust and low public confidence, reduces the project’s effectiveness and adoption. Failure to consider feedback, which leads to stagnation in project development, limits improvements and prevents the project from meeting user expectations. Consumers receiving something different from what they expected, which leads to dissatisfaction and a loss of trust, damages the project’s reputation.

• Constantly review contracts to match dynamic environment in intervals of three or five years or as required while also updating user manuals. • Maintain a budget that supports recruitment and filling all positions to enable the project to operate at full capacity and deliver critical activities and this should include professional development • Advertise jobs locally to attract and hire competent, qualified personnel from local communities ensuring the recruitment of at least 80% of key project positions filled by locals from the community. • Consider government subsidies for private sector to recover investments in shorter period of time • Amalgamate reports and review reports on revenue and traffic flows as major indicators of performance to guide project activities • Collecting tariffs from end users and or revenue collection • Subsidies to reward actions and mitigate unfavourable policies or cover operation and maintenance costs or underprivileged groups • Government should maintain control over the project and supervise, even when the private sector is handling <u>Stakeholder Involvements</u> • Maintain previously established committees in prior phases or create new ones e.g. a human resource committee, finance committees, audit committees, quality assurance, communication committees among others to enhance user satisfaction. • Hire experienced consultants to professionally develop and update manuals for the project's operation and maintenance activities • Constantly hold meetings with project team and stakeholders in community including end users in their associations • Develop project succession strategy and plans when the phase is at a mature stage to ensure continuation • Strengthen and enhance existing communication teams and systems to support activities such as employee journaling and facilitate seamless communication between top management, project staff, and end users. • Encourage the participation of staff, volunteers, students, and researchers in various capacities to conduct research that enhances project outcomes and enriches product development processes. • Negotiate with end user representatives to ensure best affordable tariffs for public sector and end user, based on ongoing market prices, end users representatives, international market, and that match to cost with diverse tariff payment systems for domestic user.	Insufficient sensitisation about the project benefits, which leads to low public awareness, results in poor adoption and limited support. Belief that project products are only for the wealthy, which leads to exclusion of lower income groups, limits the market reach, and reduces inclusivity. Knowledge about the project products and services being unavailable via media, which leads to poor access to information, prevents effective public engagement. Information being available only through word of mouth, which leads to misinformation and confusion, limits the spread of accurate project details. Poor project scenery, which leads to reduced public interest, causes low engagement and diminished support for the project. Not relying on existing data, which leads to inefficiency and missed opportunities, hinders the project's development and success. Disconnection between management and operations, which leads to miscommunication and delays, reduces the project's effectiveness and efficiency. Affordability issues, where external funding is secured but the country struggles to repay, which leads to financial instability and threatens the project's long-term viability. Expensive equipment, which cannot be maintained locally, leads to increased repair costs and project downtime. Lack of qualified local technicians to maintain equipment, which leads to operational difficulties, causes delays and hampers project progress. Repetitive maintenance, which increases operational costs, reduces project efficiency and increases the time needed to reach objectives. Project activists disturbing the project, which leads to higher costs and increased tariffs, makes the project less affordable for end users. Perceived high cost of products and services, which leads to reduced accessibility, discourages users and limits adoption. Low visibility of project products and services, which leads to limited public awareness, reduces user engagement and lowers participation. High costs for domestic consumers, which lead to unaffordability, makes widespread adoption difficult and unsustainable. High initial costs of acquiring products and services, which discourage users, reduces the number of adopters and lowers long-term success.

• Engage communities to secure and prevent vandalism and theft of project assets and provide security to users by fostering strong relationships with local police and addressing related issues. Also, implement preventive measures, maintain a register of cases, and act against offenders, including castigating those found guilty. • Resolve any pending disputes Key Funding priorities • Continuously lobby for funds for the large maintenance budget, invest, and advance finances towards project activities or make timely payments to fund the huge operation and maintenance budget • Utilise diverse modes and platforms, including radio shows, TV programs, and other outreach channels, to effectively engage stakeholders, advertise project initiatives, and bridge communication gaps. Staffing matters • Continuously train and retrain project staff, including experts, employees, volunteers, students, and researchers, for both short and long-term periods and to be sophisticated, with a business acumen. • Implement competitive remuneration and reward systems to enhance staff retention, commitment, and performance e.g. reward staff with a percentage of the profit earned, offering attractive salaries, additional allowances for specialised personnel or consultants, and provide nonmonetary benefits such as housing near project facilities and transport for project staff. • Layoff persistently unprofessional staff who do not meet standards and hire or retain efficient professionals with fresh innovative new ideas and ways of doing things • Continuously appraise, maintain project facility, and train project staff to effectively maintain specialised equipment, document and manage the acquired knowledge Research and Development • Ensure that the project consumes the information and trends in reports produced by project teams and stakeholders incorporating it in its appraisal to inform project improvement and better planning e.g. trends to grow users and revenue. • Maintain innovations in different aspects and mitigate financial risks related to tariffs e.g. strategise to grow more users in cases of revenue shortfalls, work with existing government aided systems to collect tariffs and provide accountability to stakeholder • Maintain a research and development department to anticipate and support risk management, develop new products, and address project gaps.	A tedious process to access products and services, which leads to frustration, discourages participation and reduces project impact. Excluding end users in tariff-setting, which leads to unaffordable pricing, makes the project inaccessible to many. Users reverting to traditional products and services, which are more affordable, reduces the project's long-term impact and undermines innovation. Overuse of products or services, which leads to higher costs, reduces affordability and makes the project unsustainable. Lack of inclusion of end users in setting tariffs, which leads to unaffordable prices, limits access and reduces adoption. Increasing tariffs, which lead to unaffordable costs for most users, reduces adoption and affects the financial sustainability of the project. Many individuals unable to afford the project products and services, which leads to exclusion and limits the reach of the project. Abandoned products and services, which signal dissatisfaction, undermine the project's success and decrease user confidence. Poor lighting on roads, which leads to safety concerns, discourages users, and reduces the overall effectiveness of the project. Unsafe roads, which are prone to accidents and thefts, discourage users from utilising the project, lowering engagement. High costs of training specialists, which makes retention difficult, leads to a shortage of qualified personnel and impacts the project's continuity. Lack of extra allowances for specialists, which leads to retention challenges, causes the loss of expertise, and reduces project performance. Public service staff's lack of business acumen, which leads to inefficiency, affects the project's overall management and success. Outdated practices among public servants, which lead to delays and mismanagement, slow down project execution and waste resources. Limited access to services for lower-income users, which excludes a large portion of the population, reduces inclusivity and undermines the project's purpose. Users opting for nearby alternatives, which are more accessible, reduces the project's adoption and long-term success. Selling fake products, which damages credibility, harms the project's reputation and reduces consumer trust. Middlemen exploiting end users' ignorance, which leads to inflated prices, reduces affordability and limits the project's reach.

• Contract marketing companies, set up professionally managed social media platforms and other like-minded commercial private companies, set up campaigns and camps to sensitise, create awareness and market products and services to end users and bridge the gaps between project and user. • Negotiate and sign framework contracts that may extend into the transfer phase to allow for continuity especially for maintenance of specialised equipment • Consider supporting other projects in research and development leveraging experience gained, at a cost • Sign MoUs with other entities to provide them with specialised services at a cost • Continue benchmarking activities and maintain records of what happens in similar infrastructure • Phase the activities of the project if the budget does not allow for faster expansion <u>Record User satisfaction</u> • Create an enabling, supportive, and conducive work environment for both project staff and end users and establish efficient systems and adequately staff the project to full operational capacity so as to minimise disruptions to staff while delivering a service • Ensure seamless end user experience e.g. service at peak time from the point of access to final service delivery and further incorporate a system linked to staff KPIs so to enhance accountability and performance while on duty. • Ensure maximisation end user satisfaction e.g. establish expeditious emergency and rescue services for end users • Maintain convenient accessible products and services, ensuring timely and efficient customer services to reduce possibility of end user wait time, interruptions or reverting back to traditional products. • Maintain the project facility in good condition with ideal, good ambience and fully functional equipment that can be maintained by technicians within that country • Enhance end users satisfaction e.g. put instructions, signposts, flyers, directions, and guidelines for to enhance satisfaction. • Subsidise or reduce costs of accessing products and services and give bonuses e.g. for end user to purchase equipment and for repeat dedicated users, or large quantity users • Record live user satisfaction in real time and ensure that the user gets the experience they deserve that is different from the usual • Appreciate the consumers and develop platforms to gather feedback, share lived experiences, and recommendations while disseminating project knowledge through multimedia channels and actively incorporate user feedback and insights from reports	Profit-driven private sector actors, which prioritise financial gain, may neglect long-term sustainability and hinder the project's success. Private sector actors controlling profits, which limits the project's ability to reinvest, impacts its growth and future development. Government-incurred costs, which should have been covered by contractors, increase project expenses and reduce financial sustainability. Interventions from other government entities, which create conflict and delays, slow down project implementation and increase costs. Loss of value in projects due to mismanagement of funds, which reduces the project's impact and harms the beneficiaries. High tariffs, which affect the monthly budgets of end users, reduce the affordability of the project and limit its effectiveness. Interruptions in supply, which cause irregular deliveries, inconvenience users and reduce the project's reliability. Slow response times from rescue services, which delay assistance, reduce the project's ability to respond effectively in emergencies.

that directly or indirectly impact the project to drive improvements. • Ensure health and safety of the project team and project end users • Promote and incentivise client referrals to attract additional stakeholders or users for PPP products and increase end user access, expand facilities to accommodate new users • Share benefits that accrue on the project with communities • Regularise any partners who may be selling project products to the market illegally • For products that require initial cost, subsidise the cost of acquiring products and services for the end user • Consider waiving tariffs or some costs for special case end user**s** e.g. in health sector in cas**e** of emergencies or special cases or low-**income** users so as to create equity <u>Decisions/Possible considerations</u> • Extend operational license as required by partners stemming from recommendations of the appraisal • Expand exceptional partners' services or products to other sectors in PPP context.	

7.4.7.5 Best practices of the transfer phase of the PPP-PLC

This phase indicates the seamless hand over of responsibilities of the private sector back to the government entity presenting a structured plan that ensures that project stakeholders continue reaping the benefits from the project and that the value of the project continues even after the transfer back to the public entity. Table 7.9 presents the best practices of the transfer phase of the PPP-PLC.

Table 7.9: Best practices of transfer phase of the PPP-PLC

Best practices	Barriers
<u>Conduct Audits</u> • Adhere to the terms of reference outlined in contracts and agreements during the transfer phase to ensure proper execution of responsibilities. • Conduct thorough audits to assess the condition and status of assets and resources being handed over, ensuring transparency and accountability. <u>Operationalise succession strategy</u> • Operationalise and update the detailed manuals and operational guides developed during the operation and maintenance phase to support incoming management teams in understanding processes and responsibilities. • Identify and settle any outstanding liabilities, ensuring the private sector partner is paid for any pending obligations.	• The sale of counterfeit products and services in the market, which undermines the project's credibility and harms consumer trust. • Non-compliance with licensing agreements by product sellers, which leads to legal issues and damages the project's reputation. • Government bearing costs that should have been borne by the private partner e.g. during defects liability period, which strains public resources and reduces the project's financial sustainability.

• Formalise licensing agreements with sellers of project products and collaborate with public security agencies to ensure compliance and prevent unauthorised sales. Sign licencing agreements with any suppliers for project products and services on behalf of the project and engage the police to ensure compliance, eliminate illegal middlemen and ensure that end users are not sold counterfeit products and services if other personnel but deal directly with projects • Implement an entity succession plan with a staggered strategy, ensuring smooth continuity and adherence to environmental sustainability practices. • Retain at least 90% of qualified, trained professional technical staff from the private sector, prioritising local nationals and those who were part of previous phases, to maintain continuity. • Plan and budget for phased activities such as capacity training and equipment maintenance and conduct periodic reviews to assess project progress. • Document and regularly update any risks that arise during this phase in the risk register to manage and mitigate potential issues. • Foster relationships with all stakeholders, forming committees at the ministry level to support critical activities like recruitment, remuneration, and tariff collection. • Introduce staff to the new takeover structure and provide capacity-building opportunities through specialists from the private sector to ensure effective project management. • Ensure facilities are occupied before the defects liability period expires for projects that require this condition. • Maintain effective communication platforms to support project activities, ensuring stakeholder feedback is integrated to improve the project. • Sustain framework contracts with service and product providers to ensure continuity, particularly for repair and maintenance of specialised equipment, cleaning services, and other essential operations. • Consider procuring another contractor to manage the operation and maintenance phase or explore options for decommissioning or reverse engineering the facility if necessary. <u>Successful Handover</u> • Certificates • Closed contracts • Transfer of liabilities • Reports and Documents • Systems	

The best practice framework is structured in tabular format according to the phases of the PPP-PLC capturing the best practices that enhance value creation and since this is a partnership and the project team is joint, the presented practices are not explicitly specified according to stakeholder but instead detail the practices, rather implying the stakeholders' responsibility. Upon finalisation of the framework, the study intends to validate the draft framework presented in section 7.4.7, presented in Table 7.5, 7.6, 7.7, 7.8 and 7.9 of this chapter. The study further presents a diagrammatic illustration of the value creation framework through the PPP-PLC. The study presents different phases of the PPP-PLC following the phases illustrated in the Figure 7.3.

Figure 7.3: Phases of the PPP-PLC

The next section presents how the study validated the value creation framework for PPP projects and the results of the validation.

7.4.8 Addressing steps 14 & 15: Choose the validation method and respondents for the validation, and Validate the framework

Section 7.4.7, of this chapter presented a draft best practice value creation framework for PPP projects developed by this study. The framework was developed from the results of data collected, synthesised, and analysed by the study. Since the framework was in draft form, the study carried out a validation it to establish its relevance and applicability in practical real-life situations within different contexts. The study administered the framework to four respondents among whom was (1) PPP project end user, (1) researcher within the field of PPP projects, (1) PPP project manager, (1), academician within the field of PPPs in Uganda. The next section presents how the study intends to validate the questionnaire through the validation process.

7.4.8.1 **Validation of the framework using a survey questionnaire**

A study validates a tool after it establishes and communicates the need to measure the instrument (Elangovan and Sundaravel, 2021: 7). This study established the need to validate the framework to determine whether the framework is relevant to PPP projects, the usefulness of the best practices, and whether the framework was sufficient to equip stakeholders with the tools to guide their practices. A structured validation approach was adopted from past studies conducted by Osei-Kyei, Boadi, Cheung. Specifically, this study validated the framework by administering the questionnaire to a select number of respondents highlighted in section 7.8, within the field of PPP projects. This was done with the aim of ensuring that the framework is robust enough to guide stakeholders in the value creation process. Whereas Cheung (2009), validated a similar PPP framework using nine respondents, Osei-Kyei and Chan, (2018c), validated using six respondents but neither of the validations was conducted using a real-life project. Further, Osei-Kyei and Chan (2018b: 2825), recommended that future frameworks be validated across a PPP-PLC. This study, based on previous study recommendations to validate the framework developed and selected respondents among whom included (1) project managers of a PPP project, (1) end users of PPP project products and or services, (1) expert in the field and (1) individual from among the respondents in the field involved in the study's data collection process. The four respondents targeted for the study were carefully selected depending on their capability to validate the framework and not as a general consultation exercise, but rather as a structured and deliberate assessment of the proposed framework's appropriateness, objectivity, replicability, applicability, reliability, and suitability from the standpoint of experienced practitioners and scholars.

The study adopted a validation questionnaire based on past studies that validated their frameworks similarly, specifically by Osei-Kyei and Chan (2018b) and Cheung (2009: 267) The validation questionnaire in APPENDIX IV, consisted of two sections. Section one included background information about the experts, Section two presented the proposed best practice value creation framework illustrating the practices at the different phases of the PPP-PLC. The section further presented questions to gather that the responded answered to gain their opinions about the framework presented, The respondents scored the framework against the measures of (a) degree of appropriateness, (b) degree of objectivity, (c) degree of replicability, (d) degree of applicability, degree of reliability and (e) overall suitability for PPP projects in Uganda using a five-point Likert scale, that is 1=Poor 2=Average, 3=good/satisfactory, 4=very good and 5=excellent.

7.4.8.2 **Results of the validation**

This study conducted a validation exercise guided by a structured validation instrument to assess the robustness of the best practice framework in real-life practice. The validation process used a survey approach, and the targeted respondents who were purposefully selected due to the value addition they would have on their assessment of the framework. The respondents were targeted so that the study could ensure that it was diverse and relevant to practice. The choice of expert-based validation was guided by similar approaches in conceptual and design-oriented research, where frameworks were commonly subjected to expert scrutiny prior to broader empirical testing. The process dissemination of the questionnaire to the four targeted respondents and the responses collected from the respondents are presented in Table 7.10 and in the next subsections.

Table 7.10: Details of the survey respondents for the validation process

No	Position	Type of Organisation	Sector	Primary Role
1.	Metrologist	Uganda National Bureau of Standards	Industry	Project end User

2.	Associate Professor	University	Education	Researcher
3.	Senior Mechanical engineer	Ministry of works and transport	Transport	Project Manager
4.	Researcher	University	Education	Academician

Table 7.11: Validation results

No	Validation aspects/Questions	Mean
1.	Degree of appropriateness	5
2.	Degree of objectivity	5
3.	Degree of replicability	5
4.	Degree of applicability	5
5.	Degree of reliability	5
6.	Overall suitability for PPP projects	5

The results in the Tables 7.10 and 7.11, indicates a consistent score of 5 across all aspects, signifying *"excellent"*. This consistency of 5 demonstrated high confidence by the respondents about the framework and its ability to serve the purpose for which it was developed and fill the gaps to support value creation.

The next section further presents an interpretation of these results.

7.4.8.3 **Interpretation of validation results**

The consistent scoring presented in the table reflects the ability of the framework to meet the essential criteria expected of it, ensures its appropriateness, objectivity, replicability, applicability, and overall suitability within the context of PPP projects. The validation process that the study undertook also confirmed the robustness of the proposed framework, is robust and its practicability, making it a reliable tool for enhancing value creation within PPP projects. The positive feedback from respondents confirms its potential for widespread application within diverse sectors of an economy.

Further, building on the findings gathered throughout this validation process, **this chapter has demonstrated *how* PPP projects create value for stakeholders**. The framework illustrates the critical role that stakeholders play in the process, reflecting elements of commitment, efficiency, collaboration, risk management, dispute resolution, communication, engagement, and sustainability throughout the PPP-PLC. This framework is designed to equip stakeholders with the tools to ensure value creation across the PPP project lifecycle, it does this by fostering their confidence, supporting them to promote accountability among the different actors, and proactively addressing challenges at every phase as they arise and anticipate those that have not yet arisen. **This study therefore successfully delivered a robust best practice value creation framework for PPP projects illustrated in Figure 7.2**.

The study acknowledged the limitations in both scope and duration, but the intent of this phase was to conduct an initial, expert-informed validation that could reveal critical insights, inconsistencies, or gaps at an early stage. It is therefore recognised that further empirical testing is required to establish the framework's robustness across varied contexts and stakeholder groups.

As a recommendation and to further maximise its potential of the framework to fit the purpose, it is essential to train and guide practitioners on how to apply this framework effectively while for further research, future research is encouraged to undertake broader and more systematic testing. With effective training in implementation and well positioning of the framework within structures, the framework is well placed to achieve its objectives and enhance its ability to deliver tangible and intangible value for all stakeholders involved so as to fill the gaps in practice.

7.5 Chapter Summary

In this chapter, the study presented the best practice value creation framework for PPP projects and validated the framework for the implementation of PPP projects in Uganda. Feedback from participants during the validation was positive, indicating that the framework was appropriate, objective, applicable, reliable, and suitable for PPP projects. As a result, the best practice value creation framework for PPP projects is delivered in this chapter. The next chapter presents the conclusions and recommendations of the study.

CHAPTER EIGHT : CONCLUSIONS AND RECOMMENDATIONS OF THE STUDY

8.1 Introduction

Countries worldwide have established regulatory frameworks, streamlined project activities, and set up PPP Units, to address challenges within the dynamic PPP environment. They have further heavily invested in the projects while also intervening to cope with challenges as they arise in the PPP-PLC. However, even with these efforts, barriers have persisted within the PPP-PLC, causing the PPP projects to fail to create value for stakeholders in some contexts. Stakeholders from the public sector, governments, citizens, non-governmental organisations, researchers, and politicians have expressed their concerns over the persistent challenges that pose a risk to the sustainability of the PPP model. But not all PPPs in all contexts failed to create value because others succeeded. This variance demonstrated that value creation by PPP landscape, even when possible, was not a guarantee for stakeholders in all contexts.

This study, therefore, adopted a systematic approach to examine PPP projects, understand the value creation process, identify the barriers to value creation, and bridge the existing gaps in the value creation process. Chapters Two and Three critically reviewed the literature, highlighting gaps in the current value creation process. In Chapter Four, the study presented the design and methodology employed by this study to examine the different concepts of value creation. Then, in Chapter Five, the study further presented the results of the qualitative research collected from the field. In Chapter Six, the study synthesised and analysed results from the data and presented the best practice framework for value creation in PPP projects in Chapter Seven.

This Chapter presents the conclusion and recommendations of the study, highlighting potential future research areas. But, beyond the academic contribution of this study to literature, there are practical contributions to Uganda's landscape, for example, a contribution to Uganda's National Development Plan (NDP IV), which advocates for the adoption of PPP projects as a strategy to achieve national goals. Further, the study also aligned with the African Union's Agenda 2063, which emphasises the need for robust policies, legal and regulatory frameworks, that support PPP project development. This study's findings also aligned with the UN's Sustainable Development Goals (SDGs) in line with employment issues, climate change adaptation and overall quality of life improvement. The developed framework not only focused on value creation in one sector for only those stakeholders but analysed the problem at hand, offered solutions to the achievement of global goals.

8.2 Conclusion

PPP projects are implemented over extended periods, within dynamic environments where stakeholders, particularly PPP project partners, continuously adapt in their roles, resources, among others, to ensure value creation for citizens in society. Many countries, including Uganda, have established robust regulatory frameworks to govern and preside over PPP-project processes. In Uganda, the government enacted the PPP Act 2015 and the operationalisation of the PPP Unit, among other strategies, aimed to support the country’s implementation and supervision of PPP activities. However, this study revealed gaps in the exiting systems, indicating that, among other issues, most PPP projects were not registered with the Unit. Most projects were initiated before the enactment of the PPP Act, thereby falling outside the current formal PPP regulatory framework. With proper registration and effective oversight by the PPP Unit, these projects would benefit from the support, to enhance their effectiveness. The projects further risk failing to create value without ample supervision of their activities. The potential for the PPP projects to create value for stakeholders lies in a well-coordinated and transparent system that aligns with policy and practice. Therefore, PPP projects must be registered under the unit to ensure proper monitoring, capacity building and structured interventions as indicated in the developed framework.

The study aimed to address the poor value creation in PPP projects, which posed a threat to the heavy investments made by partners in the projects. From the main research goal, SQs and research propositions were derived. In Table 8.1, the study validated the research propositions, yielding several key findings.

Table 8.1: Findings on Research Propositions

Sub Question (SQ)	Research Sub-Questions	Findings
P (1)	PPP projects have the potential to create value for stakeholders throughout the Project Life Cycle (PLC).	The findings of this study were in line with the proposition, revealing that PPPs indeed have the potential to create value for stakeholders. There was an alignment of stakeholder expectations with the benefits accrued by stakeholders of PPP projects.
P (2)	Current practices within Uganda's PPP projects create value for stakeholders	The findings of this study supported the proposition, and the results indicated that Uganda had a robust regulatory framework and systems that attract investments into the landscape.
P (3)	There are barriers to value creation within PPP projects in Uganda.	The findings of the study supported this proposition by presenting the barriers that impeded the value creation process. These barriers were found to have undermined the effectiveness of PPP projects leading to delays, stagnation, and in some cases termination of the projects.
P (4)	Best practices within PPP-PLC enhance value for stakeholders.	The findings are in line with this proposition. They revealed that adopting best practices within various phases is key for creating value for stakeholders. This study recommends adopting the best practices in normal PPP project activities.
P (5)	There is a relationship between current practices and best practices within the project lifecycle in the creation of value for stakeholders.	The findings of this study confirmed this proposition, revealing a strong relationship between the current and best practices within the PPP-PLC. The findings of this proposition informed the development of a best practice value creation framework for PPP projects.

Table 8.1 presents an examination of the research propositions, and what the study learned from them the detailed examination of the same research propositions is outlined in the next sections.

8.2.1 The potential of PPP projects to create value for stakeholders

The findings of the study revealed that understanding the potential of PPP projects to create value for stakeholders, required a clear identification and mapping of the relevant stakeholders and their needs of the project. As stakeholders, project managers possessed varying levels of PPP project experience and roles they played in the execution of project activities. These roles were found to be similar to the roles of traditional project managers. However, these were adapted to the different dynamic environment as well as the phases of the PPP-PLC at which they were executing project activities. For end users, these stakeholders demonstrated varied levels of satisfaction, which influenced their ability to continue using and consuming project products. For instance, in the health sector, consumers indicated a need for the health services at the health facilities. And the end users were retained due to the limited available alternatives within the sectors. On the other hand, in the transport sector, end user retention mainly was driven by consumer satisfaction as the users had alternatives to the available products. This study concluded that depending on the consumer's needs, all projects needed to cater for and align stakeholder needs and expectations with the project's structure and products to create value for them. Failure to align with their needs affected end user retention negatively, while aligning with their needs enhanced their satisfaction and increased their retention as project end users.

8.2.2 The current practices of value creation in PPP projects

Uganda’s financial constraints have necessitated partnerships between the public and private sectors through PPP projects to create value. The regulatory framework, comprising the PPP Act 2015, PPP regulations and guidelines, PPDA regulations, subsidies, tax waivers and a dedicated PPP Unit, have supported the partnerships. The enabling environment has attracted foreign investors with significant capital. At the same time, local investors have also proactively sought a collaboration with the government. However, despite the supportive regulatory framework and the potential of PPP projects to create value, barriers within each phase of the PPP-PLC hindered value creation.

8.2.3 The barriers to the value creation process

PPPs were confronted with many barriers that hinder the value creation process. The barriers ranged from bureaucracies, change in project scope, climate change, communication gaps, corruption, delayed stakeholder engagement, delays, high operation, and maintenance costs. This was in addition to high tariffs, human resource constraints, insecurity, limited access to project products, non-compliance with contractual agreements, opportunistic behaviours of partners, partner conflicts, poor budgeting, profit repatriation, service interruptions and Uganda’s unstable risk profile. The barriers manifested at various phases of the PPP-PLC, varied in magnitude, and, if left unmanaged, posed a risk of adversely impacting other stakeholders.

8.2.4 Best practices of the value creation process

This study identified several best practices that are essential for the value creation process within the PPP-PLC. The best practices included engagement, collaboration, risk management, efficiency, dispute resolution, communication, commitment, and sustainability. The findings of this study suggested that incorporating these best practices within the PPP-PLC is crucial for creating enhanced value for stakeholders.

8.2.5 Relationship between current practices and best practices within the PPP-PLC in the creation of value for stakeholders.

The study concludes that integrating best practices with current practices throughout the PPP-PLC enabled PPP projects to overcome barriers to value creation. Whereas current practices were inherently ingrained, best practices were more deliberate and refined, ensuring end user satisfaction. Therefore, the key findings of this study indicated that the Best Practice Value Creation Framework is a fusion of current and best practices, emphasising the need for stakeholders to adopt, monitor and evaluate their practices to enhance value creation.

8.2.6 Current frameworks within the PPP context

This study assessed existing historical frameworks and identified gaps within them, which, due to their generic nature, failed to provide a step-by-step guide towards the value creation process in PPP projects. To address the ambiguity surrounding the concept of value creation in PPP projects, this study targeted PPP projects across various sectors of the economy. Employing a qualitative approach, this study drew conclusions and recommendations, which were presented in the Best Practice Value Creation Framework of this study in Chapter Seven.

8.3 Recommendations

The findings in this study and the literature review presented several salient issues on the value creation process of PPPs. From these, several recommendations emerged from this study, and they include:

8.3.1 Strengthening and aligning stakeholder expectations to the goals of the projects

This study recommends that stakeholders are engaged from the very start and that their expectations be captured so that these are reflected within the objectives of the projects. As the project progresses, there should be a matrix where the expectations are ticked off as the project achieves them. Further, the expectations should be catered for and communicated to the stakeholders, as the project incorporates them, clearly stating at which stages or phases these expectations shall be attained. This practice fosters stakeholder buy-in and a feeling of belonging of the stakeholders with the project.

8.3.2 Incorporation of best practices within contract terms

To overcome barriers to value creation, this study suggests that all projects highlight the best practices as they will be incorporated within the project. This may form a part of the contract so that as the performance indicators are highlighted, the elements of best practices also stand out and project performance is measured against the two fronts throughout the PPP-PLC. This would support the projects in overcoming barriers and effectively anticipating them before they happen to create value for all involved.

8.3.3 Empowerment of the PPP Unit to effectively supervise all PPP projects

This study recommends the effective empowerment of the activities of the PPP Unit, for example, by making it a requirement and mandatory for any PPP activities to gain approval from the unit at every stage in the PPP-PLC. Further, the Unit can be empowered to register and constantly update their databases by registering all projects, even those formed before the enactment of the PPP Act of 2015. The unit can also be equipped to manage different projects within different sectors to cater for unique and innovative projects equally and ensure that diverse sectors benefit from the PPP project model.

8.3.4 Empowerment of Uganda's private sector

During data collection, it was noted that Uganda's private sector was highly unsophisticated. This contributed to their inability to participate within the PPP landscape and compete against foreign companies. This study recommends that the government intervene to support local private sector entities. The support may be, inform of subsidies and tax waivers that can help private sector entities mitigate risks. Several risks to the government are associated with profit repatriation and indebtedness to foreign companies because of all projects being financed by foreign international private sector companies.

8.3.5 Investment in PPP capacity building

Capacity building, particularly by the project, for public sector personnel, is essential for the seamless adoption of the developed Best Practice Value Creation Framework. For the personnel and stakeholders of the PPP projects who would use the framework, capacity building is a way to enhance their knowledge and skills and enable them to adapt quickly to the new processes and systems, mitigating any resistance to change. Also, it would promote a culture of learning, boost their confidence and lead to successful implementation of the framework.

8.4 Suggestions For Future Studies

The study advanced the understanding of value creation in PPP projects and project management practices within the PPP context. The study also recommends the following for future studies:

a) Given the exploratory nature of the validation process conducted by this study, future research is encouraged to undertake broader, more systematic empirical testing of the framework. The proposed process could involve applying the framework in real-life PPP projects, or conducting multi-stakeholder workshops. These efforts would serve to validate the framework's practical utility, refine its components, and assess its generalisability across different sectors and environments. Further, the framework could benefit from expanding the validation sample to include public sector actors, private partners, financiers, and civil society among other stakeholders to enrich the applicability and credibility of the framework in guiding value creation in PPP projects.
b) Future studies are encouraged to undertake longitudinal research to explore how value is created, transformed, or lost across different phases of the PPP-PLC. This is particularly relevant because PPP projects are typically long-term engagements, and the nature and perception of value may evolve over time. A longitudinal approach would allow researchers to examine the sustainability of outcomes, the long-term satisfaction of stakeholders, and the alignment of PPPs with broader development objectives such as

national development goals, SDGs among others. This line of inquiry could be supported by repeated data collection at various stages of the PLC. Special focus could be put on the elements of value creation and an analysis on them to assess their effect and how stakeholders apply them in real life in the value creation process.

c) The present study focused primarily on the managerial and structural dimensions of PPP projects. Future research could benefit from the adoption of mixed-methods approaches to assess the broader social and economic impacts of PPP projects. This would provide insight into the lived-in experiences of beneficiaries in areas such as access to services and products, employment generation, environmental sustainability, and community satisfaction. The combination of the qualitative and quantitative studies would offer a more holistic picture of how PPPs contribute to, or hinder, long-term development goals.

In summary, future studies should not only refine and validate the proposed framework but also critically examine its implications across time, sectors, and socio-economic settings. Doing so will contribute to a more robust and contextually grounded body of knowledge on value creation in PPPs, particularly within developing economies such as Uganda.8.5 Reflections

This research was motivated by a report by the Office of the Auditor General (OAG) which highlighted, among others, tremendous losses and information gaps which hindered transparency and accountability, and therefore challenged the assessment of PPP processes, their number in the economy and whether they possessed the ability to deliver value in the economy.

Research into PPP projects in Uganda confirmed that institutions such as the World Bank, which had heavily invested in PPP projects globally and in Uganda, had acknowledged the lack of transparency in executing these projects. Furthermore, public dissatisfaction and stakeholder frustrations echoed the same issues since, without transparency, it was difficult to measure or assess the magnitude of the investments, the progress of the projects, and their impact on communities. This, therefore, rendered them in a picture of mere commitments and not drivers of sustainable development.

This study sought to bridge the knowledge gap by understanding the complexities of value creation in PPPs, guiding future decisions and ensuring that PPPs deliver their promise of creating value for stakeholders. The problem statement, main research goals and sub-goals, guide the inquiry into the concept. Thus, the study developed a research conceptual framework and propositions to guide the study further. The areas of interest that emerged from the research problem, goal, and purpose of the study included:

i. PPP projects
ii. PPP Project Lifecycle
iii. Value creation process
iv. Drivers/Elements of value creation
v. Barriers to value creation
vi. Public Value (PV) theory in PPP projects
vii. Frameworks as management tools

The study drew all these constructs together and investigated the relationships between them, leading to a detailed review of literature presented in Chapters Two and Three. Upon reviewing the literature, the study developed a research methodology to best suit the study's data collection and analysis. The study adopted a qualitative approach and formulated research propositions to specify the relationship between the areas of interest.

The qualitative approach enabled the study to better understand PPP projects, the PPP-PLC, and the requirements for creating value for stakeholders. The data collection and analysis process were guided by research propositions, which were subsequently proven. The study synthesised and analysed the data further, guided by the research propositions, leading to the development of the Best Practice Value Creation Framework for PPP projects. This framework explained how PPPs create value through the phases of their PPP-PLC, thus providing a solution to the problems faced by PPP projects. All ethical standards were adhered to throughout the research process, ensuring compliance with established research standards.

The significance of this study lies in its contribution to the field of project management, serving as a guide for stakeholders of PPP projects from both the private and public sectors. In Uganda, PPPs are crucial for driving development across different sectors of the economy. The importance of PPP projects is further highlighted in Uganda's NDP IV, the African Union's Agenda 2063 supporting the streamlining and development of frameworks to strengthen and guide PPP processes.

This study provides a foundation for policy makers, practitioners, researchers, and other stakeholders to refine strategies, strengthen governance structures and ensure that PPP projects create value and fulfil their promise of socio-economic development.

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APPENDICES

APPENDIX 1

PROJECT MANAGER'S SEMI-STRUCTURED INTERVIEW GUIDE

Research Topic:	A Framework For The Value Creation Process In Public-Private Partnerships Projects (PPPPs): A Perspective From Uganda
Major Research Goal:	To develop a best-practice value-creation framework for PPPP projects in the Ugandan context.

Purpose:

The purpose of this study is to gain an understanding of the perspective of multiple stakeholders regarding current and best practices within Public Private Partnership Projects in Uganda. The data collected from this interview will be utilised to develop a best practice value creation framework that PPPPs worldwide can use to create value for stakeholders. All information will be kept confidential and only to advance knowledge about value creation in PPPPs. I would like to record this interview to transcribe and review it later. Do you have any questions for me at this time? Do you give your consent for this interview to be recorded?

Interview Questions:

SECTION A: Bibliography

1. Tell me a little about yourself and your role in the PPP.
2. How long have you been working on the project?
3. What position do you hold on this project?
4. What is your highest academic background?

SECTION B

1. How would you describe PPPs?
2. What are your expectations of PPP projects?
3. How are you benefiting as a stakeholder of this project?
4. What PPP projects have you been involved in?
5. In your opinion, what is the current state of PPPs?
6. Mention the current PPPs in Uganda that are being carried out that you know of?
7. Mention a successful project you have been involved in and briefly explain the processes that the project has gone through
8. What are the good practices that are carried out by the projects?
9. Tell me the factors that enhance PPPP value creation in Uganda
10. How best do you ensure participation in this project?
11. How best do you ensure partnership in this project?
12. How do you ensure risk management in this project?

13. How best do you ensure innovation in this project?
14. How best do you ensure Dynamic Decision making in this project?
15. Describe how best PPP projects can be implemented in Uganda
16. What are the planning strategies of this project?
17. What are the procurement strategies of this project?
18. What are the designs and construction strategies of this project?
19. What are the operation strategies of this project?
20. What are the transfer strategies of this project?
21. In your own words, what challenges have you faced while implementing the project?
22. In your experience, what project have you been involved in that has not fulfilled its objectives?
23. In your experience, describe one project that has not created value, and what can PPPs learn from it?
24. Please describe recommendations on how best to structure PPPs to meet the needs of stakeholders.
25. Are there any other issues you would like to share that can promote performance in PPPPs?

Closing: Thank you for taking the time to share your experiences with me today. As I review our interview, I may contact you with some additional or clarifying questions. Your perspective and lived experiences are critical to this study. I appreciate your participation in this research. Please be assured that your information and responses are confidential and will be kept in a secure location.

Student Name:	Hudah Namirembe Bawonga
Student Number:	21N9065
Programme of Study:	PhD in Social and Economic Policy
Supervisor:	P.D. Rwelamila
Co-Supervisor:	Cyril Mbatha

USER'S SEMI-STRUCTURED INTERVIEW GUIDE

Research Topic: A Framework for the value creation process in Public-Private Partnerships Projects (PPPPs): A Perspective from Uganda

Major Research Goal: To develop a best-practice value-creation framework for PPPP projects in the Ugandan context.

Purpose:

The purpose of this study is to gain an understanding of the perspective of multiple stakeholders, including users, regarding current and best practices within Public Private Partnership Projects in Uganda. You have been identified as a user of …….(PPP project). In this study, a Public Private Partnership Project in this study is a contractual arrangement whereby private companies are involved in the financing, ownership, and, sometimes, operation of public facilities. The data collected from this interview will be utilised to develop a best practice value creation framework that PPPPs worldwide can use to create value for stakeholders. All information will be kept confidential and only to advance knowledge about value creation in PPPPs. I would like to record this interview to transcribe and review it later. Do you have any questions for me at this time? Do you give your consent for this interview to be recorded?

Interview Questions:

SECTION A: Bibliography

1. Tell me a little about yourself and your role in the PPP.
2. How long have you been a user of this project?

SECTION B

1. What are your expectations of using this project's products/services?
2. What are the benefits of using this project?
3. In your opinion, comment about the
   a. Affordability of the project
   b. Accessibility of the project.
   c. Environmental sustainability of the project
4. What challenges have you faced as a user of the project?
5. Please describe recommendations on how this project can meet the needs of stakeholders.
6. Are there any other issues you would like to share that can promote the value creation by the project?

Closing: Thank you for taking the time to share your experiences with me today. As I review our interview, I may contact you with some additional or clarifying questions. Your perspective and lived experiences are critical to this study. I appreciate your participation in this research. Please be assured that your information and responses are confidential and will be kept in a secure location.

Student Name: Hudah Namirembe Bawonga
Student Number: 21N9065
Programme of Study: PhD in Social and Economic Policy
Supervisor: P.D. Rwelamila
Co-Supervisor: Cyril Mbatha

APPENDIX II

Rhodes University Human Research Ethics Committee
PO Box 94, Makhanda, 6140, South Africa
t: +27 (0) 46 603 7727
f: +27 (0) 46 603 8822
e: ethics-committee@ru.ac.za

https://www.ru.ac.za/researchgateway/ethics/

RHODES UNIVERSITY
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29 May 2023

Ms Hudah Namirembe Bawonga

Email: g21n9065@campus.ru.ac.za hudahssali@gmail.com

Review Reference: 2023-7172-7639

Dear hudah namirembe

Title: A framework for the value creation process in Public-Private Partnerships Projects (PPPPs): A perspective from Uganda

Researcher: hudah namirembe

Supervisors: Prof P.D. Rwelamila and Prof Cyril Mbatha

This letter confirms that the above research proposal has been reviewed and **APPROVED** by the Rhodes University Human Research Ethics Committee (RU-HREC). Your Approval number is: 2023-7172-7639

Approval has been granted for 1 year. An annual progress report will be required in order to renew approval for an additional period. You will receive an email notifying you when the annual report is due.

Please ensure that the ethical standards committee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes in investigators. Please also ensure that a brief report is submitted to the ethics committee on the completion of the research. The purpose of this report is to indicate whether the research was conducted successfully, if any aspects could not be completed, or if any problems arose that the ethical standards committee should be aware of. If a thesis or dissertation arising from this research is submitted to the library's electronic theses and dissertations (ETD) repository, please notify the committee of the date of submission and/or any reference or cataloguing number allocated.

Sincerely,

APPENDIX III

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PARTICIPANT INFORMED CONSENT DECLARATION
(To be signed by research participant/s)

<u>Project Title</u>: *A Framework for the value creation process in Public-Private Partnerships Projects (PPPPs): A Perspective from Uganda*.

Hudah Namirembe Bawonga from the Department of Institute of Social and Economic Research (ISER), Rhodes University, has requested my permission to participate in the above-mentioned research project.

The nature and the purpose of the research project and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

1. The purpose of the research project is to develop a best practice value creation framework for Public Private Partnership Projects.

2. Rhodes University has given ethical clearance to this research project, **Number 2023-7172-7535**, and I have seen/may request to see the clearance certificate by contacting the Ethics Coordinator (<u>ethics-committee@ru.ac.za</u>)

3. By participating in this research project, I will be contributing towards the body of knowledge on value creation by Public Private Partnership Projects. In addition, the results of the study will provide insight into the best practices of value creation that PPPPs can adopt to create value for stakeholders.

4. I will participate in the project by responding to questions as per the interview guide to provide a better understanding and reflection about my experience with value or value creation in a PPP project. The interview may take about forty-five (45) minutes to one (1) hour. I am collecting information through face-to-face or telephone interviews.

5. My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences.

6. I will not be compensated for participating in the research, but my out-of-pocket expenses will be reimbursed.

7. The following risks are associated with my participation: the risk of confidentiality, which will be alleviated by not using names of participants or the projects but rather assigning a code to protect the identity of the participants and the project. Everything that is mentioned will remain strictly

confidential and will be securely stored and destroyed five (5) years after the dissertation is published.

8. The Researcher intends to publish the research results in the form of journal articles, published and disseminated to stakeholders. However, confidentiality and anonymity of records will be maintained, and my name and identity will not be revealed to anyone who has not been involved in the conducting of the research, ***unless I indicate to the contrary/recognize that as a public figure my identity will inevitably be/become known, in which case I agree to accept the loss of anonymity.***

9. In terms of the Protection of Personal Information Act (No. 4 of 2013) it remains my right to request the Researcher to provide me with a detailed explanation of exactly how confidentiality and anonymity of the data I provide will be achieved. I may also request to know exactly how my personal information will be stored securely, for how long it will be stored.

10. If any data collected from me for this research project is to be used by the Researcher for any further study, I am to be informed in writing, and my written consent is requested again. I need not give consent for the new research if it is incompatible with the initial purpose of the present study (POPIA, s15(3)). Equally, I can simply reject the request. In such cases, a formal request needs to be made to me by the researcher via the Ethics Coordinator (ethics-committee@ru.ac.za).

11. In terms of the POPI Act, I possess the right to receive feedback about this research. This will take the form of a dissemination workshop where the results of the study will be shared, and a copy of the research thesis will be availed in the organisation's repository unless ***I elect not to receive this feedback.***

12. Any further questions that I might have regarding the nature of the research and/or my participation in it will be answered by Hudah Namirembe Bawonga, g21n9065@campus.ru.ac.za.

13. By signing this informed consent declaration, I am not waiving any legal claims, rights, or remedies. A copy of this informed consent declaration will be given to me, and the original will be kept on record by the Researcher.

14. I ***agree*** to the Researcher's use of voice recording of my comments and opinions during interviews, the purpose of which is to ensure the accurate recording of my views/responses. Furthermore, I have the right to request a copy of the interview transcriptions to confirm that my opinions are accurately recorded

I, …………………………………………………………………………., have read the above information / confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask, and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurised in any way and I voluntarily agree to participate in the above-mentioned project.

………………………………….   ………………………… …………………………

Participant's signature Witness Date

APPENDIX IV

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VALIDATION SCORING SHEET

Thank you for agreeing to participate in this validation survey.

Purpose of the questionnaire: To validate the Best Practice Value Creation Framework for Public-Private Partnerships (PPPs) in Uganda, ensuring it effectively guides stakeholders through the phases of the PPP Project Life Cycle (PPP-PLC).

Background

This research seeks to validate the **Best Practice Value Creation Framework for PPPs**, which has been developed based on rigorous data collection and analysis. The study's primary objective is:
To develop a best-practice value creation framework for PPP projects..

Instructions

his document consists of **two sections**: **Section 1:** Collects background information and **Section 2:** Presents the framework for validation. After reviewing the framework, you will be asked to rate six validation aspects by selecting the appropriate boxes and responding to the questions as necessary.

The survey will take approximately 15-20 minutes to complete, and your responses will remain completely anonymous.

1.1 Consent Box

☐ I agree to participate and understand the survey is anonymous.

Section 1: Respondent Background Information

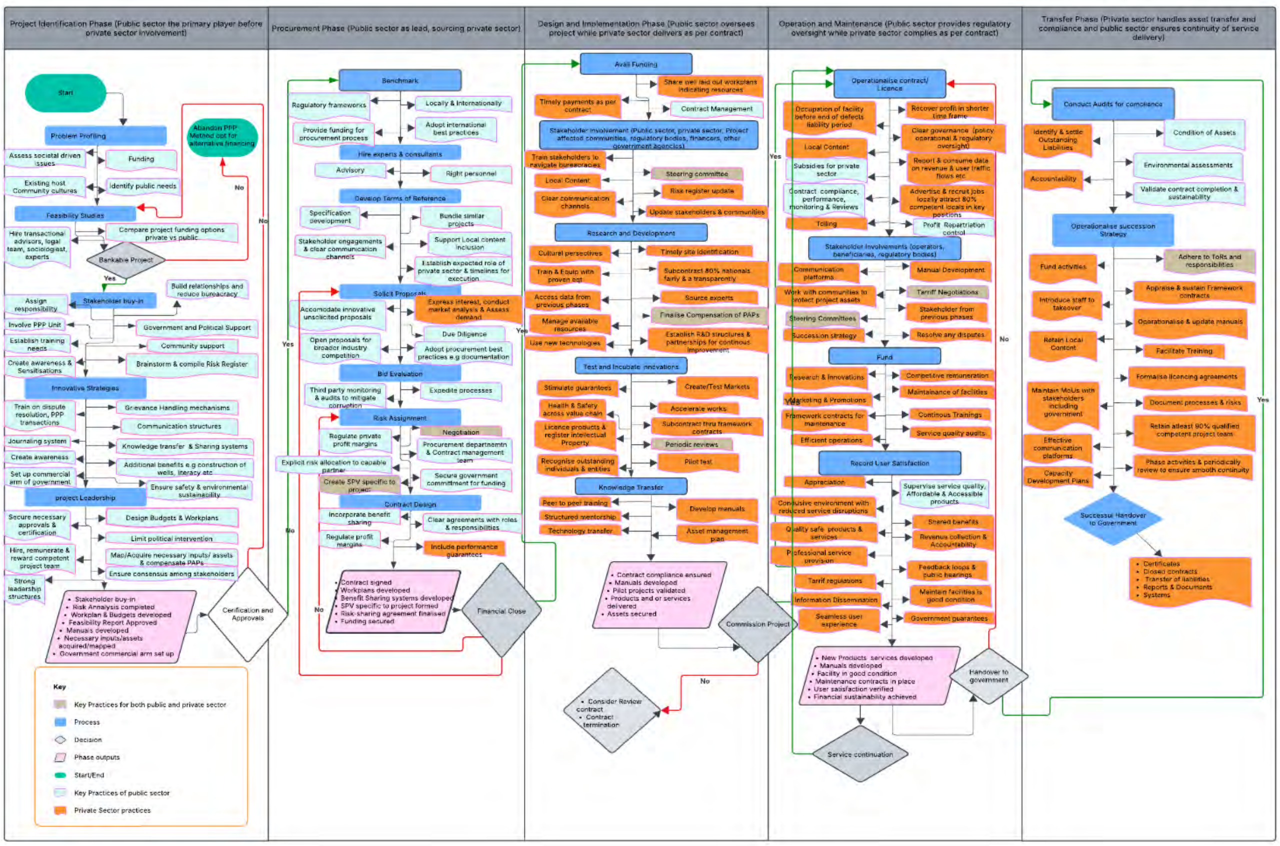
This section collects demographic and professional information relevant to the study.

a) **Name** (Optional): ______________________
b) **Gender**
   ☐ Male
   ☐ Female
c) **Position/Designation**:______________________

d) Your role in PPP projects
   ☐ Project Manager/Coordinator
   ☐ Project End User
   ☐ Researcher/Academic

Section 2: Framework Validation

Please review the framework presented below and provide your feedback based on the questions that follow.



Validation Questions

Please select the relative score for each validation aspect to represent the extent of satisfaction. (1 represents Poor, 2 represents Average, 3 represents Good/Satisfactory, 4 represents Very Good, 5 represents Excellent)

Validation Aspect	**Scoring Scale**				
	Poor	**Average**	**Good/Satisfactory**	**Very Good**	**Excellent**
Degree of appropriateness					
Degree of objectivity					
Degree of replicability					
Degree of applicability					
Overall reliability					
Overall suitability for PPP projects					

1. Do you have any specific suggestions to improve the framework?___________________________

2. Are there any important elements you feel are missing from the framework? If yes, please specify.

____

APPENDIX V

Telephone : 256 41 4341305/230487
Fax : 256 41 4233524
Email : finance@finance.go.ug
Website : www.finance.go.ug
Plot No. 2-10 Apollo Kaggwa Road
In any correspondence on
This subject please quote No. PPP 000/014

Ministry of Finance, Planning &
Economic Development,
P.O Box 8147
Kampala, Uganda

22 May 2023

Hudah Namirembe Bawonga
Researcher
Rhodes University
P.O. Box 94, Makhanda 6140, Eastern Cape, South Africa
+27 46 603 8111

RE: REQUEST FOR SIGNING INFORMED CONSENT FORM

Reference is made to your letter requesting the Public Private Partnership Unit (PPPU) to sign an informed Consent form for your research on: ***A Framework for the value creation process in Public-Private Partnerships Projects (PPPs): A Perspective from Uganda.***

This is to inform you that the form has been signed and also to request that you share the research findings of your study with the PPPU.

Yours sincerely,

PP. Jim Mugunga
Executive Director.

RHODES UNIVERSITY
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ACCESS LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

Rhodes University
Drosty Road,
Grahamstown,
6139

Public Private Partnership Unit,
Ministry of Finance, Planning and Economic Development
Rwenzori Towers, Ground Floor, Wing A
Plot 4B & 6, Nakasero Road
P.O. Box 12622, Kampala
Email: info@pppunit.go.ug
Tel: (+256) 417 104200

May 12, 2023

Dear sir,

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered PhD student in the Institute of Social and Economic Research (ISER) at the Rhodes University. My supervisors are Professor P.D. Rwelamila and Professor Cyril Mbatha.

The proposed topic of my research is: ***A Framework for the value creation process in Public-Private Partnerships Projects (PPPPs): A Perspective from Uganda*** The objectives of the study are:

(a). To examine the existing knowledge on PPPPs to gain an understanding of the drivers and barriers of the value creation process in PPPs
(b). To explore current practices in Uganda and global best practices of value creation in PPPPs and address challenges identified from the study
(c). To develop and validate a best-practice value creation framework that addresses the challenges of PPPPs identified from the study.

I am hereby seeking your consent to collect data in the form of face-to-face and telephone interviews from project managers and users from among the PPP projects in Uganda. To assist you in reaching a decision, I have attached to this letter:

(a) A copy of an ethical clearance certificate issued by the University
(b) A copy the research instruments which I intend using in my research

Should you require any further information, please do not hesitate to contact me or my

Rhodes University, Research Office, Ethics
Ethics Coordinator: ethics-commitee@ru.ac.za
t: +27 (0) 46 603 7727 f: +27 (0) 86 616 7707
Room 220, Main Admin Building, Drostdy Road, Grahamstown, 6139

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supervisor. Our contact details are as follows:

Lead Supervisor	Co-Supervisor	Student
Prof. P.D. Rwelamila	Prof. Cyril Mbatha	Hudah Namirembe Bawonga
mutajwaarwelamila@gmail.com	c.mbatha@ru.ac.za	hudahssali@gmail.com
+27823783512	+27 (0) 46 603 8919 /+27 (0) 81 551 0836	+256701969800

Upon completion of the study, I undertake to provide you with a feedback.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Hudah Namirembe Bawonga
0701969800/0776969800

I hereby give consent for the study to be undertaken among Public Private Partnership (PPP) Projects.

Name: Jim Mugunga Signature: pp. ....
On behalf of the Public Private Partnership Unit (PPPU) of Uganda