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Project Feasibility Analysis a Strategic Tool for Project Performance: The Case of Public-Private Partnership in The Bamenda Municipality

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Abstract

The main aimed of this research is to determine the influence of project feasibility analysis on the performance of public-private partnership projects in Bamenda municipality. The methodology of the study consists of causal research design, primary source of data was collected with the help of questionnaires. The sample size used for the study is made up of 52 public private partnership projects. A purposive sampling technique was used for the study. The research uses OLS technique to estimate the regression. The regression analysis was based on the objective of the research work and also to identify the significant condition of the various variables used in the study. The findings revealed that after the regression analysis per objective, the variables legal feasibility and operational feasibility were positive and significant meanwhile technical feasibility was negative and significant. The study recommends that given the significant negative impact of technical feasibility analysis on project performance, it is recommended to enhance the rigor and comprehensiveness of technical assessments. This may involve investing in specialized expertise and technologies to accurately evaluate technological capabilities, identify potential challenges, and leverage innovative solutions for project implementation.

Keywords:

Feasibility analysis, technical feasibility, legal feasibility, operational feasibility, project performance, public private partnership projects

1. Introduction

Project feasibility analysis is an integral part of the design and implementation of public private partnership projects. In the 1960s and 1970s, feasibility analysis emerged as a key tool to evaluate the technical, economic, financial, and operational viability of large-scale projects particularly in the public sector. The feasibility analysis identifies the project market, highlights the project's key goals, maps out potential challenges or roadblocks and offers alternative solutions. It also factors in time, budget, legal, and manpower requirements to determine whether the project is not only possible but advantageous for the company, organization or government to undertake.

Public-private partnerships have played a significant role in infrastructure development and public service delivery in the United States over the past few decades. Public-private partnerships gained prominence in the US during the 1980s and 1990s as a way to leverage private sector expertise and financing for public infrastructure projects. However, the performance of these public-private partnership projects in Cameroon has been mixed. While some projects such as the Kribi Deep Water Port have been successful in attracting private investment and delivering improved infrastructure, others have faced challenges related to contract design, financial structuring and stakeholder management.

Many public private partnership projects in Bamenda still end up unsuccessful despite the various types of feasibility analysis carried out before engaging in the project. Feasibility analysis is typically conducted before any initial steps are taken with a project including planning. It is one of, if not the most important factors in determining whether the project can move forward and be successful at the end. Some of the problems related to this study include poor execution of technical feasibility, wrong economic and legal feasibility, poor estimates and financial visibility and insufficient operational feasibility analysis. More recently, the COVID-19 pandemic has presented new challenges for the public-private partnerships market as governments and private partners grapple with issues such as revenue shortfalls, project delays, and the need for renegotiations.

Most often than not, feasibility analyses are not carried out by professionals either due to limited budget or biased hiring. Factors such as limited institutional capacity, political instability and the lack of a comprehensive public private partnership policy and regulatory framework have contributed to the uneven performance of public-private partnership projects in Cameroon.

In this study, the researcher intends to make an in-depth analysis of the importance of jointly carrying out technical, legal and operational project feasibility analysis. While there have been past attempts

to address this problem, including the implementation of project appraisal and evaluation methods, success has been limited.

There is a need for a comprehensive and systematic understanding of the impact and effectiveness of project feasibility analysis on the performance of public private partnership projects in Bamenda. The contribution of this research will be to provide a deeper understanding of the relationship between project feasibility analysis and the performance of public private partnership projects in Bamenda municipality and to identify ways to improve the effectiveness of project feasibility analysis. It is very necessary to conduct all the possible types of project feasibility analyses to ascertain the possible success of the project. However, most researchers have only focused on one type of feasibility analysis due to reasons such as time factor and limited resources. In this study, it will look at three types of feasibility analyses namely, technical, legal and operational feasibility analyses and their influence on performance of public private partnership projects which are very relevant. This will help entrepreneurs, project managers, government and policy makers to make informed decisions.

2. Main Research Objective

The main objective of this research is to determine the influence of project feasibility analysis on the performance of public private partnership projects in Bamenda.

3. Specific Research Objectives

1. To investigate the influence of technical feasibility analysis on the performance of public private partnership projects in Bamenda.
2. To assess the influence of legal feasibility analysis on the performance of public private partnership projects in Bamenda.
3. To determine the influence of operational feasibility analysis on the performance of public private partnership projects in Bamenda.

4. Literature Review

4.1. Theoretical Literature

4.2. The Stakeholder Theory

The stakeholder theory which is a crucial concept in understanding and managing public-private partnership projects was not developed in a specific year, but rather evolved over time. The foundations of stakeholder theory propounded by Edward Freeman's can be traced back to the 1960s and 1970s, when scholars and practitioners began to recognize the importance of considering the interests of various stakeholders beyond just shareholders in the management and decision-making of organizations.

The stakeholder theory is highly relevant to this research work on public-private partnership projects for the following reasons: public private partnership projects typically involve a diverse set of stakeholders, including government agencies, private sector partners, local communities, and various other interest groups. In the context of public private partnership projects, this is particularly important, as the governance and decision-making structures often involve a complex interplay between public and private sector actors. Incorporating stakeholder theory can help ensure that project governance and decision-making processes are more inclusive, transparent, and responsive to the needs of various stakeholders.

Overall, the stakeholder theory provides a robust conceptual foundation for this research work on public private partnership projects, as it can help you analyze, understand, and address the multifaceted challenges and opportunities inherent in these complex public-private collaborations. Incorporating stakeholder theory into this research framework can significantly enhance the ability to develop practical insights and recommendations for improving the governance, management, and outcomes of public private partnership projects.

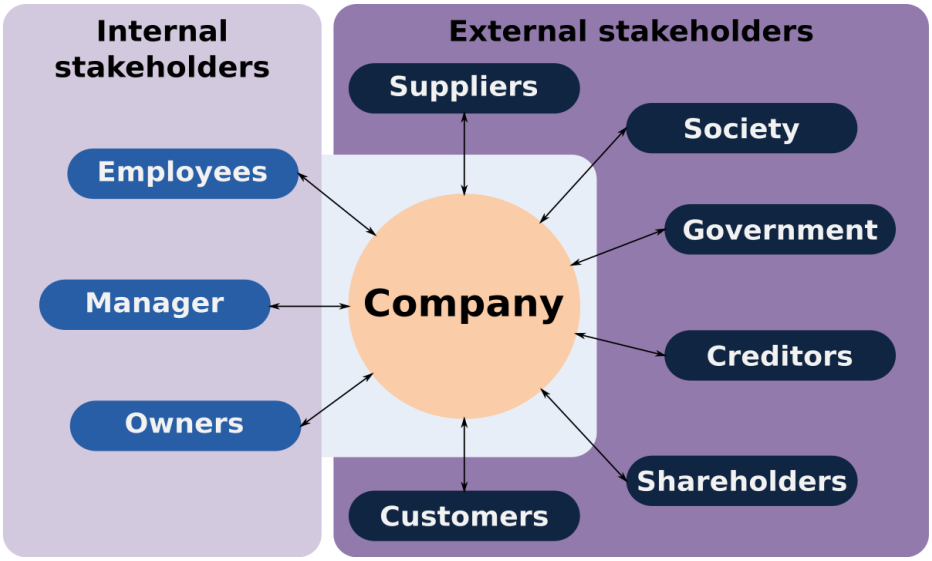

Fig 1 Stakeholder Model Freeman, (1984)

4.3. The Principal-Agent Theory

The Principal-Agent Theory was developed in the 1970s by economists Michael C. Jensen and William H. Meckling. It has it roots in the fields of economics and organizational behavior. The primary objective of the Principal-Agent Theory is to understand the relationship between a principal (the party who delegates work) and an agent (the party who performs the work on behalf of the principal). The theory aims to identify and address the potential conflicts of interest that can arise in such a relationship.

The theory has been criticize based in the following aspects such as oversimplification that is the theory is sometimes criticized for oversimplifying the complex and multifaceted relationships between principals and agents. Also, lack of context; the theory may not adequately account for the specific cultural, institutional, and organizational contexts in which the principal-agent relationship is embedded. More so, it assumption of self-interest, the assumption of self-interested behavior may not always hold true, as agents may also have intrinsic motivations and a sense of duty.

In the context of the effects of project feasibility analysis on the performance of public private partnership in Bamenda, the Principal-Agent Theory can provide valuable insights: The public sector (the principal) delegates the delivery of a public service or infrastructure project to a private sector partner (the agent) in a public private partnership arrangement. Also, the feasibility analysis can help identify potential agency problems, such as information asymmetries and conflicting interests that may arise between the public and private partners. By addressing these issues through the feasibility

analysis, the principal can design appropriate incentive structures, monitoring mechanisms, and risk-sharing arrangements to align the interests of the public and private partners and improve the performance of the public private partnership project.

Incorporating the Principal-Agent Theory into the research it can help you better understand the role of project feasibility analysis in mitigating the challenges inherent in the principal-agent relationship within public private partnership projects in the Bamenda municipality context.

4.4. The Contingency Theory

Fred Fieldler is a prominent proponent of Contingency Theory. Fred Fieldler, an American psychologist, is known for his research on leadership styles and their effectiveness in different organizational contexts. Fieldler's Contingency Theory of Leadership suggests that the effectiveness of leadership styles depends on the situational factors, such as task structure, leader-member relations, and positional power (Fieldler, 1964).

The core premise of the Contingency Theory is that leadership effectiveness is contingent on situational factors, was a significant departure from earlier leadership theories that sought to identify a single optimal leadership style.

One of the key criticisms of the Contingency Theory is that it oversimplifies the complexities of leadership and organizational dynamics. While the theory provides a useful framework for understanding the importance of situational factors, it may fail to account for the nuanced and dynamic nature of real-world leadership situations. Additionally, the theory has been criticized for its reliance on the assumption of stable leadership styles, as individuals may exhibit different behaviors in different contexts. Furthermore, the Contingency Theory has been criticized for its limited scope, as it primarily focuses on the leader-follower relationship and does not fully address the broader organizational and environmental factors that can influence leadership effectiveness. Some scholars have argued that the theory should be expanded to consider the impact of organizational culture, technological advancements, and other external forces on the leadership-performance relationship.

Despite these criticisms, the Contingency Theory remains an influential and widely-studied approach in the field of management and organizational behavior. Its emphasis on the importance of situational factors in determining the most effective leadership style has had a lasting impact on leadership research and practice. The Contingency Theory proposed by Fred Fiedler is highly relevant and

significant to this research on the effects of project feasibility analysis on the performance of public-private partnership (PPP) projects in Bamenda.

4.5. Theory of Constraints

The theory of Constraints was formulated by Eliyahu Goldratt, an Israeli physicist, and management guru, in the mid-1980s. Goldratt introduced theory of Constraints through his novel "The Goal" and further developed the theory in collaboration with various colleagues, presenting a systematic approach to improving organizational performance and efficiency.

The theory of constraints asserts that every system, no matter how complex, has at least one constraint that limits its ability to achieve its goals. The primary goal of theory of Constraints is to identify and alleviate these constraints systematically, thereby improving the overall performance of the system. Goldratt emphasizes that the focus should be on the entire system rather than optimizing individual components in isolation. The theory advocates a process of continuous improvement, where efforts are directed towards understanding, exploiting, and ultimately elevating the constraints that hinder the system's ability to achieve its objectives.

The theory of Constraints operates on the assumption that organizations can be viewed as interconnected systems, and improving the performance of individual components does not necessarily enhance the overall system's effectiveness. It assumes that constraints are inherent in any system and that identifying and addressing these constraints is crucial for sustained improvement. Additionally, theory of Constraints assumes that organizations can achieve better results by concentrating on managing constraints rather than attempting to optimize every aspect simultaneously. The theory recognizes that not all constraints are physical; they can also manifest in policies, procedures, or other aspects of organizational structures. By acknowledging these assumptions, theory of Constraints provides a holistic perspective on organizational challenges and offers a structured approach to enhance efficiency.

Furthermore, theory of constraints assumes that suboptimal performance in one part of the system negatively impacts the system as a whole, emphasizing the interconnectedness of various elements. This assumption underlines the need for a systemic rather than a localized view when addressing organizational challenges. The theory of constraints challenges traditional cost accounting measures, suggesting that they often lead to suboptimal decisions by not considering the impact of constraints on overall system performance.

The framework of theory of constraints consists of a series of steps known as the process of On-Going Improvement. This process involves identifying the system's constraints, exploiting the constraints to the fullest extent possible, subordinating all other processes to the constraints, elevating the constraints, and then repeating the cycle. The Five Focusing Steps represent the iterative nature of the theory of Constraints framework, providing a structured approach to continuously improve system performance. This includes identifying and focusing on the critical constraint, aligning and adjusting other processes to support the constraint, and systematically working towards elevating or eliminating the constraint. By following these steps, organizations aim to achieve a continuous cycle of improvement in line with the overarching goal of maximizing throughput while minimizing operational expenses and inventory levels.

The Theory of constraints offers a valuable perspective for addressing the feasibility analyses influencing project performance in the Bamenda Municipality. Goldratt's theory of Constraints emphasizes the identification and management of constraints within a system, and in the context of the study, feasibility analyses can be considered as constraints hindering project performance. According to Goldratt (1990), a constraint is any factor limiting an organization from achieving its goal. By applying the theory of constraints principles, the study can systematically analyze and prioritize various feasibility analysis that act as constraints to greater project performance.

Additionally, the subordination and elevation steps in the theory of constraints align with the study's context. By subordinating other processes to the critical constraints (feasibility analysis influencing project performance), project managers, project holders and project stakeholders can ensure that all efforts are directed towards addressing the most impactful feasibility analysis.

Despite its popularity and practical applications, the theory of Constraints has faced criticism on various fronts. One prominent critique revolves around the oversimplification of complex organizational systems. Gupta and Boyd (2008) argue that the theory of constraints tends to reduce the complexity of real-world situations into a linear cause-and-effect model, overlooking the intricacies of interrelated factors within organizations. Critics suggest that this oversimplification may lead to a lack of nuance in understanding and addressing the multifaceted challenges that organizations encounter, particularly in dynamic environments.

5. Empirical Literature

Menyeng and Fokwa in 2020 carried out research on Evaluating the Social Impact of Project Feasibility Analysis on Public Projects in Cameroon. This study focuses on evaluating the social

impact of project feasibility analysis on public projects in Cameroon. It suggests that the inclusion of social factors in feasibility studies leads to enhanced community engagement, increased public support, and better overall project outcomes.

Eseme and Ngimwa in 2022 carried out a research on Stakeholder Analysis and Project Feasibility in Public Projects. This research explores the role of stakeholder analysis in project feasibility for public projects in Cameroon. The findings highlight that a comprehensive examination of stakeholders improves project dynamics, minimizes conflicts, and ensures effective participation, ultimately contributing to successful project implementation. Technological Evaluation of Project Feasibility Analysis on Public Infrastructural Projects in Cameroon. International Journal of Technology Management. Focusing on the technological evaluation of project feasibility analysis, this study examines its impact on public infrastructural projects in Cameroon. The research reveals that integrating technological factors in feasibility studies leads to improved project design, efficiency, and long-term sustainability. Financial Analysis in Project Feasibility Studies: A Comparative Study of Public Projects in Cameroon. Journal of Finance and Investment Analysis. This comparative study evaluates the role of financial analysis within project feasibility studies for public projects in Cameroon. The research demonstrates that in-depth financial assessments contribute to project viability, improved budgeting, and effective financial management, leading to enhanced project performance and successful financial outcomes.

Montano, García-L´opez and Melgarejo (2021) analysed the economic and legal factors that condition the proper operation of a project intend to arrive at a general model of operation that to construct from the study of three particular cases: Algeria, Tunisia and Egypt. These three countries represent different ways of structuring a project, with the involvement of the public sector being the main element that varies between them. Maguemgoum & Fomba (2017) in their study investigates the impact of project feasibility analysis on the performance of public infrastructure projects in Cameroon. The findings suggest that comprehensive feasibility analysis significantly improves project outcomes, including cost control, timely completion, and stakeholder satisfaction.

Tchambo, Tchinda & Ndzana (2023) explored the role of risk analysis within project feasibility studies in ensuring the success of public projects in Cameroon. The research highlights that a comprehensive assessment of potential risks leads to effective risk mitigation strategies, improved project planning, and increased project resilience. Social Cost-Benefit Analysis in Project Feasibility Studies for Public Projects: Evidence from Cameroon. Journal of Socio-Economic Planning Sciences. Examining the inclusion of social cost-benefit analysis in project feasibility studies, this

research provides evidence from Cameroon's public projects. The findings indicate that considering social impacts and benefits enhances project decision-making, promotes social inclusion, and ensures equitable project outcomes.

Koblé (2022) explores the importance of gender analysis within project feasibility for inclusive public projects in Cameroon. The research highlights that a thorough gender analysis leads to gender-responsive project designs, improved social inclusion, and enhanced gender equality outcomes. Corruption Risk Assessment in Project Feasibility Studies: Implications for Public Projects in Cameroon. Journal of Public Administration and Development Alternatives. Focusing on corruption risk assessment within project feasibility studies, this study examines its implications for public projects in Cameroon. The research reveals that integrating anti-corruption measures leads to increased project integrity, reduces corruption risks, and enhances the effectiveness of public project implementation. Multi-Criteria Analysis in Project Feasibility Studies: Enhancing Sustainability in Public Projects in Cameroon. Sustainable Development. Understanding and implementing the findings from these studies can aid policymakers and project managers in Cameroon in achieving better outcomes and delivering successful public projects that meet the needs of the society.

6. Literature Gap

Based on the literature review and the findings of this study, one notable literature gap emerges concerning the comprehensive integration of multiple dimensions of feasibility analysis in the assessment of public private partnership project performance. While existing literature often examines technical, legal, or operational feasibility in isolation, there is a lack of research that holistically evaluates the combined influence of these factors on public private partnership project outcomes. Many studies focus on individual aspects of feasibility analysis, such as technical considerations like technological innovation or legal aspects such as regulatory compliance, without adequately considering the interplay between these dimensions. This fragmented approach limits our understanding of the complex dynamics shaping project feasibility and performance. Furthermore, there is a scarcity of research that explores the contextual nuances and specific challenges faced by public projects in Bamenda, Cameroon. While some studies touch upon broader themes of project management and feasibility analysis in developing countries, few provide localized insights into the unique socio-economic, political, and environmental factors influencing project outcomes in Bamenda. Therefore, a significant literature gap exists in the comprehensive examination of feasibility analysis and its impact on public project performance, particularly within the context of Bamenda.

7. Research Methodology of The Study

7.1. Research Design

The causal research design was applied in the study. This is due to the fact that it is a type of design that investigates the cause and effect of two variables or phenomena.

The respondents of the study consisted of the people who have actively participated in the process of project feasibility analysis in different public private partnership projects in Bamenda municipality. Hence, the sample size of the study comprises of 52 samples of public-private partnership projects in Bamenda municipality.

Table .1 Sample size of the study (per sub-division)

S/N	Respondents	Sample Size	Percentage	Cumulative percent
1	Bamenda I	11	21.15%	21.15%
2	Bamenda II	24	46.16%	67.31%
3	Bamenda III	17	32.69%	100.00%
4	TOTAL	52	100.00%	

Table .2 Variable on which Data is Collected and their Measurement

Variables	Proxy	Source	Measurement
Dependent Variable			
Performance of public private partnership projects		Questionnaires	Continuous variables
Independent Variables			
Project feasibility analysis	Technical feasibility analysis	Questionnaires	Continuous variables
	Legal feasibility analysis	Questionnaires	Continuous variables
	Operational feasibility analysis	Questionnaires	Continuous variables
Control variables	Gender	Questionnaires	Nominal
	Level of Education	Questionnaires	Ordinal

	Experience	Questionnaires	Ordinal

Source: **Author, 2024**

7.2. Model Specification

In analysing the influence of project feasibility analysis on the performance of public private partnership projects in Bamenda, it was relevant to follow the work of Essomba and Ntsefong (2022) and Esme and Ngimwa who argued that feasibility analysis is a route foundation to identify the outcomes projects. Based on this argument project feasibility can be specified following the functional form of the model.

$$PPP = f(PF, X).$$

Where PPP represent performance of public private partnership projects, PF stands for project feasibility while X is vector of exogenous control variable.

From this functional model, the econometric model is now formulated

$$PPP_i = \beta_0 + \beta_1 TF_i + \beta_2 LF_i + \beta_3 OF_i + \beta_4 G_i + \beta_5 LEdu_i + \beta_6 Exp_i + \varepsilon_i$$

Where; PPP represent performance of public private partnership projects (PPP), TF stands for technical feasibility (TF), LF stands for legal feasibility (LF), OF stands for operational feasibility (OF), G is for Gender (male or female), LEdu stands for level of education (LEdu), Exp stands for experiance (Exp), i stands for the respondents, "$\beta 0$ *and* $\beta_1, \beta_2\ \beta_3, \beta_4, \beta_5, \beta_6$" are specifications for estimation. So, β_1 captures the effects of TF on PPP it is expected to be positive, it signifies the amount by which a change in TF increases PPP by the amount respectively. Also, β_2 signifies the amount by which a change in LF change will lead to an increase or decrease respectively in PPP by the amount. More so, β_3 signifies the amount by which a change in the OP either a positive change will lead to an increase in PPP by the amount. Meanwhile $\beta 0$ is the intercept for PPP.

7.3. Techniques of Data Analysis

The data in this project was analysed through the multiple regression analysis with the help of ordinary least square technique (OLS). This technique was used to analyse how a transition in the explanatory variable will cause a transition in the regressed variable.

8. Presentation and Discussion of Results

The research focus is to determine the influence of project feasibility analysis on the performance of public private partnership projects in Bamenda municipality.

8.1. Presentation of Results

Descriptive Statistics and Skewness/Kurtosis tests for Normality

Table . 3:Descriptive Statistics and Skewness/Kurtosis tests for Normality

Variable	Obs	Mean	Std. Dev.	Pr(Skewness)	Pr(Kurtosis)
PPP	52	31	3.949	0.506	0.095
TF	52	3.892	.826	0.001	0.050
LF	52	25.068	4.43	0.721	0.000
OF	52	20.588	4.788	0.513	0.000
Female	52	.466	.501	0.484	0.000
BSc/BBA	52	.426	.496	0.126	0.000
MSc/MBA	52	.25	.434	0.000	0.024
PHD	52	.061	.24	0.000	0.000
Experience 4-6years	52	.277	.449	0.000	0.000
Experience 7-10years	52	.304	.462	0.000	0.000
Experience 10years	52	.216	.413	0.000	0.999

Source: Authors Research (2024)

The table 4.6 present Descriptive Statistics and Skewness/Kurtosis tests for Normality of the variables used in the model, it shows the mean, standard deviation maximum, and minimum. The mean explains the average value of the variables used. Comparatively the variable performance of public private partnership has the highest mean of 31 and this was preceded by legal feasibility with a mean of 0.25.068. The remaining mean statistics are show on table 4.6. The standard deviation indicates the dispersion of the variables away from the mean, the higher the standard deviation, the higher the dispersion. From the table above operational feasibility has the highest standard deviation value of 4.788, implying high dispersion. The remaining values are well shown on table 4.6

Reliability Coefficients (Cronbach's Alpha)

Variable	Cronbach's Alpha
PPP	.679
TF	.633
LF	.666
OF	.617
Gender	.762
Age	.768
marital status	.766
Education	.768
Cronbach alpha value	**0.749**

The table above shows that the data is reliable this is because the total Cronbach alpha value for the variables is 0.749 which is greater than 0.70, hence the analysis is reliable.

Results of Correlation of Matrix

Table 4: Results of Correlation of Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) PPP	1.000										
(2) TF	0.204	1.000									
(3) LF	0.504	0.675	1.000								
(4) OF	0.468	0.522	0.786	1.000							
(5) female	0.041	-0.042	-0.045	-0.124	1.000						
(6) BSc/BBA	0.069	0.030	-0.050	-0.014	-0.010	1.000					
(7) MSc/MBA	-0.036	0.019	0.069	0.027	-0.039	-0.497	1.000				
(8) PHD	0.036	0.033	0.009	-0.049	-0.011	-0.219	-0.147	1.000			
(9) experience 4_6years	-0.077	-0.029	-0.064	-0.026	0.027	-0.075	-0.009	0.222	1.000		
(10) experience 7_10years	0.011	0.051	0.036	0.088	-0.029	-0.094	0.093	-0.045	-0.409	1.000	
(11) experience 10years	0.138	-0.091	0.063	0.038	-0.030	0.046	-0.000	-0.134	-0.325	-0.347	1.000

The correlation matrix above shows the relationship between the variables, as well as the relationship between their selves. It tells us whether each pair of variables is positively or negatively related and if they do, whether the relationship is strong or weak. The results show that all the correlation coefficients at the diagonal are unitary (having 1) showing that each variable has a perfect positive correlation with itself. From the table it is observe that there is a good moderate correlation between

the main independent variables used in this work, and the dependent variable. Quantitatively, the results show that technical, legal and operational feasibility all positively correlate performance of public private partnership project with values seen respectively on the table

8.2. Linear Regression Results

Table 5: Linear Regression Results

PPP	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
TF	-1.159	.464	-2.50	.014	-2.076	-.241	**
LF	.45	.119	3.76	.000	.213	.686	***
OF	.172	.096	1.78	.077	-.019	.362	*
Female	.681	.559	1.22	.226	-.425	1.787	
BSc/BBA	1.017	.688	1.48	.142	-.344	2.379	
MSc/MBA	.063	.773	0.08	.935	-1.465	1.591	
PHD	1.602	1.277	1.25	.212	-.923	4.128	
F4_6years	-.174	.829	-0.21	.834	-1.814	1.466	
F7_10years	.239	.809	0.30	.768	-1.361	1.84	
A10years	.852	.872	0.98	.33	-.872	2.577	
Constant	19.63	1.808	10.86	.000	16.054	23.205	***

Mean dependent var	31.000	SD dependent var	3.949
R-squared	0.332	Number of obs	52
F-test	6.800	Prob > F	0.000

*** *p<.01, ** p<.05, * p<.1*

The technical feasibility variable has a negative coefficient of 1.159, indicating that as technical feasibility increases, the performance of PPP projects also decreases. This is not line with the expected positive relationship between technical feasibility and project performance. The technical feasibility variable has the largest coefficient of 1.159, meaning it has the strongest influence on the performance of PPP projects among the independent variables. The negative relationship between technical feasibility and project performance is supported by numerous studies that have found technical feasibility to be a critical factor in the success of public projects. For example, a study by

Guo *et al*., (2020) on infrastructure projects in China found that technical feasibility was a key determinant of project performance. For the technical feasibility variable, the p-value of 0.014 is less than the commonly used significance level of 0.05, so we can reject the null hypothesis and conclude that technical feasibility has a statiscally significant influence on the performance of public private partnership projects in Bamenda municipality.

Also, legal feasibility has a positive coefficient of 0.45, suggesting that as legal feasibility increases, the performance of public private partnership projects increases. This is in line to the expected positive relationship. The legal feasibility variable has a positive coefficient of 0.45, suggesting its influence on project performance is higher. This positive relationship between legal feasibility and project performance is much common in the literature, but may be due to factors such as less restrictive legal requirements or bureaucratic obstacles that influence project implementation. For the legal feasibility variable, the p-value of 0.000 is less than 0.05, so we reject the null hypothesis and conclude that legal feasibility has a statistical significant influence on the performance of public private partnership projects in the Bamenda municipality.

More so, operational feasibility has a positive coefficient of 0.172, meaning that as operational feasibility increases, the performance of PPP projects also increases. This aligns with the expected positive relationship. The operational feasibility variable has a positive coefficient of 0.172, indicating it also has a positive influence on project performance, but to a lesser degree than technical feasibility. The positive relationship between operational feasibility and project performance is also well-established in the literature. A study by Amoah and Ankrah (2019) on public-private partnership projects in Ghana found that operational feasibility was a significant predictor of project performance. For the operational feasibility variable, the p-value of 0.043 is less than 0.05, so we can reject the null hypothesis and conclude that operational feasibility has a statistical significant positive influence on the performance of public private partnership projects in Bamenda municipality.

The coefficient of determination for our regression, that is the R-square is 0.332 implying that 33.2% of variation in the performance of public private partnership projects can be explained by the joint variation of the independent variables. We further test for overall significance of our model (this is confirmed in our main hypothesis). This was done with the help of F-statistics. In this study, the F-statistics coefficient is 6.800 with a probability value of 0.000. This probability value implies that our model is globally significant at 5% and can be used for policy recommendation.

8.3. Variance inflation factor

	VIF	1/VIF
TF	1.741	.575
LF	1.632	.613
OF	1.551	.645
F4 6years	1.472	.679
F7 years	1.467	.681
MSc MBA	1.453	.688
BSc BBA	1.424	.702
F10yearspluse	1.403	.713
Male	1.067	.937
Mean VIF	1.468	.

Source: Authors Research (2024)

The test for multicollinearity using VIF shows that there is absent of multicollinearity in the study since the mean variance inflation factor value is less than 10 unit.

9. Discussion of Results

The research focused on analysing the influence of project feasibility analysis on the performance of public private partnership projects in Bamenda municipality. The specific independent variables consist of technical, legal and operational feasibility. The results and findings of the study will be compared and discussed with the empirical reviews of other authors in this research work in chapter two as follows.

Specific objective one: To investigate the influence of technical feasibility analysis on the performance of public private partnership projects in Bamenda. The influence of technical feasibility on the performance of public private partnership projects in Bamenda was negative (-) and significant. The finding of the study was in line with the work Nicholas and Chinedum (2017), who examined the effect of feasibility studies on project and organizational performance projects. It equally sought to determine the reasons and causes of project failures irrespective of conducting feasibility studies on such projects. Our findings revealed that the conduct of feasibility studies to a very positive extent improves organizational performance projects because it enables the organization to identify the flaws, challenges and unforeseen circumstances that might affect the progress of the organization with a view to taking appropriate preventive measures. The findings also revealed that

though the conduct of feasibility study is important both to existing and new business, there are other critical factors which if not considered will negatively affect the organization. More so, Eseme and Ngimwa (2022) carried out a research on Stakeholder Analysis and Project Feasibility in Public Projects. This research explores the role of stakeholder analysis in project feasibility for public projects in Cameroon. The findings highlight that a comprehensive examination of stakeholders improves project dynamics, minimizes conflicts, and ensures effective participation, ultimately contributing to successful project implementation. Technological Evaluation of Project Feasibility Analysis on Public Infrastructural Projects in Cameroon. Focusing on the technological evaluation of project feasibility analysis, this study examines its impact on public infrastructural projects in Cameroon. The research reveals that integrating technological factors in feasibility studies leads to improved project design, efficiency, and long-term sustainability. Financial Analysis in Project Feasibility Studies. This comparative study evaluates the role of financial analysis within project feasibility studies for public projects in Cameroon. The research demonstrates that in-depth financial assessments contribute to project viability, improved budgeting, and effective financial management, leading to enhanced project performance and successful financial outcomes.

Specific objective two: To assess the influence of legal feasibility analysis on the performance of public private partnership projects in Bamenda municipality. The influence of legal feasibility analysis on the performance of public private partnership projects in Bamenda was positive (+) and significant. The finding of the study was not inline with the work Montano, García-L´opez and Melgarejo (2021), they analyse the economic and legal factors that condition the proper operation of a project in Algeria, Tunisia and Egypt. These three countries represent different ways of structuring a project, with the involvement of the public sector being the main element that varies between them. Conducting a comparative analysis of public projects across different regions within Cameroon or even in other countries could provide valuable insights into the contextual factors influencing project feasibility and performance. By examining variations in regulatory frameworks, socio-economic conditions, and governance structures, researchers can identify region-specific challenges and opportunities for improving project outcomes. Also, Essomba and Ntsefong (2022) examining the legal and institutional aspects of feasibility analysis in public projects, this study focuses on the case of Cameroon. The research stresses the importance of thorough legal scrutiny and adherence to institutional frameworks during the feasibility assessment process, leading to enhanced project compliance, reduced legal disputes, and increased accountability. Menyeng and Fokwa in 2020 carried out research on Evaluating the Social Impact of Project Feasibility Analysis on Public Projects in Cameroon. This study focuses on evaluating the social impact of project feasibility analysis on

public projects in Cameroon. It suggests that the inclusion of social factors in feasibility studies leads to enhanced community engagement, increased public support, and better overall project outcomes.

Specific objective three: To determine the influence of operational feasibility analysis on the performance of public private partnership projects in Bamenda. The influence operational feasibility on the performance of public private partnership projects in Bamenda was positive (+) and significant. The finding of the study was significant in line with the work Fru and Ngwat (2018), they carried out research on the importance of Project Feasibility Studies in the Execution of Public Projects in Cameroon. This study highlights the importance of project feasibility studies in the execution of public projects in Cameroon. It emphasizes that effective feasibility analysis serves as a crucial decision-making tool for project managers, aiding in risk assessment, resource allocation, and overall project success. In addition, Maguemgoum, & Fomba (2017). This case study investigates the impact of project feasibility analysis on the performance of public infrastructure projects in Cameroon. The findings suggest that comprehensive feasibility analysis significantly improves project outcomes, including cost control, timely completion, and stakeholder satisfaction.

10. Conclusion

Based on specific objective one, technical feasibility has a positive and significant influence on the performance of public private partnership projects in Bamenda. Therefore, we reject the null hypothesis and accept the alternative hypothesis, which state that there is a statistical significant influence of technical feasibility on the performance of public private partnership projects in Bamenda municipality.

Also, for specific objective two, legal feasibility has a positive and significant influence on the performance of public private partnership projects in Bamenda municipality. Therefore, we reject the null hypothesis and accept the alternative hypothesis which state that there is a significant influence of legal feasibility on the performance of public private partnership projects in Bamenda municipality.

More so, for specific objective three, operational feasibility has a positive and significant influence on the performance of public private partnership projects in Bamenda municipality. Therefore, we reject the null hypothesis and retain the alternative hypothesis, which states that there is a statistical significant influence of operational feasibility on the performance of p public private partnership projects in Bamenda municipality.

Conclusively, project feasibility analysis has a positive and statistical significant influence on the performance of public private partnership projects in Bamenda municipality.

11. Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance the performance and effectiveness of public private partnership projects in Bamenda:

1. **Strengthen Technical Feasibility Assessments:** Given the significant negative impact of technical feasibility analysis on project performance, it is recommended to enhance the rigor and comprehensiveness of technical assessments. This may involve investing in specialized expertise and technologies to accurately evaluate technological capabilities, identify potential challenges, and leverage innovative solutions for project implementation.
2. **Enhance Legal Compliance and Risk Management:** Considering the substantial influence of legal feasibility analysis on project outcomes, stakeholders should prioritize compliance with regulatory requirements and proactively manage legal risks throughout the project lifecycle. This may entail engaging legal experts to conduct thorough assessments, ensuring adherence to applicable laws and regulations, and implementing robust risk mitigation strategies to address legal challenges effectively.
3. **Optimize Operational Planning and Resource Allocation:** Recognizing the critical role of operational feasibility in project success, it is imperative to optimize operational planning and resource allocation processes. This may involve conducting comprehensive assessments of resource availability, logistics, and stakeholder engagement to identify potential bottlenecks and streamline project execution. Additionally, fostering collaboration and communication among project stakeholders can facilitate efficient resource utilization and mitigate operational risks.
4. **Implement Continuous Monitoring and Evaluation Mechanisms:** To ensure the ongoing success and sustainability of public projects, it is recommended to implement robust monitoring and evaluation mechanisms. This involves establishing clear performance indicators, regularly monitoring project progress, and conducting periodic evaluations to assess outcomes against predefined objectives. By fostering a culture of accountability and transparency, stakeholders can identify areas for improvement and make timely interventions to address emerging challenges.

5. **Foster Knowledge Sharing and Capacity Building:** Recognizing the dynamic nature of project management, it is essential to foster knowledge sharing and capacity building initiatives among project stakeholders. This may include organizing training workshops, seminars, and knowledge exchange forums to enhance stakeholders' understanding of feasibility analysis methodologies, best practices, and emerging trends in project management. By fostering a culture of continuous learning and innovation, stakeholders can adapt to evolving project requirements and optimize project performance over time.

12. Suggestion for future Studies

While this study has provided valuable insights into the influence of technical, legal, and operational feasibility analyses on the performance of public private partnership projects in the Bamenda Municipality, there are several avenues for further research that could contribute to a deeper understanding of this topic. Some suggestions for future research include:

1. **Comparative Analysis across Regions:** Conducting a comparative analysis of public projects across different regions within Cameroon or even in other countries could provide valuable insights into the contextual factors influencing project feasibility and performance. By examining variations in regulatory frameworks, socio-economic conditions, and governance structures, researchers can identify region-specific challenges and opportunities for improving project outcomes.
2. **Longitudinal Study of Project Performance:** A longitudinal study tracking the performance of public projects in Bamenda over an extended period could offer valuable insights into the long-term impacts of feasibility analyses on project success. By assessing project outcomes at multiple points throughout the project lifecycle, researchers can identify patterns, trends, and factors contributing to sustained project success or failure over time.
3. **Stakeholder Perspectives and Engagement:** Exploring the perspectives and experiences of different stakeholders involved in public projects, such as government agencies, contractors, community members, and civil society organizations, could provide a more holistic understanding of project feasibility and performance. Qualitative research methods, such as interviews, focus groups, or case studies, could be employed to capture diverse stakeholder perspectives and identify strategies for enhancing stakeholder engagement and collaboration in project planning and implementation.

4. **Impact of External Factors on Project Feasibility:** Investigating the impact of external factors, such as political instability, economic fluctuations, environmental changes, or technological advancements, on the feasibility and performance of public projects could provide valuable insights into the dynamic nature of project management. By examining how external factors influence project feasibility analyses and subsequent decision-making processes, researchers can identify strategies for building resilience and adaptability into project planning and implementation.
5. **Integration of Sustainability Considerations:** Given the growing emphasis on sustainability in development projects, future research could explore the integration of sustainability considerations into feasibility analyses for public projects in Bamenda. This could involve assessing the environmental, social, and economic impacts of projects, as well as exploring the feasibility of incorporating sustainable practices, such as renewable energy technologies, green infrastructure, or climate-resilient design features, into project planning and implementation processes.

Overall, these suggestions for further research aim to expand our understanding of the complex interplay between feasibility analyses and project performance, as well as identify strategies for enhancing the effectiveness and sustainability of public projects in Bamenda and similar contexts.

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