

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2015

The Critical Success Factors of Public Private Partnerships in Lagos State

Franca Igboka Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Public Administration Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Franca Igboka

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

> Review Committee Dr. Paul Rutledge, Committee Chairperson, Public Policy and Administration Faculty

Dr. Gregory Dixon, Committee Member, Public Policy and Administration Faculty

Dr. Ian Birdsall, University Reviewer, Public Policy and Administration Faculty

> Chief Academic Officer Eric Riedel, Ph.D.

> > Walden University 2015

Abstract

The Critical Success Factors of Public Private Partnerships in Lagos State

by

Franca Chikodi Igboka

MS, Leeds Metropolitan University, 2010

BS, University of Lagos, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

May 2015

Abstract

In recent years, the Lagos State Government has attempted to adopt public private partnerships (PPP) with little success, largely as a result of implementation barriers. The purpose of this quantitative, ex-post facto design study was to evaluate which factors are considered most predictive of success of PPP implementation in the state, whereby the prescribed quality of products/services is achieved within a specified timeframe and at the agreed cost. Wood and Gray's theory of collaboration and the network and collaborations theory by Kamensky and Burlin guided this study. A self-constructed and validated structured questionnaire was utilized in the collection of survey data from 105 government officials and private sector partners who had experience in the state's PPP process. To ensure validity of survey data collected, data triangulation was carried out against information from the State's bulletins on its PPP projects. Data were analyzed using ANOVA. Key findings indicated that statistically significant (p = .05) factors include the development of a legal framework for PPPs, perception of value of intended projects, identification and allocation of risks, engineering and technical structure, proper identification of required competencies, and staffing and training. Factors that were not significant included economic, political, and social conditions, planning, involvement of affected persons at the planning stage, bidding process, understanding of the goals and objectives of each partner, financing structure, project monitoring and evaluation, effective communication, good leadership, and transparency and trust. To encourage positive social change, it is recommended that the state enhances the success factors identified by this study to strengthen PPP practices and improve infrastructure in Lagos.

The Critical Success Factors of Public Private Partnerships in Lagos State

by

Franca Chikodi Igboka

MS, Leeds Metropolitan University, 2010

BS, University of Lagos, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

May 2015

Dedication

I dedicate this piece of work to my very dear Children: Udochukwu Stephen Igboka, and Kenechukwu Benita Igboka.

Acknowledgments

Through this journey, I have been mentored by those who have gone ahead of me, I have connected with the caliber of persons I least expected that I will meet, and I have also made friends. I remain ever thankful to all persons who have, in one way or the other, contributed to this achievement. My special thanks go to Dr. Paul Rutledge – my dissertation committee chairman, Dr. Ian Birdsall – the University Research Reviewer, Dr. Gregory Dixon – my methodologist, Semiu Shitta Bey, and Dr. Sammy Martins of Leeds Metropolitan University, U.K.

Table of Contents

List of Tablesix
Chapter 1: Introduction to the Study1
Introduction1
Background2
Definition and Types of PPPs
Economic and Social Development and PPPs
Role of the Public and Private Partners
Arguments for and against PPPs5
Factors Influencing Success of PPPs
The Significance of the Government Selected for the Study9
Knowledge Gap 10
Problem Statement
Purpose of Study11
Variables and Research Design11
Independent Variables 12
Dependent Variable
Research Questions
Theoretical Framework14
Conceptual Framework
Nature of Study16
Ex Post Facto Research Method 16

Quantitative Survey Research Design	
Definition of Key Variables	17
Assumptions	19
Scope of the Study	19
Limitations of the Study	19
Significance of the Study	20
Summary	20
Chapter 2: Literature Review	22
Introduction	22
Literature Review Strategy	22
Theoretical Framework	23
Conceptual Framework	24
Definition of PPP	24
Types of PPPs	27
Full Private provision	
Private financing initiative (PFI)	
Design, Build, Operate, and Transfer (DBOT)	
Public private joint venture	
Leases/Concessions:	
Operate, Maintain, and Manage (OMM)	
Design, Build (DB)	
Models of PPPs	

Development of PPPs	31
Trends in PPPs	35
Role of the partners	37
Role of the Public partner	37
Role of the private partner	37
Argument for PPPs	38
Speed 38	
Cost Saving	39
Manpower needs 4	42
Funding4	43
Productivity and technological innovation4	14
Management and operational efficiency4	45
Necessity 4	45
Synergy 4	46
Profit motives and corporate social responsibility4	46
Risk transfer 4	47
Arguments Against PPPs	50
Low- balling	51
Lack of transparency	51
Corruption	51
Low quality goods/services	52
Lack of accountability5	52

Erosion of Equity	
Dilution of control	
Deviation from mandate	
Challenges of PPPs	55
Diverse objective and ideologies of the partnering organization	ations 55
Master-Master relationship	
Inadequate mechanisms	
Cultures of the partners	
Resistance to change	
Inadequate Training and education	
Bureaucracy	
Inadequacy of legislation and enabling laws	
Complex arrangement	
Critical Success Factors of PPPs	60
Definition	
Legal framework	
Favorable economic, political and social conditions	
Planning	
Involvement of the affected persons/stakeholders at the pla	nning stage 65
Efficient bidding process	
Evaluation of value addition potential	66
Identification, assessment, and allocation of risks	

Understanding of the goals and objectives of each partner	. 67
Commitment and participation by top management of both parties	. 68
Financing structure	. 69
Engineering and technical structure	. 69
Identification of required competencies	. 70
Staffing and training of team members	. 70
Monitoring and project evaluation	. 72
Effective Communication	. 74
Good leadership	. 75
Transparency and trust	. 76
Summary	77
Chapter 3: Research Method	80
Introduction	80
Research Questions and Hypotheses	. 81
Literature Review	. 82
Contribution of the Study	. 83
Variables	85
Variables Independent Variables	85
Variables Independent Variables Dependent variable	85 . 85 . 86
Variables Independent Variables Dependent variable Research Method, Design and Approach	85 . 85 . 86 86
Variables Independent Variables Dependent variable Research Method, Design and Approach Ex post facto research method	85 . 85 . 86 86

Population and sample
Participation and Data Collection
The sample population
Sampling method
Sample size analysis
Data collection and the research instrument92
Demographic information
Informed consent
The research instrument94
Validity and Reliability94
Validity
Threats to Validity
Reliability
Operational definition of key variables95
The Scale Scores
Data Analysis
Data cleaning and screening
Research Questions and Hypotheses
Data Analysis
Assurance for Cooperation and Approval
Ethical Consideration
Summary100

Chapter 4: Results	102
Introduction	102
Purpose of the Study	102
The Data Collection Instrument	102
Research Questions and Hypotheses	103
Preview of the Chapter	103
Data Collection	104
Data Collection Timeframe and Response Rates	
Discrepancies in Data Collection Plan	105
Demographic Characteristics of the Sample	105
Results 106	
Descriptive Statistics	106
Evaluation of statistical assumptions	110
Analysis of Variance (ANOVA)	110
Data analysis by survey questions	
Data analysis by Research Questions and Hypotheses	
Analysis of research questions by professional groups	
Test of the hypotheses	241
Comparison of the actual means against the hypothesized mean	
The effect size Analysis	
Research Question 1 and Research Hypotheses 1	
Research Question 2 and Research Hypotheses 2vii	270

Summary	
Chapter 5: Discussion, Conclusions, and Recommendations	
Introduction	
Interpretation of the Findings	
The Critical Success Factors of PPPs in Lagos State	
Challenges facing PPPs implementation in Lagos state	
Limitations of the Study	
Generalizability and trustworthiness of the study	
Validity and reliability of the findings	
Recommendation for further research	
Implications of study	
Social Change	
Methodological implication	
Conclusion	
References	
Appendix A: Structured Questionnaire	
Appendix B: National Institute of Health (NIH) Certificate	
Appendix C: Letter of Corporation	

List of Tables

Table 1. Distribution of responses by Gender
Table 2. Distribution of responses by marital status
Table 3. Distribution of responses by highest educational qualification
Table 4. Distribution of responses by professional engagement
Table 5. Distribution of SQ1 by professional groups 112
Table 6. ANOVA of SQ1 by professional groups 112
Table 7. Confidence interval of SQ1 112
Table 8. Distribution of SQ2 by professional groups 113
Table 9. ANOVA of SQ2 by professional groups 114
Table 10. Confidence interval of SQ2 114
Table 11. Distribution of SQ3 by professional groups 115
Table 12. ANOVA of SQ3 by professional groups 116
Table 13. Confidence interval of SQ3 116
Table 14. Distribution of SQ4 by professional groups 117
Table 15. ANOVA of SQ4 by professional groups 118
Table 16. Confidence interval of SQ4 118
Table 17. Distribution of SQ5 by professional groups 119
Table 18. ANOVA of SQ5 by professional groups 120
Table 19. Confidence interval of SQ5 120
Table 20. Distribution of SQ6 by professional groups 121
Table 21. ANOVA of SQ6 by professional groups 122

Table 22. Confidence interval of SQ6 12	2
Table 23. Distribution of SQ7 by professional groups 12	3
Table 24. ANOVA of SQ7 by professional groups 12	4
Table 25. Confidence interval of SQ7 12-	4
Table 26. Distribution of SQ8 by professional groups 12	5
Table 27. ANOVA of SQ8 by professional groups 12	6
Table 28. Confidence interval of SQ8 12	6
Table 29. Distribution of SQ9 by professional groups 12	8
Table 30. ANOVA of SQ9 by professional groups 12	8
Table 31. Confidence interval of SQ9 12	8
Table 32. Distribution of SQ10 by professional groups 12	9
Table 33. ANOVA of SQ10 by professional groups 13	0
Table 34. Confidence interval of SQ10 13	0
Table 35. Distribution of SQ11 by professional groups 13	1
Table 36. ANOVA of SQ11 by professional groups 13	2
Table 37. Confidence interval of SQ11 13	2
Table 38. Distribution of SQ12 by professional groups 13	3
Table 39. ANOVA of SQ12 by professional groups 13-	4
Table 40. Confidence interval of SQ12 13-	4
Table 41. Distribution of SQ13 by professional groups 13.	5
Table 42. ANOVA of SQ13 by professional groups 13	6
Table 43. Confidence interval of SQ13 13	6

Table 44. Distribution of SQ14 by professional groups 137
Table 45. ANOVA of SQ14 by professional groups 138
Table 46. Confidence interval of SQ14 138
Table 47. Distribution of SQ15 by professional groups 139
Table 48. ANOVA of SQ15 by professional groups 140
Table 49. Confidence interval of SQ15 140
Table 50. Distribution of SQ16 by professional groups 141
Table 51. ANOVA of SQ16 by professional groups 142
Table 52. Confidence interval of SQ16 142
Table 53. Distribution of SQ17 by professional groups 143
Table 54. ANOVA of SQ17 by professional groups 144
Table 55. Confidence interval of SQ17 144
Table 56. Distribution of SQ18 by professional groups 145
Table 57. ANOVA of SQ18 by professional groups 146
Table 58. Confidence interval of SQ18 146
Table 59. Distribution of SQ19 by professional groups 147
Table 60. ANOVA of SQ19 by professional groups 148
Table 61. Confidence interval of SQ19 148
Table 62. Distribution of SQ20 by professional groups 149
Table 63. ANOVA of SQ20 by professional groups 150
Table 64. Confidence interval of SQ20 150
Table 65. Distribution of SQ21 by professional groups 151

Table 66. ANOVA of S21Q by professional groups 152
Table 67. Confidence interval of SQ21 152
Table 68. Distribution of SQ22 by professional groups 153
Table 69ANOVA of SQ22 by professional groups 154
Table 70. Confidence interval of SQ22 154
Table 71. Distribution of SQ 23 by professional groups 155
Table 72. ANOVA of SQ23 by professional groups 156
Table 73. Confidence interval of SQ23 156
Table 74. Distribution of SQ24 by professional groups 157
Table 75. ANOVA of SQ24 by professional groups 158
Table 76. Confidence interval of SQ24 158
Table 77. Distribution of SQ25 by professional groups 159
Table 78. ANOVA of SQ25 by professional groups 160
Table 79. Confidence interval of SQ25 160
Table 80. Distribution of SQ26 by professional groups 161
Table 81. ANOVA of SQ26 by professional groups 162
Table 82. Confidence interval of SQ 26 162
Table 83. Frequency distribution by research question and response type - SQ1 163
Table 84. Frequency distribution by research question and response type - SQ2 164
Table 85. Frequency distribution by research question and response type - SQ3 165
Table 86. Frequency distribution by research question and response type - SQ4 166
Table 87. Frequency distribution by research question and response type - SQ5 167

Table 88. Frequency distribution by research question and response type - SQ6...... 168 Table 89. Frequency distribution by research question and response type - SQ7....... 169 Table 91. Frequency distribution by research question and response type - SQ9...... 171 Table 92. Frequency distribution by research question and response type - SQ10...... 172 Table 93. Frequency distribution by research question and response type - SQ11 173 Table 94. Frequency distribution by research question and response type - SQ12 174 Table 95. Frequency distribution by research question and response type - SQ13 175 Table 96. Frequency distribution by research question and response type - SQ14 176 Table 97. Frequency distribution by research question and response type - SQ15 177 Table 98. Frequency distribution by research question and response type - SQ16...... 178 Table 99. Frequency distribution by research question and response type - SQ17 179 Table 100. Frequency distribution by research question and response type - SQ18 180 Table 101. Frequency distribution by research question and response type - SQ 19 181 Table 102. Frequency distribution by research question and response type - SQ20 182 Table 103. Frequency distribution by research question and response type - SQ21 183 Table 104. Frequency distribution by research question and response type - SQ22 184 Table 105. Frequency distribution by research question and response type - SQ23 185 Table 106. Frequency distribution by research question and response type - SQ24 186 Table 107. Frequency distribution by research question and response type - SQ25 187 Table 108. Frequency distribution by research question and response type - SQ26..... 188 Table 109. Frequency of responses by professions and response types - SQ1...... 190

Table 110. Frequency of responses by professions and response types - SQ2...... 191 Table 111. Frequency of responses by professions and response types - SQ3...... 193 Table 112. Frequency of responses by professions and response types - SQ4...... 195 Table 113. Frequency of responses by professions and response types - SQ5...... 197 Table 114. Frequency of responses by professions and response types - SQ6...... 199 Table 115. Frequency of responses by professions and response types - SQ7...... 201 Table 116. Frequency of responses by professions and response types - SQ8...... 203 Table 117. Frequency of responses by professions and response types - SQ9...... 205 Table 118. Frequency of responses by professions and response types - SQ10...... 207 Table 119. Frequency of responses by professions and response types - SQ11...... 209 Table 120. Frequency of responses by professions and response types - SQ12...... 211 Table 121. Frequency of responses by professions and response types - SQ13...... 213 Table 122. Frequency of responses by professions and response types - SQ14...... 215 Table 123. Frequency of responses by professions and response types - SQ15...... 217 Table 124. Frequency of responses by professions and response types - SQ16...... 219 Table 125. Frequency of responses by professions and response types - SQ17...... 221 Table 126. Frequency of responses by professions and response types - SQ18...... 223 Table 127. Frequency of responses by professions and response types - SQ19...... 225 Table 128. Frequency of responses by professions and response types - SQ20...... 227 Table 129. Frequency of responses by professions and response types - SQ21...... 229 Table 131. Frequency of responses by professions and response types - SQ23...... 233

Table 132. Frequency of responses by professions and response types - SQ24
Table 133. Frequency of responses by professions and response types - SQ25 237
Table 134. Frequency of responses by professions and response types - SQ26 239
Table 135. Chi-square SQ1 242
Table 136. Chi-square SQ2
Table 137. Two tail t-test -SQ2
Table 138. Chi-square SQ3
Table 139.T wo tail t-test -SQ3
Table 140. Chi-square SQ4
Table 141. Two tail t-test -SQ4
Table 142. Chi-square SQ5
Table 143. Two tail t-test -SQ5
Table 144. Chi-square SQ6
Table 145. Chi-square SQ7
Table 146. Chi-square SQ8
Table 147. Two tail t-test -SQ8
Table 148. Chi-square SQ9
Table 149. Two tail t-test -SQ9
Table 150. Chi-square SQ10
Table 151. Two tail t-test -SQ10
Table 152. Chi-square SQ11
Table 153. Chi-square SQ12

Table 154. Chi-square SQ13	
Table 155. Chi-square SQ14	
Table 156. Two tail t-test –SQ14	
Table 157. Chi-square SQ15	
Table 158. Two tail t-test -SQ15	
Table 159. Chi-square SQ16	
Table 160. Two tail t-test -SQ16	
Table 161. Chi-square SQ17	
Table 162. Two tail t-test -SQ17	
Table 163. Chi-square SQ18	
Table 164. Two tail t-test -SQ18	
Table 165. Chi-square SQ19	
Table 166. Two tail t-test -SQ19	
Table 167. Chi-square SQ20	
Table 168. Chi-square SQ21	
Table 169. Chi-square SQ22	
Table 170. Chi-square SQ23	
Table 171. Two tail t-test -SQ23	
Table 172. Chi-square SQ24	
Table 173. Chi-square SQ25	
Table 174. Two tail t-test -SQ25	
Table 175. Chi-square SQ26	

List of Figures

Figure 1. Calculation of sample size on G*Power software	
Figure 2. Distribution of responses by gender	106
Figure 3. Distribution of responses by marital status	107
Figure 4. Distribution of responses by highest qualification	108
Figure 5. Distribution of responses by professional engagement	109
Figure 6. Mean for responses to SQ1 by professional groups	111
Figure 7. Mean for response to SQ2 by professional groups	113
Figure 8. Mean for response to SQ3 by professional groups	115
Figure 9. Mean for response to SQ4 by professional groups	117
Figure 10. Mean for response to SQ5 by professional groups	119
Figure 11. Mean for response to SQ6 by professional groups	121
Figure 12. Mean for response to SQ7 by professional groups	123
Figure 13. Mean for response to SQ8 by professional groups	125
Figure 14. Mean for response to SQ9 by professional groups	127
Figure 15. Mean for response to SQ10 by professional groups	129
Figure 16. Mean for response to SQ11 by professional groups	131
Figure 17. Mean for response to SQ12 by professional groups	133
Figure 18. Mean for response to SQ13 by professional groups	135
Figure 19. Mean for response to SQ14 by professional groups	137
Figure 20. Mean for response to SQ15 by professional groups	139
Figure 21. Mean for response to SQ16 by professional groups	141

Figure 22. Mean for response to SQ17 by professional groups	143
Figure 23. Mean for response to SQ18 by professional groups	145
Figure 24. Mean for response to SQ19 by professional groups	147
Figure 25. Mean for response to SQ20 by professional groups	149
Figure 26. Mean for response to SQ21 by professional groups	151
Figure 27. Mean for response to SQ22 by professional groups	153
Figure 28. Mean for response to SQ23 by professional groups	155
Figure 29. Mean for response to SQ24 by professional groups	157
Figure 30. Mean for response to SQ25 by professional groups	159
Figure 31. Mean for response to SQ26 by professional groups	161
Figure 32. Frequency for response to SQ1 by response type	163
Figure 33. Frequency for response to SQ2 by response type	164
Figure 34. Frequency for response to SQ3 by response type	165
Figure 35. Frequency for response to SQ4 by response type	166
Figure 36. Frequency for response to SQ5 by response type	167
Figure 37. Frequency for response to SQ6 by response type	168
Figure 38. Frequency for response to SQ7 by response type	169
Figure 39. Frequency for response to SQ8 by response type	170
Figure 40. Frequency for response to SQ9 by response type	171
Figure 41. Frequency for response to SQ10 by response type	172
Figure 42. Frequency for response to SQ11 by response type	173
Figure 43. Frequency for response to SQ12 by response type	174

Figure 44. Frequency for response to SQ13 by response type
Figure 45. Frequency for response to SQ14 by response type176
Figure 46. Frequency for response to SQ15 by response type177
Figure 47. Frequency for response to SQ16 by response type178
Figure 48. Frequency for response to SQ17 by response type179
Figure 49. Frequency for response to SQ18 by response type
Figure 50. Frequency for response to SQ19 by response type
Figure 51. Frequency for response to SQ20 by response type
Figure 52. Frequency for response to SQ21 by response type
Figure 53. Frequency for response to SQ22 by response type
Figure 54. Frequency for response to SQ23 by response type
Figure 55. Frequency for response to SQ24 by response type
Figure 56. Frequency for response to SQ25 by response type
Figure 57. Frequency for response to SQ26 by response type
Figure 58. Frequency for responses to SQ1 by profession and response types
Figure 59. Frequency for responses to SQ2 by profession and response types
Figure 60. Frequency for responses to SQ3 by profession and response types
Figure 61. Frequency for responses to SQ4 by profession and response types
Figure 62. Frequency for responses to SQ5 by profession and response types
Figure 63. Frequency for responses to SQ6 by profession and response types200
Figure 64. Frequency for responses to SQ7 by profession and response types
Figure 65. Frequency for responses to SQ8 by profession and response types

Figure 66. Frequency for responses to SQ9 by profession and response types
Figure 67. Frequency for responses to SQ10 by profession and response types
Figure 68. Frequency for responses to SQ11 by profession and response types210
Figure 69. Frequency for responses to SQ12 by profession and response types
Figure 70. Frequency for responses to SQ13 by profession and response types214
Figure 71. Frequency for responses to SQ14 by profession and response types
Figure 72. Frequency for responses to SQ15 by profession and response types
Figure 73. Frequency for responses to SQ16 by profession and response types
Figure 74. Frequency for responses to SQ17 by profession and response types
Figure 75. Frequency for responses to SQ18 by profession and response types224
Figure 76. Frequency for responses to SQ19 by profession and response types226
Figure 77. Frequency for responses to SQ20 by profession and response types228
Figure 78. Frequency for responses to SQ21 by profession and response types
Figure 79. Frequency for responses to SQ22 by profession and response types
Figure 80. Frequency for responses to SQ23 by profession and response types
Figure 81. Frequency for responses to SQ24 by profession and response types
Figure 82. Frequency for responses to SQ25 by profession and response types238
Figure 83. Frequency for responses to SQ26 by profession and response types240
Figure 84. Response percentage by response types for SQ1
Figure 85. Response percentage by response types for SQ2
Figure 86. Response percentage by response types for SQ3
Figure 87. Response percentage by response types for SQ4

Figure 88. Response percentage by response types for SQ5	
Figure 89. Response percentage by response types for SQ6	251
Figure 90. Response percentage by response types for SQ7	
Figure 91. Response percentage by response types for SQ8	254
Figure 92. Response percentage by response types for SQ9	256
Figure 93. Response percentage by response types for SQ10	
Figure 94. Response percentage by response types for SQ11	259
Figure 95. Response percentage by response types for SQ12	
Figure 96. Response percentage by response types for SQ13	
Figure 97. Response percentage by response types for SQ14	
Figure 98. Response percentage by response types for SQ15	
Figure 99. Response percentage by response types for SQ16	
Figure 100. Response percentage by response types for SQ17	
Figure 101. Response percentage by response types for SQ18	271
Figure 102. Response percentage by response types for SQ19	273
Figure 103. Response percentage by response types for SQ20	274
Figure 104. Response percentage by response types for SQ21	
Figure 105. Response percentage by response types for SQ22	276
Figure 106. Response percentage by response types for SQ23	
Figure 107. Response percentage by response types for SQ24	279
Figure 108. Response percentage by response types for SQ25	
Figure 109. Response percentage by response types for SQ26	

Chapter 1: Introduction to the Study

Introduction

Due to limited resources of governments around the world, public-private partnerships (PPPs) are becoming increasingly in use (The cracks, 2008). In such arrangements, governments and the collaborating party, pull together their resources both human and material—and make joint decisions, in providing social amenities and infrastructural facilities and services for the populace (Alexander & Nank, 2009). This is because the resources generated by governments have, over the years, increased at what can be likened to arithmetic progression; meanwhile, the economic growth around the world has taken a geometric progression (Macneil, 1980). This mismatch has put a strain on the limited public resources available for economic and infrastructural development.

The government of Lagos State has recently begun the application of the PPP concept and is prone to the pitfalls associated with it. Therefore, this study aimed at finding out whether or not the critical success factors of the PPP concept were present in the state's operations, benchmarking with the best practices in other successful economies, in order to find ways of bringing perfection into the process to enhance the utilization of this vehicle of economic development.

In this study, I examined the role played by the partners, the effect of the financing structure, and all the factors that scholars have considered critical to the success of PPPs, with the aim of advising the government on ways of improving the PPP process in the state, in order to maximize the benefits. Upon the achievement of this aim, the infrastructural base in the state will improve, and the masses will benefit from it. Researchers have offered various definitions for the PPP concept, yet the scholars have argued that it has no definite definition (Bansal, 2012; Farajian, 2010; Jefferies & McGeorge, 2009; Neal, 2010; Queen, 2011). However, my discovery was that the concept has a definite definition, but the cause of variances between the various definitions is the appendages that explain the variant of the concept as defined.

The study was designed as a quantitative survey, with an ex post facto research method; data were collected with a structured 5-point Likert scale questionnaire, and the statistical analysis was aided by the use of the SPSS analytical software.

Background

Definition and Types of PPPs

Various scholars have argued that the term PPP eludes definition because there are too many varying definitions in the literature (Bansal, 2012; Farajian, 2010; Jefferies & McGeorge, 2009; Neal, 2010; Queen, 2011). Jefferies and McGeorge (2009) added that this problem with the definition of the term limits the research potential of the concept.

However, my assessment of the definitions as contained in the literature revealed that the concept actually has a clear definition. The issue that has led to the misconception concerning lack of definition is that the concept has so many types, thereby causing different scholars to define it differently, depending on the particular type they are dealing with at the time of their definition. Therefore, I give a simple definition of PPP as follows: A collaboration involving a public sector organization/department (or several public sector entities) with a private sector entity (or several private sector entities) to provide a public good or service.

Interestingly, virtually all the definitions in the literature, in one manner or the other, captured this basic definition. Their appendages went on to associate their definitions with the type of PPP they were addressing. Abramov (2009) asserted that the range of PPP is quite broad.

The basic types of PPP identifiable in the literature were as follows:

- Full private provision
- Private financing initiative (PFI)
- Design, build, operate, and transfer (DBOT)
- Public private joint venture
- Leases/concessions:
- Operate, maintain, and manage (OMM)
- Design, build (DB)

Economic and Social Development and PPPs

There was strong evidence in the literature suggesting that rapid economic and social development has an unquestionable link with PPPs. The literature revealed that the developed countries, as well as those that were rapidly developing, adopted PPPs long ago, while the underdeveloped countries have still been waking up to the use of the concept quite lately.

The United States has embraced PPPs since 200 years ago (Ysa, 2007), an assertion that is supported by Hanger (2012).

The United Kingdom took PPPs more seriously between 1980 and 1992 (Checherita, 2009; Cheung et al., 2009).

Southeast Asia, Latin America, Europe, woke up to PPPs in the 1990s (Checherita, 2009), while in Australia, the adoption started between the 1980s and 1990s (Jefferies & McGeorge, 2009).

As far back as the 1950s, the Chinese government started working towards the use of the concept to accelerate their economic and social development but started extensive application of it in the 1990s (Lee, 2010).

Regardless of the benefits of PPPs, as evidenced by the rapid economic development and advancement witnessed by those countries who have embraced it successfully, many nations are yet to consider its adoption, while some are still at the start-up stage (Hossain, 2011); Lagos State Government is one of those at the start-up stage.

Role of the Public and Private Partners

From the definition of the PPP concept, there are four key elements therein: the public partner, the private partner, the asset or service, and the people. Each of the partners has key roles to play in order to bring the asset to life, to enable the people benefit from it.

Importantly, governments need to utilize their regulatory powers to create the enabling laws in order to attract and encourage private investors to partner with them, and also to sustain the partnerships thus created (Leland & Read, 2012; Neal, 2010).

It is also the responsibility of the government to put mechanisms in place to prevent the exploitation of the beneficiaries of assets and services created by PPP arrangements (Mavalankar et al., 2008). Jenkins (2012) supported this view, positing that governments must ensure that PPPs improve the quality of lives of the citizenry and ensure the protection of the environment from the potential impact of projects under PPPs.

According to McAfee (2008), the responsibility to provide good leadership in the whole process of PPP lies with the government, and it must also show support to the projects to lend credibility to it.

On the other hand, the type of partnership will dictate the private partner's responsibility. Generally, the private partner is charged with the responsibility of managing the commercial risks, and in many cases, the provision of funds, design, administration and technical support (Hill, 2011).

Arguments for and against PPPs

PPP is a concept that governments have developed in order to tackle their developmental needs (Abramov, 2009). It is one of the most dynamic approaches that have been employed in order not to be overtaken by the astronomical growth in the need for infrastructure (Hill, 2011; Lee, 2010).

According to Bansal (2012), PPP is a result of governments' search for innovative project delivery methods for the provision of public goods and services.

The desirability of the concept of PPP could be attributed to the following characteristics:

- Speed of execution (Bansal, 2012; Cheung et al., 2009; Jenkins 2012; Roach, 2011)
- Costs savings (Liu & Wilkinson, 2011; Ortiz, 2009)
- Manpower provision (Busch & Givens, 2011; Hanger, 2012; Mavalankar et al., 2008; Stevens, 2010)
- Provision of funds (Bansal, 2012; Chan et al., 2009; Cheung et al., 2009; Farajian, 2010; Hanger, 2012; Lee, 2010; Pantelias, 2009; Tynkkynen & Lehto, 2009)
- Efficiency and technological innovation (Blanc-Brude et al., 2009; Busch & Givens, 2011; Farajian, 2010; Lee, 2010; Liu & Wilkinson, 2011)
- Management and operational efficiency (Bansal, 2012; Checherita, 2009; Cheung, et al., 2009; Hossain, 2011; Jenkins 2012; Wilkinson; 2011)
- Necessity of collaboration (Laganga, 2011; Mairembam et al., 2012; Prenzler, 2009)
- Synergy advantage (Callet, 2010; Martin & Halachmi, 2012; Nachiappan, 2009) and
- Risk transfer (Amponsah, 2010; Hardcastel et al., 2010; Jefferies & McGeorge, 2009).

However, some scholars have argued that there are some issues that could water down the value addition potential of PPPs (Hardouin, 2009), which are identified as follows:

- Low- balling in the bidding process (Neal, 2010)
- Lack of transparency (Verma, 2010)
- Corruption of the officials (Neal,2010)
- Low quality goods/services (Neal, 2010)
- Lack of accountability (Neal, 2010)
- Erosion of equity, thereby limiting governments powers (Neal, 2010)
- Dilution of control, (Fuente & Profiroiu, 2008), and
- Deviation from mandate by the private partners (Ibem, 2011).

In addition to the above, PPPs have also been challenged by the diverse objectives and ideologies of the partnering organizations (Cheung, et al., 2009; Hardouin, 2009; Roach, 2011), master-master relationships within the team drawn from both partners (Queen, 2011), inadequate mechanisms (Ahmed, 2010; Boyer, 2012; Neal, 2010), contrasting cultures of the partners (Cyert & Goodman, 1997; Jenkins, 2012), resistance to change by the intended beneficiaries, (Agyemang, 2011; Neal, 2010; Pantelias, 2009), inadequate training and education of the team members (Farooq, 2011), inadequacy of legislation and enabling laws (Ibem, 2011; Lee, 2010), and complex arrangements within the PPP process (Farajian, 2010; Mistarihi et al., 2012).

Factors Influencing Success of PPPs

Irrespective of the geographical location, some factors are considered to be quite critical for the success of PPPs (Cheung, 2012). These could be environmental, legal, and economic, as well as technical and technological factors (Mistarihi et al., 2012).

Critical success factors are "those few key areas of activity in which favorable results are absolutely necessary for a particular manager to reach his or her own goals...those limited number of areas where things must go right" (Rockart, 1982, p. 2).

These factors as identified in the literature were as follows:

- Legal framework (Cheung et al., 2012; Hardcastel et.al, 2010; Hill, 2011; Ibem, 2011).
- Favorable economic, political and social conditions (Cheung et al., 2012; Gerace 2011; Hardcastel et.al, 2010; Jenkins, 2012; Weiermair et al., 2008)
- Planning (Agyemang, 2011; Alexander & Zuckerman, 2000; Amponsah, 2010; Hardcastel et.al, 2010)
- Involvement of the affected persons at the planning stage (Abramov, 2009; Agyemang, 2011; Amponsah, 2010; Boyer, 2012; Weiermair et al., 2008)
- Efficient bidding process (Apgar, 2011; Cheug et al., 2009; Weiermair et al., 2008).
- Evaluation of value addition potential (Callet, 2010; Tynkkynen & Lehto, 2009).
- Identification, assessment, and allocation of risks (Agyemang, 2011; Amponsah, 2010; Checherita, 2009; Cheung et al., 2009; Hardcastel et al., 2010; Jenkins, 2012; Pantelias, 2009)
- Understanding of the goals and objectives of each partner (Belniak, 2008; Cheung et al., 2012; Neal, 2010)
- Commitment and participation by top management of both parties (Boyer, 2012; Neal, 2010; Weiermair et al., 2008)
- Financing structure (Amponsah, 2010; Pantelias, 2009)
- Engineering and technical structure (Belniak, 2008; Pantelias, 2009).
- Identification of required competencies (Boyer, 2012)
- Staffing and training of team members (Boyer, 2012; Cheung et al., 2012; Young, 2010)
- Monitoring and project evaluation (Amponsah, 2010; Boyer, 2012; Busch & Givens, 2011; Checherita, 2009; Hanger, 2012; Keanry et al., 2010; Moszoro & Krzyzanowska, 2008; Weiermair et al., 2008; Young, 2010)
- Effective Communication (Amponsah, 2010; Keanry et al., 2010; Neal, 2010; Titus-Howard, 2012; Young, 2010)
- Good leadership (Amponsah, 2010; Hardcastel et al., 2010; Mairembam et al., 2012; Mistarihi et al., 2012; Nachiappan, 2009)
- Transparency and trust (Abramov, 2009; Busch & Givens, 2011; Neal, 2010; Roach, 2011; Tynkkynen & Lehto, 2009).

The Significance of the Government Selected for the Study

I consider the government of Lagos State to be quite significant in Nigeria, due to the position the state occupies, both in history and in the present day dispensation. Lagos State was the Federal Capital Territory of the Federal Republic of Nigeria up until December 12, 1991.

The State is situated in the northwestern part of Nigeria and is flanked by the Atlantic Ocean, making it possible for two of the country's largest seaports to be situated there. It is a major commercial city in Nigeria, with one of the busiest international airport in the country situated in it.

It is also a boarder state between Nigeria and other West African countries. All these factors sum up to give insight as to why the story of Nigeria as a country cannot be completely told without mentioning Lagos State. This is the basis on which I chose the state for this study.

Knowledge Gap

Although there was overwhelming amount of literature on PPP covering various countries of the world, no such study, both in the past and in recent times, has been conducted to determine how the PPP concept has been operating in Lagos State. Therefore, this study became important in order to assist the state to be as proficient as possible in the utilization of the PPP concept in developing its infrastructural base.

Problem Statement

PPP arrangements have not always resulted in positive experiences, as they have, in some instances, proved very difficult, thereby causing deviations between the expected results and the actual results. This had led to undue delays and at some times amounted to projects abandonment (Kwak, Ying, & Ibbs, 2009). The lukewarm attitude of government officials, complex decision making processes, lack of clear objectives, lack of transparency, poor risk management strategies, and inadequate regulatory framework has made the experience of the partnering private organizations to be somewhat negative (Kwak et al., 2009).

Lagos State Government, being in the early years of adoption of the PPP strategy, having signed its first significant PPP contract in 2008, is susceptible to difficulties associated with the concept. Therefore, except it learns from the experiences of those economies that have successfully utilized the PPP concept, the experience may be unpleasant, and the outcomes may deviate significantly from the expectations.

Purpose of Study

The purpose of this study was to examine the workings of the PPP concept in Lagos State, taking into account the administration and relationship between the major actors involved in the process. The extent of existence of the independent variables was explored, applying the Likert scale method of data collection, and the ex post facto research method.

The aim was to find out whether the critical success factors were present and the degree of their application, in order to assist Lagos State Government to improve the process by incorporating best practices.

Variables and Research Design

According to Creswell (2009), in quantitative research, the researcher aims at determining the existence of relationships among variables.

When it is not possible for a researcher to cause the occurrence of a variable through a treatment, which translates to experimental method, that researcher can study how previously occurring treatments affected the variables by applying the ex post facto method of inquiry (Tuckman, 1999).

Ex post factor design is applicable when the researcher has identified the independent variables and begins his or her research by observing the dependent variable (Kerlinger, 1964).

Due to the nature of this study, I chose the ex post facto design because the experimental design was not practicable.

The key variables of the research have been identified as follows:

Independent Variables

- Legal framework
- Favorable economic, political and social conditions
- Planning
- Involvement of the affected persons at the planning stage
- Efficient bidding process
- Evaluation of value addition potential
- Identification, assessment, and allocation of risks
- Understanding of the goals and objectives of each partner
- Commitment and participation by top management of both parties
- Financing structure
- Engineering and technical structure

- Identification of required competencies
- Staffing and training of team members
- Monitoring and project evaluation
- Effective communication
- Good leadership
- Transparency and trust
- Diverse objective and ideologies of the partnering organizations
- Master-master relationship of the team members
- Inadequate mechanisms to tackle problems arising from the PPP
- Varying organizational cultures of the partners
- Resistance to change by the beneficiaries
- Bureaucracy
- Complex nature of the PPP concept

Dependent Variable

The level of application of the critical success factors and challenges of PPPs in Lagos State was the dependent variable.

Research Questions

Research Question 1: Is the existence and application of the critical success

factors of public private partnerships in Lagos State significant?

Hypothesis 1: The existence and application of the critical success factors of

public private partnerships in Lagos state is significant.

Null Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is not significant.

Research Question 2: Are the challenges faced in the implementation of public private partnerships in Lagos State significant?

Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is significant.

Null Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is not significant.

Theoretical Framework

Wood and Gray (1991) developed the theory of collaboration, which underlined this study. They defined the concept as follows: "Collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to their domain" (p. 146).

The theory postulates that for partnerships and collaborations to make sense, the collaborators must be autonomous in order for them to maintain their individual controls (Wood & Gray, 1991). This aspect is important because, except if the intention is to create another organization, it must be understood that the collaborating parties need to maintain their autonomy (Wood & Gray, 1991).

Another tenet of this theory is that of "shared structure" (Wood & Gray, 1991, p. 148), which implies that because collaborations and partnerships are not permanent

structures, the structure should be temporary in nature, and the negotiated rules and applicable details should be tailored to suit that structure.

Importantly, Wood and Gray (1991) pointed out that derailment of purpose should be avoided; that is, the activities of the partnership must continuously focus on the problems that brought the collaboration into being. In as much as the approaches may change, the orientation must not depart from the purpose that necessitated the arrangement.

Independent control of resources by the collaborators is yet another crucial aspect of the theory (Wood & Gray, 1991). While the vision must be shared, control should be segregated in order to create room for accountability. This, however, should be structured in such a manner that the synergic effect of partnership and collaboration concept is not undermined.

This framework pertained to the variables addressed by the research questions in the sense that they were the critical success factors that were the items of focus.

Conceptual Framework

The network and collaborations theory by Kamensky and Burlin (2004) underlined this study. PPPs are rooted in collaborations and network of partnerships, therefore the study benefited from the tenets of these theories. The theories relate to how accountability and cooperation play out in collaborations and cooperative arrangements.

Through PPPs, hybrid organizations are formed, and specialized skills and knowledge become necessary for their management. This theory encapsulates what those specialized skills are (Mistarihi et al., 2012). As a consequence of the interweaving of the different organization cultures that stem from the individual partners, mixed characteristics are created that can bring about some level of uncertainty (Farajian, 2010). It becomes necessary to deal with the matters arising, looking up to the theoretical framework of corporations and collaborations.

This conceptual framework was quite useful in attempting to understand what could be considered to be the critical success factors of PPPs, which are a form of collaborations.

Nature of Study

The study was a quantitative survey, in which the researcher asks questions that assist an inquiry as to how variables are related, and the hypotheses show the researcher's predictions concerning how the variables might be related (Creswell, 2009).

Ex Post Facto Research Method

Where a researcher is not in a position to cause an effect on the variables through the introduction of a treatment, but he or she studies the phenomenon by examining the effects of a treatment or treatments that have already occurred, the research design is the ex post facto (Tuckman, 1999).

Experimental design was not possible for this study due to the fact that I could not cause an effect on the variables by means of introducing a treatment; hence the ex post facto design was considered most appropriate and was adopted.

Quantitative Survey Research Design

This study was a quantitative survey. "A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population" (Creswell 2009, p.

145). In this research, the opinions of the respondents were the subject for quantitative and numeric description.

I designed the survey as a self-assessment quantitative survey, leveraging on the following four factors identified by Creswell (2009) as the advantages of the survey design:

- It saves time and money,
- Observing the respondents or situations to determine causes and effects would be impracticable given the circumstances of the phenomenon being studied,
- Quantitative survey is adjudged to be more effective than qualitative examination of documents, because the number of documents that will need to be examined in order to generate the required data will be near prohibitive, and
- Treatment need not be administered during the research, rather effects of past treatments is the focus.

Through the selected approach, design, and technique, I was able to measure in quantitative terms, the existence and significance of each of the independent variables earlier identified.

Definition of Key Variables

Economic, political and social conditions: The whole system of taxation, infrastructure, culture, and general economic conditions that operate within the system

Efficient bidding process: The process of calling potential partners to submit their quotations for a particular project. It involves transparency in selecting the best quote in terms of value, track record, and price.

Evaluation of value addition potential: This is the determination of the capability of a planned project in improving the lives of the people.

Favorable economic, political and social conditions: This is the whole system of inflation, interest rates, taxation, sociocultural environment, available market, and the nature, education level, and the general disposition of the people within the environment where PPP is contracted or planned.

Financing structure: This is the source and nature of funds that are applied to a PPP project.

Identification, assessment, and allocation of risks: It is the process of envisaging the unfavorable conditions that may crop up at any phase of the project, which may have adverse effect on its success, and apportioning them to the partners before the commencement of the project.

Legal framework: These are the legal pronouncements, rules, and regulations that enable, regulate, and oversee the workings of PPPs.

Involvement of the affected persons at the planning stage: This is the system of consulting, educating, and seeking the buy-in of the end users of a PPP product or service, before implementing the project.

•

Assumptions

It was assumed that the respondents would conscientiously and truthfully complete the questionnaires.

This assumption was critical, as the opinions and beliefs of the respondents formed the basis of the conclusions at the end of this study.

Scope of the Study

The study covered the government, the operators, and the consultants. The individuals sampled were those considered to be knowledgeable and in possession of valid information, relevant to the study.

The results to a large extent are capable of being generalized to all PPP projects in Lagos State and can be generalized in other locations having similar workings and conditions.

This study was, however, is limited by the fact that the peculiarities in Lagos State were being considered, and therefore generalization in areas not having identical circumstances may not be valid.

Limitations of the Study

To measure the opinions, attitudes, and beliefs of respondents, a 5-point Likert scale was employed in this study. However, the responses may not have accurately captured the reality due to the fact that the actual dimensional continuum for each question could be diverse and very vast, which will not be adequately covered by the five choices in the Likert scale (Hartley, 2014).

I engaged with each participant to ensure that they understood the scale in order to secure as far as possible a uniformity of understanding by all respondents.

Researchers' bias was also a potential limitation, whereby the experiences of the researcher encroach on the real outcomes of the research. To mitigate this, all my personal opinions and experiences were clearly set aside.

Significance of the Study

This study could make a very meaningful contribution to positive social change by suggesting ways in which the Lagos State Government can maximize the use of PPPs. Best practices the world over in the policy formulation, administration, execution, and implementation of PPP was benchmarked against what was obtainable in the state, in order to discover and advise on the areas that require improvement.

As can be seen from the literature, the link between the utilization of PPPs, and accelerated social and economic development cannot be overemphasized. Hence, for the state to achieve its dream of turning Lagos State to a *mega city*—a slogan the current government administration has been seen to sing in the media—it must not only embrace the PPP concept, but must also ensure that best practices are employed, in order to derive the maximum benefits.

Summary

The PPP concept has come of age, but most developing economies are at the wake of its application. Lagos State government, being among this class of economies, has just begun the application of the concept. This study was aimed at finding out how

much of the critical success factors were applicable to the state, as compared to successful economies who had successfully applied the concept.

I designed the study as a survey, utilizing the quantitative research technique. Data collection was by a 5-point Likert scale, and the data so collected were analyzed statistically making use of the SPSS analysis software.

In Chapter 2, I give account of the review of literature relevant to this study, showing the work that researchers have done already and the gap filled by this work.

Chapter 2: Literature Review

Introduction

PPPs have proven to be an effective means of matching the growth in the infrastructural needs of the people, which appears to be at a geometric progression, with the growth in governments' finances at an arithmetic progression (Macneil, 1980).

The potential benefits of PPP, however, are hampered in many cases by the undesirable outcomes of some of such projects (Kwak et al., 2009). This manifests in undue delays, and in some cases, project abandonment.

I intended this study to benchmark the best practices around the world with what is obtainable in Lagos State, a state in its early years of adoption of the concept. Being in this early stage of application of the PPP concept, the process in the state is prone to undesirable effects of inherent challenges; this study was crucial in order to serve as a compass.

This chapter includes a review of the work of others in this field, including the various definitions of the PPP concept, the level of application around the countries and economies of the world, and the various factors, favorable and unfavorable, that affect its effectiveness and successful implementation.

Literature Review Strategy

I started off with a review of related literature that were reviewed during my coursework and then expanded the scope by searching the databases for related research materials. I searched multiple databases such as ProQuest, as well as through Google Scholar. The databases searched were ABI/INFORM Academic Search Complete, Academic Search Complete, Business and Management, Dissertations & Theses, and Dissertations & Theses at Walden. I narrowed the database search by subject, limiting my search to business and management, education, information systems and technology, and policy administration and security

Because the concept of PPP is quite dynamic, I tried to concentrate on materials that were not more than 5 years old, though quite a few (about 2%) of the literature I eventually reviewed was more than 5 years old. The key words—*Public Private Partnerships, collaborations, partnerships, quantitative research, survey method, and post ex-facto research*—formed the basic search items.

Theoretical Framework

The theory of collaboration by Wood and Gray (1991) underlined this study. The definition of the concept under this theory is: "Collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to their domain" (p. 146).

According to the theory, for partnerships and collaborations to make sense, the collaborators must remain autonomous to ensure retention of their individual controls. Since the aim of PPPs is not to create a new organization by merger, the collaborating parties must understand the need for autonomy.

Shared structure is another rule under this theory, and it suggests that since collaborations and partnerships are not permanent structures, the nature of the structure should also be temporary, with suitable rules and applicable details. The initial purpose for collaboration should always be the focus, and though it may become necessary to change the strategies and approaches along the line, there should not be a departure from the initial purpose. A vital aspect of the theory is that in as much as there is a shared vision, accountability must be ensured through segregation of controls, while sustaining the synergic effect of the collaboration.

The variables that were addressed by this research work are covered by this framework.

Conceptual Framework

The concept of network and collaborations by Kamensky and Burlin (2004) underlined this study. Collaborative networks form the roots of PPPs, and it bothers on how to achieve accountability and cooperation in collaborations.

The formation of PPPs creates organizations that are hybrid in nature, requiring specialized management skills and knowledge (Mistarihi et al., (2012). And consequent upon the mixture of the organizational culture of the partnering organizations, mixed characteristics are created (Farajian 2010). This theory specifies what the required specialized skills and knowledge should be, for effective administration of such situations. The theories under this concept therefore become useful in such circumstances.

Definition of PPP

So many definitions have been offered for the term PPP, yet some scholars believe that there is no specific definition for it. "Public-Private Partnership (P3) can be a term which has no specific definition attached to it" (Bansal, 2012, p. 11). "The literature lacks a universal definition as well as a framework for collaboration" (Queen, 2011, p. 61).

"While Public-Private Partnership has been exercised in many countries over the years, there are still disagreements in how a Public-Private Partnership should be defined" (Farajian, 2010, p. 10).

"Many papers on Public-Private Partnerships begin with the comment that Public-Private Partnerships are notoriously difficult to define" (Jefferies & McGeorge, 2009, p. 421). They added that the problem of definition, to a large extent, lends difficulty in carrying out a research of the concept.

Neal (2010) also found that the literature showed so many differences in the way PPP has been defined, and therefore was of the view that PPP eludes definition. Nevertheless, he agreed that the varying definitions have some unifying elements. According to Busch and Givens (2011), PPP can be defined as "collaboration between a public sector (government) entity and a private sector (for-profit) entity to achieve a specific goal or set of objectives. This collaboration results in government-business relationships that include service contracts, supply chains, ad hoc partnerships, channel partnerships, information dissemination (p. 1).

"A Private Partnership for Public Benefit (PPPB) is an ad-hoc structure that aligns private resources towards a government objective without leveraging additional public funds" (Farooq, 2011 p.4).

"PPP refers to contractual agreements formed between a public agency and private sector entity (between public and private partners) which contribute in increase of the availability and quality of the public services and also enables private partner to achieve desired benefits" (Kruzic & Skokic, 2008, p.1193).

"PPP can be broadly defined as a partnering process between two or more public and private sector organizations, to produce and/or deliver a public good or service that may not have been possible without this partnership arrangement" (Mistarihi et al., 2012, p61).

A simple and on-the-point definition is given by the office of Public Sector Information in the United Kingdom as "arrangements typified by joint working between the public and private sectors" (Farajian, 2010, p.10).

Moszoro & Krzyzanowska (2008, p.205) described it as "long-term cooperation agreement between a Public authority and the private sector to provide public services"

The U.S. Army Corps of Engineers defined partnering as "the development and sustainment of a relationship that promotes achievement of mutually beneficial goals" (Agyemang, 2011, p.12).

The World Bank's economics of education group offered a definition of PPP in education as "a contractual relation between government and private providers" (Read, 2011, P. 39).

Having assessed the definitions in the literature, as demonstrated above, it can be concluded that various scholars have offered definitions for PPP, which is not different from the attempts made at the definition of other notable terms. The issue that makes these definitions to appear so different from each other is that each of them attempted to address a different type of PPP. Therefore, the confusion is not that PPP does not have a definite definition, but the fact that there are various types of PPPs.

Simply put, PPP is collaboration between a public sector entity (or several public sector entities) with a private sector entity (or several private sector entities) to provide a public good or service. In actual fact, all the definitions in the literature captured this basic definition. The appendage in each of the definitions went further to address the type of partnership which the author had in mind at the time of his definition.

Types of PPPs

There are several variants of the PPP concept, which have been examined by various scholars. Abramov (2009) noted that a broad range of PPP does exist, characterized by the investment of private sector in public owned businesses and provision of funds by the private sector for infrastructure improvements.

Shown below, are the types of PPPs according to the various models and forms that their agreements take.

Full Private provision

Under this model, the government allows the private partner to plan, finance, build, operate and own the asset. The private partner charges fees for use of the assets to recoup its costs and also make profits (Checherita, 2009). The government's contribution in this regard is the permission granted to the private partner to provide the public good. In addition to this, the government creates the enabling environment through legislation.

Private Financing Initiative (PFI)

Under this arrangement, the private partner provides and operates the facility or infrastructure, while government pays shadow tolls to the private organization for the usage of the facility by the users (Checherita, 2009). Cheung et al., (2009) found that Britain has been making use of this model extensively, with about 14% of its annual investment in public services coming under the heading 'Private Finance Initiative'. As at 2006, Britain had signed 794 PFI deals amounting to about GBP55 billion (National Audit Office, 2008).

Design, Build, Operate, and Transfer (DBOT)

The private operator builds the facility according to the specification of the government. The management and operation of the facility is left with the private operator for a specified period of time under the agreement. During this period, the end users pay tolls/fees to the private operator for the use of the facility; government creates the enabling environment through legislation and concessions in favor of the private partner. At the expiration of the term, the facility is transferred to the government, in some cases; the government pays some amount to acquire the asset (Checherita, 2009).

Public Private Joint Venture

Under this arrangement, decisions are taken jointly, and both parties own the asset created by the arrangement jointly. The risks and rewards are shared among them (Checherita, 2009). This is what Queen (2011) referred to as separatist partnership, where the parties have corresponding responsibilities.

Leases/Concessions:

This is a model where an asset already built by the government is leased to a private operator. The private operator operates the assets and charges the users some form of tolls. At the end of the lease period, the assets revert back to the government (Checherita, 2009).

Operate, Maintain, and Manage (OMM)

National Council for Public-Private Partnerships (2011) describes this model as an arrangement where the private partner operates, manages and maintains a facility owned by the government (Jenkins, 2012).

Design, Build (DB)

According to Almoud et al., (2010), the Design Build model is a situation whereby the private partner has, under an agreement, the sole responsibility to design and build a facility for public use.

Government choses DB option to avoid conflicts by making the partner solely responsible for the design and building of a public facility/infrastructure. The model has proven to be capable of saving time and money (The National Council for Public-Private Partnerships, 2011).

Design Build option has some variants as follows:

• Design, Build, Maintain: where the private sector has the responsibility to design, build and maintain the facility (Jenkins, 2012).

- Design Build, Finance, Operate and Maintain: where in relation to the above, the private partner also has the responsibility to finance the project, as well as operate and maintain the facility (Jenkins, 2012).
- Design Build Finance Operate, Maintain, and transfer: where in relation to the above, the private entity transfers ownership of the facility to the government at the end of the partnership period (Jenkins 2012).

Apart from the above, two broad classifications of PPP were given by Roumboutsos & Chiara (2010) as:

- Finance based model that utilizes private funds for the provision of public goods, and
- Service based model that utilizes the expertise of the private partner to operate and manage already existing facilities.

It should be noted that PPPs are quite different from privatization because in privatization, government loses control of the subject, while through the PPP model; government retains control to a large extent (Weimeair et al.,2008).

Models of PPPs

The literature revealed that PPPs can take different models. This, to an extent explains why many scholars have concluded that PPP has no definition. It can be argued that PPP has a definite definition, but what brings about the complexity is that a PPP can be designed to suit the realities of the partners at any particular time, and given the peculiarities of the environment, the economy, and the location. According to Mackintosh (as cited in Belniak 2008), three basic models do exist. The first being the Synergy model, which is where partners pool their resources together, and where the partnership created is expected to produce a result that is larger than the sum of the results obtainable by individualized efforts with same level of resources.

Second is the Increased Budget Model, whereby the partnership creates accessibility to funding that could not be possible in individualized efforts.

And lastly the transformation model that bothers on knowledge diffusion to bring about transformation and changes.

Development of PPPs

The problems facing governments in the area of providing for their populace is very widespread and broad and cannot be adequately dealt with without collaborations by governments and other stakeholders (Laganga, 2011).

After the incidence of World War II, there became an increased need for governments to partner with private organizations to provide infrastructure, especially in the areas of Medicaid, medicare, and environmental cleanup (Hanger, 2012). Since the end of World War II, the formation and use of PPPs have been on the increase (Hanger, 2012).

Apart from the increasing need for infrastructure, PPPs have become desirable due to the need to address inequalities in the area of accessibility of healthcare, poverty and food insecurity, and HIV/AIDS insurgence (Kraak et al.,2012).

According to Lee (2010) the Chinese government started considering PPP as an option of development from 1950s when it began to face obsolete technologies and

dearth of management skills, shortage of funding, and a very visible underperformance of the urban water sector of its economy. It took the concept more seriously starting from the 1990s, by promulgation of laws to entice private entities to produce public goods, beginning with urban water services (Lee, 2010).

Developed economies as well as developing countries, have embarked upon PPPs as a source of funding and or expertise to meet up with their various infrastructural and social needs in the areas of "roads, railways, harbors, airports, prisons, schools, hospitals, sports facilities, universities, public sector offices, water supply lines, wastewater, etc." (Kruzic & Skokic 2008).

By the end of 2010, there became increased calls for global PPPs to address issues requiring global collaboration. World bodies: the United Nations, UNICEF, WHO, the World Bank, private foundations such as Bill and Melinda Gates Foundation, UN Foundation, and private organizations such as the Coca Cola Company, Pfizer International, British Petroleum, together with various other civil society organizations have entered into one form of partnership or the other to address the pressing issues plaguing mankind (Aziz, 2012).

There are currently about 400 units of global PPPs, spanning diverse entities and attempting to solve divergent purposes (Aziz, 2012).

In the United Kingdom, PPP was first adopted in 1992 under the model of Private Finance Initiative (Cheung et al.,2009). However, Checherita (2009) argued that the United Kingdom shifted to PPP in the 1980s. In the 1990's, Southeast Asia, Latin America, Europe, Australia, and some other (countries drifted towards PPP as an option of solving economic and social problems (Checherita 2009).

In Australia, the use of PPP can be traced back to 1980s and 1990s (Jefferies & McGeorge, 2009). While countries like Italy, Finland, Greece, Portugal and Spain are still working out their strategies to grow the use of PPP in their countries, UK, Ireland and Australia rank tops among those that have been able to establish strong structures for the success of PPP programs (Checherita, 2009). PPPs manifested in its modern form in the 1980s in Australia (Teicher et al., 2008).

In the United States PPPs practically started during World War II through the New Deal Initiative that was initiated by President Roosevelt (Hanger, 2012).

The U.S. government has, since the 1980s, increased use of organizations from the private sector to perform tasks that are ordinarily considered the responsibility of the government; for instance, the Air Traffic Towers are operated by private organizations in many airports across the US; this is unknown to many people, as the function is a responsibility of Federal Aviation Administration (Nachiappan Subbiah, 2009).

The introduction of private services as well as finance in the provision of pubic goods has featured very prominently in governments' efforts to provide public goods in the last 20 years (Roumboutsos & Chiara 2010). Given the success of PPPs in the US, the government is expected to continue to witness its extensive use, especially in the area of highway transportation, even as a policy tool (Roach, 2011). It is important to note that it is not very certain when USA first adopted PPPs because some scholars' claim that it had been around for about 2 centuries while others believe that it is less than a century old.

According to National Council for Public-Private Partnerships (2011), PPPs have been in use for more than 200 years in the United States (Jenkins, 2012). But Farajian (2010) asserts that PPP was introduced in the United States in the 1950s. However, Strong evidences in the literature suggest that Farajian may not be utterly right. (Minow, 2003) found out that PPPs date back to 1800s, where governments in the United States of America encouraged Private Organizations to provide public goods by use of tax exemptions and land grants.

At some other times the U.S. government received funding from the private and non-governmental organizations for furtherance of the course of public infrastructure and social welfare provisions. Precisely in 1829, John Smithson issued the sum of \$500,000 to the United States government as funding for an organization in Washington D.C, whose mandate was to further knowledge (Neal, 2010).

Despite the age-long use of PPPs, some countries are just in the start-off stage of its introduction. The Jordan Education Initiative was introduced in 2003, marking the beginning of PPP in Jordan, and in 2007, it completed the enactment of its PPP policy, which was officially launched in 2008 (Mistarihi et al.,2012).

Moszoro & Krzyzanowska (2008) pointed out that Poland is one of the countries making minimal use of PPP; with involvement of the private sector in only 3 sectors out of the 11 identified economic and social sectors.

There were enormous evidences pointing to the fact that the developed parts of the world embraced the PPP model of procurement since long time ago, but the developing countries have only seen the need to join suit only recently Hossain (2011). Should we then conclude that PPP is the ingredient that actually caused the developed countries to become developed?

Although PPP has been considered as a very valuable model of procurement, Farooq (2011) warns that it is not all community issues that are solvable by its application, and therefore, the intention of studying how to make PPPs more effective should not be misconstrued as a suggestion to use the concept exclusively, but to utilize it maximally.

Trends in PPPs

PPP has been a subject of interest for not only governments, but also scholars around the world, which has led to series of studies across the globe. These studies have revealed varying results especially in terms of success rates, with major success indicators being the costs and speed of execution (Bansal, 2012). This has further explained why there is a huge literature on this subject matter; the results from each study can however be generalized only to an extent.

In the United Kingdom, PPP was introduced as Private Finance Initiative in the year 1992, aimed at involving the private sector in public services provision (Bansal 2012).

A study conducted by Bansal (2012) in North America, based on 12 large scale PPP projects concentrated on the costs and speed of execution of the projects, showed that the success rate was 75%. PPPs were seen to adhere to the budgeted time and costs which is a major attraction for the public sector participants.

In the last 3 decades, the traditional procurement method of pubic goods is gradually being phased out by PPPs. This development has not been uniform around the world, as some transform slowly, and the others quite rapidly (Pantelias, 2009).

PPP is not new in the global sense. In the past one or two decades, it has become widely used in the UK (Blanc-brude et al.,2009). Within the past 15 years, as much as 1,000 PPP contracts have been entered into by the U.K. government, amounting to about 200 billion euros. PPP has over the years been applied to a variety of purposes including homeland security. Right from the time of founding of the U.S., government has collaborated with the private sector on home land security, and as at date, about 85 percent of USA's critical infrastructure is in one way or the other under PPP arrangements (Busch & Givens, 2011).

Cheung et al., (2009) tried to understand why the public sector around the world are adopting PPP for provision of public goods and services, and they found out that the early adopters of PPP did so majorly to find private funds for public benefits. However, the reasons for PPP have evolved beyond just funding, and have included speed of execution, improved quality delivery, and efficiency in planning designing and execution of projects.

Role of the partners

Role of the Public Partner

It is the role of government to see to the success of its PPP programs by utilizing its regulatory powers in encouraging the private investors (Leland & Read, 2012).

For the PPP model to deliver the expected results, it is necessary that the government enacts, facilitates and guards the laws of the partnership and ensure that there are no deviations from the set rules. It should also ensure that the executors of the PPP are held accountable to the citizenry (Neal, 2010).

In addition, governments should put mechanisms in place to ensure that the public is not unduly exploited by the private investors who are always motivated by profits (Mavalankar et al., 2008).

Similarly, Jenkins (2012) argued that governments have the responsibility to drive PPPs, by ensuring maximum benefits to the citizenry, in terms of the improvement to their quality of life, as well as the impact on the environment.

Very importantly, McAfee (2008) asserts that, for PPPs to work, government needs to provide leadership in the whole process, guiding the transformation and offering support to it.

Role of the Private Partner

In most cases, it is the responsibility of the private partner to manage the commercial risk involved in PPP project and at some other times, depending on the agreement; its responsibility could include the provision of funds, design and administrative support for the PPP project (Hill, 2011).

Argument for PPPs

There are quite a number of reasons why PPPs have become desirable as a tool for economic and social development. Governments over the years have strived to develop specialized solutions for the ever evolving development needs (Abramov, 2009). PPP is one of the most dynamic approaches which governments have employed to tackle the growing need for infrastructure and social amenities. In developing countries, the need for infrastructure and social amenities grow at a pace that is faster than the growth in public funds (Hill, 2011; Lee, 2010).

Bansal (2012, p. 6) points out that, "policymakers have reached a point where they are in search of innovative project delivery methods which are efficient in both cost and time". The reasons for this shift as seen from the studies by various scholars are as follows:

Speed

A study conducted by Buxbaum and Ortiz (2009) revealed that private organizations are more efficient than their public counterparts in terms of keeping to schedule; and in agreement with this revelation, Roach (2011) found that projects under PPP experience timely completion.

Cheung et al., (2009) posited that the speed of the private organizations can be attributable to their ability to avoid bureaucracy and ease administrative bottlenecks. Jenkins (2012) buttressed this point by stressing that PPP is capable of mitigating the bureaucratic backlogs characterizing the operations of government entities. However, Callet (2010) warned that the speed, which the private partner lends to PPP projects, is greatly threatened by the bureaucratic model of the public sector.

On the other hand, Agyemang (2011) found that a major contributor to the speed of PPPs is the availability of funds made possible by the private sector partner.

According to Bansal (2012), PPPs can reduce the completion time of a project by at least 0.23%, while other forms of acquisition can increase the completion time by as much as 11.04%.

In 2003, 75% of PPPs contracts in the UK were delivered within the budgeted time, and by 2008, 69% of the projects delivered within schedule- about 4% of the projects were delivered before the scheduled time. These results may seem not too commendable but interestingly, projects under traditional procurement method experienced far more delays than is obtainable through PPPs (UK National Audit Office 2009).

Cost Saving

Liu & Wilkinson (2011) found that cost savings is a major factor influencing the adoption of PPP.

A study conducted by Buxbaum and Ortiz (2009) showed that PPPs deliver more cost efficient operations than the traditional procurement method.

Cheung et al.,(2009) argued that the private sector partner has the capacity to save costs at all the phases of the PPP project, but however pointed out that PPPs could give rise to high transaction costs. Cheung et al. (2009) found that PPPs may result to transaction costs that are not usually relevant in traditional delivery methods. For instance, cost of agreements and other legal fees may not be required where government acquires the assets directly. Farajian (2010) described transaction costs as the type of costs that are incurred for searching, negotiating, contracting and enforcing a contract. These costs are classified extra costs for PPP projects.

These transaction costs are capable of impinging the benefits derivable by the public partner from the PPP, and therefore may prevent or limit their use (Leland & Read, 2012).

This class of costs may represent price payable for the numerous benefits associated with PPPs (Leland & Read, 2012).

However, strong evidence exist which suggest that PPP is capable of reducing the overall cost of projects far better than what can be achieved by other delivery methods, although the costs are affected by the interest associated with the use of private funds (Bansal, 2012). It should be noted that transaction costs constitute an insignificant portion of total project costs.

The cost savings in PPP can be quite significant because it has been established that contrary to criticisms, PPPs could save between 6% to 40% of construction costs of projects, thereby eliminating cost overruns. A direct example is the Miami Port Tunnel project by the Florida Department of Transportation whereby the proposals submitted by private partners were found to be far below what the organization budgeted for the project (Agyemang, 2011).

PPPs bring about competition thereby fostering improved quality and conscious efforts to reduce costs (Read, 2011).

Contrary to the positive assertions above, Blanc-brude et al. (2009) gathered data which showed that PPP project in Europe raises the cost of road construction by a whopping 24% above the cost of achieving similar result under the traditional delivery method, which they attributed to the premium paid by the government to the private sector against the risks transferred. This suggests that governments in that part of the world may be utilizing PPP for very risky projects.

Very importantly Blanc -brude et al. (2009) also pointed out that this lack of cost saving is largely due to the fact that in the affected projects, the structure is such that any costs saved accrues to the government, therefore the private partner gains nothing from any cost saving mechanism he may put in place. Since the private partner will need to invest time, money and initiative in order to save costs, incentives should be built into PPP projects such that not only government, but all the partners benefit from actual costs saved.

Interestingly, another study undertaken in the UK shows that, although there could be cost overruns in PPP, such overruns are still far below what is applicable to traditional procurement method Farajian (2010).

The UK's National Audit Office records (2009) shows that procurement under PPP resulted into 22% cost overruns, against a staggering 73% recorded for traditional procurement.

Bansal (2012) found that 83% of the time, PPPs will be completed within the budgeted amount. In the cases where there were cost overruns, it was discovered that the cause was mainly issues that were not envisaged at the inception of the project.

Blanc-brude et al., (2009) found that such cost overrun result majorly from the price paid for risk transferred to the private partner. This logically should cause PPP projects to be more expensive than the conventional procurement method, because it guarantees completion of projects.

PPPs in service delivery have shown to save huge amount of costs in the sense that the public partner simply leverages on the facilities and staff base of the private sector to provide extra services. This has been widely applied in the area of healthcare; in Los Angeles CA USA, private clinics were integrated into a partnership with the public sector to deliver healthcare services in the year 2000.

In conclusion, In PPPs, the private partner has the potential to save costs, but the potential is however enhanced in situations where the public sector gives enabling incentives (Hill, 2011).

Manpower needs

According to Stevens (2010) private businesses, due to the new industry landscape, including the rapid technological advancement, strive to continually keep abreast with current developments, through training and retraining of their workforce. PPPs enable government to tap into this, and benefit from the quality of staff maintained by their partnering private organizations.

Busch & Givens (2011) found out that government on its own might not be capable of adequately catering for its own manpower needs, hence the private sector is deemed to be more effective in this regard, a view which is supported by Hanger (2012), who asserted that governments have overwhelmingly large number of projects, yet they are often under staffed.

This explains the attraction to PPP projects whereby they can leverage on the staff strength of the partnering private operators. A study by Mavalankar et al., (2008) showed how government was able to leverage successfully on private hospitals staff-base to achieve their objectives in the area of obstetrics care for poor women in a county in India. **Funding**

For 2008 – 2013, \$1.6 trillion was required for the infrastructure development in the U.S., which was far above the available financial resources of the government (USDOT 2007), hence the shift to PPP for the provision of some of the infrastructure.

Governments do enter into PPP arrangements in order to find private funding for public infrastructure (Bansal, 2012). Pantelias (2009) identified insufficiency of public funds as the major reason why governments enter into PPPs. Governments do not have the ability to raise massive funds that can match the expansive infrastructural development needs, hence it has found PPP projects very valuable, because in such arrangements, the private partner becomes the catalyst for the raising of funds (Cheung et al., 2009;Lee, 2010). Tynkkynen & Lehto (2009) discovered that government sees its own financial base as being inadequate to match the increasing demand for infrastructure, hence it is not possible for it to single handedly provide for its populace.

In the same light, Chan et al., (2009) found that the governments' chief reason for the adoption of PPPs is the funding mechanism provided by the private partner. Hanger (2012) also supports this view by noting that budget deficits of governments make it necessary for it to enter into PPP projects. Farajian (2010) also points to the same direction.

On the contrary, Hill (2011) argued that in the developing countries which are characterized by undeveloped capital markets, government may be in the best position to raise funds, as it is considered to be more credit worthy than the private sector. It therefore follows that in such cases, government will provide the funding, while the private partner will plan, execute and manage the project. Similarly, Leland & Read (2012) found out that governments enter into PPP projects in order to use their financial resources to foster development. (Agyemang 2011) asserts that even governments who are not burdened by inadequate funding will still favor PPPs, in order to incentivize private operators to utilize their resources and create jobs and improve infrastructure.

It therefore means that in most cases, funding is the attraction for the government, while in few other cases, it is not.

Productivity and Technological Innovation

Blanc-Brude et al.,(2009) emphasized that the major reason why governments adopt PPP is the possible higher level of efficiency and productivity that can be derived from it, owing partly to the fact that risks are transferred to the party who can manage it better – usually the private partner.

Technological innovation is also considered to be a major factor influencing governments to embark on PPP projects, it enables them to leverage on the facilities of the private partner to achieve their developmental objectives (Busch & Givens, 2011; Farajian, 2010; Lee, 2010). In PPP arrangements, the private partner has enough room to
continue to innovate, from the inception of the project, through its life circle (Liu & Wilkinson, 2011).

Management and Operational Efficiency

The private sector partner has better capacity to plan, as well as design and build infrastructure; governments' bureaucracy limits its mobility and therefore renders it less efficient (Cheung et al., 2009)

The private sector's efficiency level is considered to be superior to that of the public sector because the private sector is seen to be much more innovative in terms of technology and management, than the public sector, which is one of the major reasons why governments have chosen the path of PPPs to actualize their development objectives (Bansal, 2012; Checherita, 2009; Hossain, 2011).Jenkins (2012) pointed out that government's attraction to PPP is mainly because the arrangement has a good potential of speeding up the processes involved in projects by eliminating the bureaucratic bottlenecks often inherent in government operations. Liu & Wilkinson (2011) found that PPPs produce better quality services, as well as better project scrutiny, and these reasons further punctuate governments shift to PPP.

Necessity

There are some areas where efficiency will be almost impossible for the government without partnering with the private sector. For instance, eradication of counterfeit pharmaceutical drugs will be impossible if there is no form of partnership with private organizations (Laganga, 2011). Prenzler (2009) also found that a government's fight against ATM raids was unsuccessful, until the police partnered with a

private security organization. In a nutshell, PPP would become a good option in situations where some peculiarities of a project, make is very difficult for government, operating alone, to achieve its aims (Mairembam, et al., 2012).

Synergy

As Martin & Halachmi (2012) found, in PPP projects, the synergy created by the partners forms the major attraction especially in low income countries. Still on synergy, Callet (2010) argues that PPPs are basically formed to efficiently tackle very serious needs that would otherwise be difficult for a single organization to undertake alone. Nachiappan Subbiah (2009) Noted that PPP makes it possible for a government to increase its scope without necessarily expanding its base.

Profit Motives and Corporate Social Responsibility

In some instances, private organizations do initiate PPP programs as part of their corporate social responsibility (Ahmed 2010). This, they do, in an attempt to give back to the society because, according to Abramov (2009) private businesses are otherwise seen, by the society, as being unconcerned about the impact of their business activities on the communities in which they operate. At other times, private organizations are largely motivated by profitability when entering into PPP arrangement (Jenkins 2012).

Partners go into PPP for the fact that it can advance their individual courses (Jackson 2012). And Belniak (2008) adds that PPP affords the partners, benefits commensurate with their level of investment.

Risk Transfer

Jefferies & McGeorge (2009) believed that the major attraction to PPPs is the shift of risk and not the provision of funding by the private partner. Risk, indeed is a major factor influencing the formation of PPPs (Hardcastel et al.,2010).

Governments can shift associated risks of the projects to the private partner Amponsah (2010). For instance, the risk that a facility would have structural defects in a long run that could make it difficult to manage, can be mitigated, if the builder (the private partner) is also the maintainer under the contract. Under this sort of arrangement, the private partner is compelled go the extra mile to ensure that the long term durability of the facility is built into the design. According to Moszoro & Krzyzanowska (2008) a risk is effectively transferred when a partner accepts to bear the consequences attached to that risk, if and when it occurs. (Chan et al.,2009) found that government effectively transfers financial risk, construction risks, and commercial/operational risks to the private partner, although in some cases, due to the nature of the project and the associated risks, the transfer could be partial.

Risks are transferred to the private partner through a form of complex contractual agreements (Boyer, 2012), and each type of risk is allocated to the party who is in the best capacity to control it (Amponsah, 2010).

Blanc-Brude et al. (2009) asserted that sharing of risks associated with a PPP project is capable of increasing efficiency and saving costs.

Read (2011) found that the project costs under PPPs should be higher than the costs under the traditional procurement method; reason being that since the construction

risk is usually transferred to the private partner, the premium and incentives associated with the risk transfer, add up to increase the overall project costs.

However, this is quite arguable because even under the traditional procurement method, when the construction risks materialize, the project costs will increase, and where such risks are not properly managed, the project could fail ultimately.

In a PPP arrangement, risks are identified, analyzed and allocated. Allocation criteria is basically the ability to bear, hence risks are allocated to the party who has the best capacity to manage it (Agyemang, 2011; Amponsah, 2010; Jenkins, 2012; Pantelias, 2009).

The risk of poor design, high construction costs, operational inefficiencies leading to cost overruns, and ultimately, community dissatisfaction, are risks that are better managed by the private partner, therefore the government is happy to transfer them, and include incentives to encourage the private partner to bear them (Amponsah, 2010).

The risks associated with PPPs will vary from country to country and from community to community.

Moszoro & Krzyzanowska (2008) classified the risks associated with PPPs into 3 headings as follows:

- Construction risks
- Demand risks, and
- Availability risk

Construction risk is the risk that there could be late delivery, additional costs, and technical deficiency.

Availability risk is the possibility that the private partner will deliver quantities that is short of the expected quantity or if the quality does not match the specification.

Demand risk being the risk that there could be limited demands due to emerging new trends, technological changes and competition.

Moszoro & Krzyzanowska (2008) went ahead to recommend that at least one of demand risk and availability risk should be allocated to the private partner, ignoring the construction risk. On the contrary, Read (2011) argued that construction risks should be born fully by the private partner. I tend to concur with the argument of Read (2011) because the construction risks are under the control of the private partner, therefore allocating such risks to it will create more room for efficiency.

I also propose the following classification for risks associated with a PPP, given the various risks that have been identified in the literature:

- Social
- Economic
- Political

Risks that can be termed as social are those that can be affected mostly by the nature and culture of the people, as well as the nature of their government. Such risks as the possible reaction of the public to outsourcing of a good or service which they think is primary responsibility of government, as well as the reactions of the masses on possible termination of appointment of some public servants, whose services would become irrelevant due to a PPP project, could be regarded as social risks. Economic risks are those risks that are associated with the macro economic conditions, and can manifest in the area of resistance of the service by the public due to perceived high prices, low demands due to low purchasing power, high inflation rates causing the fixed prices to become grossly inadequate, and increasing cost of funds that could increase the financial costs.

Political risks are those risks that come about as a result of changes in polity which affect government decisions and frequency of change of government officials

Jenkins (2012) noted that the risks associated with individual partners may be different from those affecting the project itself. In risk allocation therefore, only those risks associated with the 'project' should be re allocated and rewarded. For instance the possibility that the private partner may raise the charge-out prices for their services at the long run is a risk that needs to be borne and mitigated by the public sector. This therefore suggests that all risks are not transferable. Nevertheless, risk transfer remains an important factor that influences the government to enter into PPP agreements (Liu & Wilkinson, 2011).

It should be noted that the reasons for embarking on a PPP will vary from government to government, and from time to time. This is because the priorities will not always remain the same (Gross, 2010).

Arguments Against PPPs

PPP, irrespective of its numerous achievements, advantages and wide range of application, has come under criticism by some scholars. PPP has many constraints, some

of which are brought about by the very nature of the concept; each partner will have different goals and concerns (Hardouin, 2009). The identified criticisms are as follows:

Low-balling

This is a situation where a private entity may bid for a contract at a cost that is lower than the actual cost, just to secure the contract; it is a major setback in PPPs (Neal, 2010). This can result in unnecessary optimism in the cost saving potential of an agreement, which can only result to cost overruns.

Lack of Transparency

Studies have shown that transparency is lacking in the award process of many PPPs, thereby creating room for irregularities (Verma, 2010). Due to this problem therefore, the public partner is sometimes compelled to agree to a compromise and subsidize or give concessions to enable the PPP to succeed. This problem is though not without a solution: governments should make the bidding process very open and rigorous, and the pricing should be clearly mapped in a manner that will show where there is a clear case of under costing (Neal, 2010).

Corruption

Corruption which can manifest in payoffs, kickbacks, price-fixing, and bidrigging, is another subject of criticism as pointed out by Neal (2010). The private partner, having a mindset that is controlled by profit motive may employ unwholesome measures to maximize their revenue from the PPP project (Neal, 2010).

This ill, which can come from the side of both parties, could substantially impact the success of any PPP project (Verma, 2010).

This can be mitigated by a very robust agreement, concise enumeration of deliverables, proper and programmed monitoring, and clearly set policies. In addition, adequate legislation by the government can also help to check the excesses of the private partner.

Low Quality Goods/Services

Some scholars have also based their criticisms on the argument that the private partner will produce low quality services under a PPP contract (Neal, 2010). This can come from their effort to maximize their profits; Tynkkynen & Lehto (2009) pointed out that the profit-seeking mindset of the private partner will always result to problem for the PPP.

To curb this problem, the agreements must specify the expected service quality, and necessary controls must be put in place to monitor performance and penalties for non/under performance must be clearly spelt out.

Lack of Accountability

Another issue of criticism is that of accountability. Who really should be held accountable? A Nigerian proverb has it that 'a goat that is collectively owned, will always be tin due to hunger'. When accountability is shared, then there exists a room for laxity.

According to Neal (2010) the public partner is accountable to the populace, while the private partner is accountable to their shareholders. Who among these partners should be held liable for lack of accountability? The answer boils down to the fact that the tenets of the agreement should decide who is accountable for what. And more importantly, it should be born in mind that whatever is not adequately monitored/checked will not measure up to expectation. Therefore adequate controls must be put in place by the public partner to instill accountability.

Erosion of Equity

An important criticism identified by Neal (2010) is that of equity erosion. Public goods and services provided through PPPs often attract price tags. This means that the users must part with money before having access to the service/goods. Sometimes, it becomes out of reach of the poor masses that may have the most need for it. (Neal, 2010). Government should not be a mere purchaser of goods and services; it should guarantee equality, in the sense that the services should not be unnecessarily highly priced and out of reach of the common masses.

Dilution of Control

Fuente & Profiroiu (2008) feared that PPPs are capable of relegating government to a second fiddle position in very critical issues relating to public goods and welfare. There are some goods and services, which, by their nature, are almost synonymous with governance.

Roach (2011) observed that PPPs can lead to loss of control by the government on vital public goods. Buxbaum and Ortiz (2009) are of the view that the private partner usually has too much involvement in the PPP contract, which could buttress what Roach (2011) observed.

The private partner could intentionally make a ploy to reduce the level of involvement of the government in a PPP project; part of their possible ploy to abuse and take undue advantage of the system.

Teicher et al.,(2008) is concerned that the focus on risk minimization and costs saving may becloud the public partners approach to other very salient issues relating to PPPs, both at the planning stage and the execution stage. This could be part of the issues leading to lack of attention to the issue of retention of control.

The public shows resentment at any time the government appears to have delegated its functions. It is possible for government to lose control of such function if adequate care is not taken in drafting the agreements in such a manner that enables the public partner to retain the necessary level of control.

Deviation from Mandate

Sometimes, the PPP fails to deliver the mandates and the expected results may not be realized. Ibem (2011) discovered that a PPP set up by a state government in Nigeria to provide housing for low income earners, failed to deliver the expected outcome. The houses built under the arrangement ended up being too expenses and had to be allocated to middle and high income earners at the end of the project.

Similarly, a study conducted by Njau et al., (2009) revealed that the dimension of implementation in some circumstances can be quite different from the specifications of the enabling policy, thereby bringing about results that vary significantly from the initial goal. The activities of officials at the grass root level were found to be the triggers of this sort of diversion.

Those who have no belief at all in PPPs see it as a way of creating unnecessary ambiguities with so much grammar without good outcomes (Jefferies & McGeorge, 2009).

In the same light, Hossain (2011) saw critics as believing that the real benefits of PPPs accrue to the private partner, rather than to the citizenry. In most cases profitability is placed at the fore front, while the welfare of the citizens becomes secondary.

Challenges of PPPs

Partners' experiences with PPP projects have not always been positive due to some challenges that are peculiar to partnership arrangements. (Kwak et al.,2009). The following are specific issues that make PPPs administration difficult:

Diverse Objective and Ideologies of the Partnering Organizations

The major issue, which breeds a huge challenge in PPP, is the diverse goals and aspirations of the different collaborating organizations (Cheung, et al., 2009; Hardouin, 2009; Roach, 2011).

Goal congruence is thus, hard to achieve because the public and the private sectors are, by their original mandates, driven by very different, and almost contrasting objectives.

As the public operators strive to make infrastructure available to the people at little or no cost, the private partners think in an almost opposite direction due to their profit motive.

Different ideologies and structures of the different partners also create problems for the PPPs (Callet, 2010).

Ideally, the private and public partners should have the same vision of successfully completing the project, they do think differently due to their contrasting motives - the government is concerned about the social welfare of the people, while the private partner is concerned about profits and financial growth of their organizations (Checherita, 2009). It therefore becomes a challenge to be able to harmonize these objectives in a manner that will eliminate conflict of interest (Gerace, 2011).

Master-Master Relationship

The individuals that make up the PPP implementation team are usually bosses from both sides; the master-servant relationship that makes execution and administration easy is relatively absent. The government officials, who are used to holding on to power, may not be able to submit to the dictates of the team members drawn from the private sector partner's side, and in most cases, the private partners crew may be quite more knowledgeable. It therefore becomes difficult to get the team members to truly agree, connect and share authority in discharging their mandates (Queen, 2011).

Inadequate Mechanisms

Ahmed (2010) pointed out that the major challenges militating against the success of PPPs are inadequate reporting mechanisms, improper monitoring of the projects, and unclear and ambiguous policies. A PPP project that lacks state oversight could be very risky and wasteful (Neal, 2010).

Boyer (2012) also discovered that the public partner officials tend to rely so much on engineering skills, neglecting financial skills which is very crucial for the success of any project In addition to the above, negotiation skills and mechanisms are always missing from the Public partners coffers (Leland & Read, 2012).

Cultures of the Partners

One of the challenges leading to failure is the differences in the cultures of the partnering organizations (Cyert & Goodman, 1997). When prospective partners have different or even contrasting cultures, blending will be very difficult, thereby causing the success of PPP under such condition to be remote.

The cultures that exist both in the Public partner's organization and that of the Private partner will invariably affect the culture of the PPP project team that is drawn from such organizations (Jenkins, 2012). In a situation where they have contrasting cultures, effective partnership may be difficult. For instance, I once worked in an organization where speed is regarded as 'everything'; such an organization will find it difficult to collaborate with a government entity that is over burdened by bureaucracy and protocols that breed delays.

Just as oil and water can hardly make a perfect mix, except with added chemicals, organizations with opposing cultures may not make workable partnerships. Therefore, it is important to consider the culture of an organization before partnering with it (Weiermair et al.,2008).

Resistance to Change

Change, irrespective of the value addition potential will, more often than not, be resisted, especially where due consultations are not made. Bad public reaction concerning any project will cause it to fail (Neal, 2010). Antagonists sometimes will instigate

criticisms against genuine PPP projects, just to cause confusion. At some other times, the negative activities of activists and community extremists can jeopardize any PPP efforts. Once a bad image is created and labeled on a PPP project, the possibility of success reduces (Agyemang, 2011;Pantelias, 2009).

Inadequate Training and Education

To position public officials for facilitation of PPP projects, training and education is very necessary. Farooq (2011) argues that public sector officials lack the necessary education and training; hence it will be difficult for them to be up to the task.

According to Queen (2011), PPPs fail in some cases due to the fact that the officials of PPP, though in most cases are desirous of adding value to the process, lack what it takes to contribute meaningfully to the course.

Bureaucracy

The bureaucratic nature of public organizations, which contrasts with Private organization's speed of operations, causes blending to be difficult (Queen 2011). In addition to this, the officials of the public sector who are used to holding on solely to power find it difficult to adjust, thereby causing unwarranted delays.

The decision making process of the public sector is highly politicized; hence this may appear too bureaucratic and problematic in the eyes of the private partner (Tynkkynen & Lehto, 2009). Callet (2010) also pointed out that the bureaucracy of government may limit the actualization of the overall goals of a PPP project.

Inadequacy of Legislation and Enabling Laws

Legislations enabling and enhancing the use of PPP are still deficient or nonexistent in some countries. Where this is the case, the foundation is weak and it will be a tall order to sue PPP projects for success.

Lee (2010) found that for Chinese government, attempts have been made to create legislation with respect to PPPs, but the laws so created do not cover all aspects, therefore giving room for failure. In some instances, he pointed out; circulars are the only available regulatory instruments rather than a well promulgated law particularly as it applies to PPPs involving foreign investors.

Similarly a PPP project that was commissioned for housing in Nigeria made use of interim guidelines in the absence of specific legal provisions on PPPs, which contributed to the partial failure of that project (Ibem 2011).

Complex Arrangement

A PPP brings about a hybrid organizational form which requires special management skills. Unfortunately, the managers from the partnering entities do lack the required skills to effectively manage such complex arrangement, particularly during the implementation stage (Mistarihi et al.,(2012).

Farajian (2010) found that PPP projects are quite complex due to the interweaving of the different organizations culture and management. This brings about a mixed characteristic that breeds uncertainty. This is made worse by the fact that some aspects of a PPP project may not be easily measurable. Arguably, you cannot control anything that cannot be measured. Nachiappan (2009) pointed out that a business relationship which is not superiorsubordinate relationship, but superior-superior relationship is hard to manage and can lead to complications.

Critical Success Factors of PPPs

Management of PPPs is a complex task, both in theory and in practical terms and the manner in which complexities are dealt with determines the level of success that could be achieved (Grossman, 2010).

Regardless of the geographical location, there are some factors that are critical for any PPP to succeed (Cheung, 2012). Special conditions, competencies and skills are necessary for a successful PPP. In addition to this, environmental factors, legal and economic factors, as well as technical and technological factors are critical to the success of any PPP (Mistarihi et al., 2012).

Definition

Rockart (1982) defined Critical Success factors as "those few key areas of activity in which favorable results are absolutely necessary for a particular manager to reach his or her own goals...those limited number of areas where things must go right" (Amponsah 2010, p. 20).

The term was also defined by Sanvido et al.,(1992) as "those factors predicting success of projects and events or circumstances that require the special attention of managers" (Amponsah 2010, p. 20).

Based on the above definitions, Critical success factors in PPP's, for the purpose of this dissertation, can be defined as those elements, dynamics, features, and fundamentals that have very considerable influence in the achievement of success in any PPP project. The level of attention accorded to them by the policy makers in the public sector, the officers at the helm of affairs of the partnering organizations, and the project managers, will to a large extent predetermine the success rate of their project.

The experiences of various countries in PPPs, as seen in the literature, have demonstrated what the critical success factors are. They are, broadly speaking, Legal, economic, social, and political factors. Some of them also bother on management skills and expertise, and importantly, some are issues that relate with the PPP structure and organization. These factors are as follows:

Legal framework

The legal framework appears to be the most critical of all the factors. However, a recent study found that partners in Australia and Britain do not bother so much about the legal framework, which is probably because workable legal framework for PPPs have already been put in place and are functional. On the contrary, the respondents from Hong Kong stressed that Legal framework is the most critical success factor for PPP projects (Cheung et al., 2012).

Economic activities are directed and redirected by public policies and legislation. Similarly, PPPs can be tuned by the public partner through legislation and public policies, and whether or not a PPP project succeeds depends largely on the support accorded to it by the government, evidenced by how favorable the policies are to the PPP (Scott 2009). The legal framework needs to be independent, fair and efficient, in order to pave way for successful PPPs (Cheung et al.,2012). Inside the legal framework should be enshrined issues like dispute resolution procedures and other governing rules.

Governments should look at their present circumstances and enact laws that can entice private operators to PPPs without heaving unnecessary cost burden on the users. The regulatory framework should be continually revised, given the experiences gathered from the local operations, until an optimum version is achieved. However, in as much as the regulatory framework should be dynamic, it should not be made epileptic, to avoid the creation of uncertainty in the minds of the private partners. The law should be able to include all aspects of PPPs in a clear and unambiguous language that will foster confidence (Hill, 2011). Chile for instance has succeeded in its PPP projects due largely to very strong regulatory framework (Hill, 2011). On the contrary, Nigeria is yet to develop a national policy on private partnerships especially in housing; this is the chief contributor to the failed PPP projects in Nigeria (Ibem, 2011).

PPP projects that have been commissioned for housing in Nigeria are making use of interim guidelines in the form of agreements which identifies the partners' costs and benefits under the project (Ibem, 2011).

So critical is this issue of Legal framework because it can uplift or kill any project (Hardcastel et al.,2010).

Favorable economic, political and social conditions

In forming a PPP, the economic conditions should be evaluated to ensure suitability for a particular type of PPP. This is the foundation of any PPP and the success depends largely on it (Weiermair et al.,2008).

Favorable economic conditions, and government guarantee, must be properly appraised in determining the viability of a PPP project (Cheung et al., 2012; Hardcastel et al., 2010).

Jenkins (2012) pointed out that a favorable economic climate is a prerequisite for PPPs success. Issues such as inflation, fluctuating interest rates, and low demand due to low purchasing power, can adversely affect any PPP project.

The political and social environment needs also to be stable before a PPP project can be implemented successfully, especially where PPP is being introduced newly. PPP projects have been found to fail in cases where there are unduly frequent changes in government (Cheung et al., 2012).

Politics, especially frequent changes in government creates uncertainty and deters private organizations from embarking on PPPs. A new government may have a different view of an ongoing PPP project and may not accord adequate support to it. It may even change some policies according to its new agenda, which may adversely affect ongoing PPP projects, especially where such policies are not specifically covered by the PPP agreements (Jenkins, 2012).

Similarly, stability of leadership in the organization of the private partner is also a critical success factor. New leadership may not understand the vision underlining some

ongoing projects, and may therefore not pursue them with the level of vigor required to achieve success (Jenkins, 2012).

In every aspect of business, and life, incentives have proven to improve performance. In order to increase the efficiency of the private partners, especially where unforeseen economic or social challenges erupt, government will need to give concessions and incentives to the private partner to ensure success of their PPP projects (Gerace, 2011).

Planning

A popular saying has it that "failing to plan equals to planning to fail". Therefore, no PPP should be consummated without proper planning.

Cost benefit analysis can be quite useful at the planning stage, as this will determine whether or not to proceed with a PPP project. It will also determine the best way to structure the partnership for maximum benefit (Hardcastel et al., 2010).

Constructive negotiation forms the bedrock of profitability in PPPs (Agyemang, 2011). And as such, all financial and non-financial rewards associated with a project must be constructively negotiated; otherwise, the project might be set up for losses at the detriment of one party and in favor of the other.

The expectations as well as the modus operandi must be in writing, enshrining the rules, structures and procedures in clear and understandable language, to avoid misunderstandings, and to ensure that the operations and relationships are kept as formal as possible. This will create room for orderliness and success in the PPP project (Alexander & Zuckerman, 2000).

Importantly, the project schedule should be detailed and clear, and having timelines for each milestone (Amponsah, 2010)

Involvement of the affected persons/stakeholders at the planning stage

Public consultation is a critical foundation for a successful PPP (Agyemang, 2011). This is because, change, no matter how positive, could be resisted if proper consultations, dialogue, and communication, with those that will be affected by it, are ignored especially at the planning stage.

The purpose of PPPs, the world over is to improve the lives of the governed; hence it may be logical to expect no resistance from the intended beneficiaries. However Abramov (2009) warned that non-inclusion of the affected communities and other stakeholders in dialogues before the commencement of a PPP project could be counterproductive.

According to Amponsah (2010) all impact parties which not only include the public, but the staff of the partnering organizations who could be affected by the partnership, must be consulted at the beginning, in order to eliminate hitches and ensure success. Weiermair et al. (2008) laid emphasis on the need to consult with the targeted end users, which could be through their representatives, and also highlighted those to be dialogued with, to include the affected employees of both the public and private partners, the press, relevant labor unions and interest groups. This exercise is aimed at gaining acceptance of the project in order to be able to sell the final output to its intended users. Boyer (2012, p. 164) found that the process of gaining the acceptance of the intended users is like the "big elephant in the room".

The literature has laid emphasis on consultations/dialogue with impact parties, at the beginning of the project, but it should also be stressed that after the planning stage, the officials need to continuously keep their listening ears active: a communication channel should be left open to receive and address their complaints and/or concerns.

Efficient bidding process

Apgar (2011) found that Industry leaders are more attuned to PPPs when the government creates a bidding system that is qualifications-based rather than the traditional proposal-and-bid system. In the same light, Cheug et al. (2009) noted that transparency in a bidding process is very essential for an efficient PPP project.

Qualification based bid system is capable of reducing procurement time by half, and also cut the cost considerably (Apgar, 2011).

A bidding process should be rigorous and detailed, and not a mere selection of the partners based on lowest price. This is because low price does not guarantee quality, and neither does it guarantee success of a project. In selecting a partner, therefore it is important for the government not to base decision on only lowest cost. The assessment should be rigorous enough to show what represents best value (Weiermair et al., 2008).

Evaluation of value addition potential

No PPP can succeed except if each of the partners has something to gain from it (Tynkkynen & Lehto, 2009). Therefore, no partner should try to take all the milk and leave out chaff for the other party. A respondent in a study conducted by Callet (2010) attributed their success in a PPP project to the win-win situation experienced in their PPP project. Another respondent in the same study commented on the usefulness of the benefits they derived from not just the core objectives of the PPP, but from the distinct competencies of the private partner which were tapped into by the public partner's staff.

Identification, assessment, and allocation of risks

It is important to address the risk elements in a PPP projects. Risks must be clearly identified, properly classified and allocated to the party who is in the best position to bear it (Agyemang, 2011; Amponsah, 2010; Jenkins, 2012; Pantelias, 2009).

Risk allocation is a key element in PPPs, therefore the expertise employed in assessing and allocating them will determine how successful a PPP can be (Hardcastel et al., 2010).

Cheung et al. (2009) also argued that risks should only be allocated to the partners according to their ability to manage them, but at the same time suggests that bulk of the risks should be allocated to the private partner. However, caution should be exercised in the identification and allocation of risks because some of the risks do not materialize throughout the project life (Checherita, 2009). There are premiums that accrue to the private partner due to the amount of risks transferred, and if such risks do not eventually materialize, the project might have been overpriced.

Understanding of the goals and objectives of each partner

Setting the records straight from the beginning is quite critical; there must be an agreement clearly stating the vision, the modus operandi, and the expectations, as well as the timetables (Neal, 2010).

To ensure the success of a PPP project, the aspirations of each party, as well as their goals and objectives must be well understood, both individually and collectively, by all the partners (Belniak, 2008).

Cheung et al. (2012) found that for a PPP to succeed, the expected outcome must be clearly mapped out and understood before the agreement is signed.

Where a partnership agreement is ambiguous as regards what is expected from either party, genuine misinterpretation can occur, leading to non-fulfillment of the PPP mandates. Therefore, the goals and milestones should be understood by all relevant parties before the takeoff of the project.

Although each partner will always have divergent goals and objectives; the public sector being driven by the goal of improving the welfare of the public, and the private sector's profit motive being their driving force most of the time, the vision of the project itself should be unified among all the partners, and it will be helpful if the vision is stated clearly and repeatedly, as a rider, on all documents concerning the project.

Commitment and participation by top management of both parties

Weiermair et al. (2008) argued that a PPP cannot be successful except if there is commitment and support from top management. Therefore, to cause a PPP to be successful, the public officials in senior positions should be, and be seen, to actively get involved in all the phases of the PPP project.

Neal (2010) saw participation and personal involvement of the chief executives of the partnering organizations as a major ingredient of success, and also noted that for a

PPP to be successful, the public sector partner must not only be supportive, but also receptive.

Senior Management of both parties must have a high level commitment to the PPP, without which the PPP will not be supported adequately (Boyer, 2012).

Financing structure

The financing structure is a key success factor, in the sense that without money, nothing can be achieved in any PPP project, and the financing structure will determine the attendant cost of funds in terms of interest payments – if bank loans are used, or return on investment - if equity capital of an entity is employed. Pantelias (2009) argued that funding should be provided by the party who is capable of providing the cheapest means of funding. In summary, the funding of a PPP should be undertaken by the funding mechanism that is best for a project, considering all other relevant issues. However, the state of the financial/capital market in any economy will greatly influence what financial structure is appropriate (Amponsah, 2010).

Engineering and technical structure

The engineering and technical aspect of any PPP is the most fundamental of all the critical factors. Usually, the private partner is the chief contributor in this aspect because the public sector is not usually technically inclined, but basically, the required competencies should be drawn from the party who possess the skills, knowledge, and experience (Pantelias, 2009). Different PPP structures need to be considered before making a choice, and their strengths and weaknesses must be analyzed and recognized, so that the best possible structure is employed for each given project (Belniak, 2008).

Identification of required competencies

Specific competencies required for the success of a PPP should be identified and enhanced.

Financial competencies should be given equal attention as engineering and technical competencies. Boyer (2012) found that many projects fail because governments concentrate on technical skills and expertise, while neglecting the financial needs of PPP projects in terms of financial reporting and analysis, and financial assessments and controls.

Competencies in legal, engineering, and finance will need to be visible at the monitoring unit of the public partner to ensure that they create a sort of mirror through which proper continuous assessment of the project can be viewed from time to time, in order to allow individuals with different backgrounds to see the value addition or otherwise of the project (Boyer, 2012).

Apart from knowledge, experience comes only with practice. Therefore the knowledge held by practitioners outside the organization who have had extensive involvement in other PPPs should be tapped into (Boyer, 2012).

Staffing and training of team members

Young (2010) discovered that the people who constitute the project team, are very critical to the success, stressing that there should be at least two visionaries from both

sides of the partnership, who will be capable of giving everything it takes to make the partnership work. Cheung et al. (2012) found that it is important to have a team of senior management who are committed to the PPP project.

The competencies of both parties need to be appraised, analyzed and harnessed to derive maximum benefit from them, and create a synergy effect (Cheung et al., 2012).

The administrators entrusted with the management of PPPs should be trained on the special skills which they require to manage such complex structures. To set the stage for such training, the first step should be a gap analysis to determine what competencies already exist and what new skills need to either be hired, or acquired (Boyer, 2012).

No PPP project can succeed without the requisite management skills required for planning execution and delivery of the mandates under such a project. Therefore, the competencies must be assessed and certified before a PPP is commissioned (Boyer, 2012).

The internal competencies identified should be cultivated into the PPP, and project champions should be built from the pool. An analysis of the workforce should be carried out to discover people within the organization who have the competencies that are required for the various roles , and the competencies identified should be harnessed and improved where necessary (Boyer, 2012).

Management from both partners should commit resources in training and developing their representatives in any PPP project (Young, 2010). However, where a required competency is not found from within the organizations, and if it is not feasible to train the existing staff in that area within a reasonable time, consideration should be given to contracting consultants to bridge the gap, rather than hire staff that may become idle at the end of the project. In doing this, knowledge mapping; identifying relevant knowledge that exist outside the organization becomes necessary. Such knowledge could either be tapped through training, coaching, or consultancy (Boyer, 2012).

Knowledge capture from ongoing PPP project, though not immediately beneficial for the 'at the moment' project, is important in order to keep records that could enhance future projects' success. 'Leaning by doing', when undocumented, could be short-lived; therefore, there should be a systematic means of capturing all significant challenges and the solutions employed in overcoming them. All failures, no matter how little or large, during the project implementation should be discussed openly and documented (Boyer, 2012). All significant achievements should also be documented as guides for future projects.

Monitoring and project evaluation

The importance of monitoring and continuous project evaluation cannot be overemphasized. Monitoring aids the documentation of 'lessons by doing', and very importantly, it bares the achievements and failures of the process and creates a yardstick for further improvements or adjustments to the program of the project (Boyer, 2012).

Busch & Givens (2011) argued that in a situation where the players under the PPP are not subjected to strict control and systemic reviews of their operations and progress, laxity, complacency and suboptimal performance may ensue. Therefore for a partnership to be successful, it must be subjected to the controls that are necessary to keep it in check, and also for the purpose of stewardship and accountability. Keanry et al. (2010) emphasized the usefulness of giving regular update on the project to the stakeholders. This bothers on three major success factors which are communication, evaluation, and monitoring.

The evaluation and monitoring updates should be issued at predetermined regular intervals (Moszoro & Krzyzanowska, 2008).

Monitoring is essential at each stage of the implementation process, and information on the evaluation need to be timely and comprehensive (Amponsah, 2010)

It is important to point out the fact that a phenomenon that cannot be measured cannot be controlled effectively, and as such, each goal and objective must be reduced to measurable details, in order to create the basis for performance evaluation (Young, 2010).

Boyer (2012) argued that the responsibility for project monitoring lies largely on the Public Partner, in order to ensure that the private partner is keeping up with the provisions of the agreement under the PPP. Hanger (2012) added that regular audits, both scheduled and unscheduled, conducted by both internally set up audit functions, and sometimes by external auditors will assist to put the PPP administrators on their toes, and also to point out areas of lapses that will need to be addressed.

Sensitivity analysis should be included as part of the evaluation procedures to enable the Public partner to determine whether to increase or decrease its level of involvement in the project monitoring activities, and also to show areas of emphasis (Weiermair et al., 2008).

The concept of value for money needs to be introduced to ensure that quality, efficiency and cost effectiveness are achieved. The challenge in introducing this concept

however lies in the fact the measurement of value could be subjective except where the expectation has been broken down into bits of details (Checherita, 2009)

Effective Communication

Communication is a key element of PPP success; therefore, appropriate network for communication and dissemination of project progress and other information should be established to keep the actors in a PPP project adequately informed (Amponsah, 2010).

For a partnership to be sustained, there must be defined modes and channels of communication, and the information flow should be free, but without compromising the confidentiality of classified information (Amponsah, 2010; Young, 2010).

Communication should be continual and should include schedules for face-to-face periodic meetings (Amponsah, 2010).

Keanry et al. (2010) also pointed out the importance of having meetings, where the team members from both partners' organizations come together to deliberate. Such meetings should be aimed at reviewing the progress, planning the future, and ironing out differences among the team members.

A PPP agreement needs to be structured in a manner that creates room for open communication which will pave way for trust to be established among the partners.

Neal (2010) also emphasized that effective communication is a necessity, as it is capable of preventing unhealthy conflicts among the partners and the team members.

In summary, open and effective communication creates a positive climate that can improve the implementation of a PPP (Titus-Howard, 2012).

Good leadership

Good governance and government support is a prerequisite for PPP success (Hardcastel et al., 2010).

From our daily experiences, leadership is a key issue because every other thing within its boundaries falls behind it. Mairembam, et al. (2012) found that good leadership fosters supportive environment for PPP projects.

Leadership combines skills, expertise, poise and charisma. Project managers under PPPs need to possess project management skills, communication skills, coordination and arbitration skills (Mistarihi et al., 2012).

PPP project managers should possess communication skills, connectivity skills collaborative attitude, and must be credible, which are outcomes of trainings, experience and other forms of education (Mistarihi et al., 2012).

Some PPPs span over a period of time, with many lasting up to 30 years. Therefore, Managers, among other skills and competencies, should be able to adapt to changes in the leadership of the Public sectors, with the attendant changes in management styles and policies (Mistarihi et al., 2012).

The managers should be self-motivated in order for them to be able to drive the course, and to inspire their team members to achieve the required results (Mistarihi et al., 2012).

Relationship by the PPP administrators is quite critical in the management of PPPs. The need for the PPP administrators to have close working relationship cannot be overemphasized because it fosters understanding and co-operation, which helps in fostering better understanding of the partnership dynamic. This is even more necessary due to the fact that every issue about partnerships, especially contingencies, cannot possibly be captured in a single document called the partnership agreement (Nachiappan 2009).

Amponsah (2010) had a long list of the skills and competencies that need to be possessed by the administrators of PPPs which includes:

- Good leadership style,
- commitment to planning and control,
- commitment to the overall goal,
- good planning skills,
- ability to motivate the project team,
- ability to cope with and manage unexpected and unforeseen crises,
- good human management skills, and
- good administrative skills.

Transparency and trust

Transparency is a critical issue in PPPs, because another crucial factor which is trust depends largely on it.

Trust is deemed to be achieved when both parties become confident that the other party will fulfill its mandates under the agreement, without attempting to maneuver issues to the disadvantage of their partners (Busch & Givens).

Various researches have shown that trust forms an essential element of PPPs. Abramov (2009) asserted that violence can erupt in fragile states, if there is no trust between the government and private business and individuals in the area. Distrust among partnering Government and private organizations will produce similar results.

A vital ingredient in building trust into PPPs is by ensuring effective communication (Neal, 2010). Effective communication in this regard needs to be open and sincere, without which it will be difficult to reach any compromise that are crucial to achieve the PPP objectives (Neal, 2010).

Neal (2010) also discovered that high-synergy PPPs have noticeable trust and respect among the partners. He also found out that conflict was the outcome of lack of trust among partners under PPPs.

Confidentiality of information could be a tactic for hiding information from partnering organizations or government, therefore, Roach (2011) asserts that it is beneficial for an officer to be appointed as commissioner of information for each PPP arrangement, and that the reasons why certain information are classified as items under the non-disclosure list must be well specified. However, even though such information is agreed to be confidential, it must be made available to all officials who have the responsibility of accepting or rejecting the partnership arrangement.

Distrust is so distractive in the sense that even the operatives under PPP arrangements could be disorganized and distressed when trust is compromised (Tynkkynen & Lehto, 2009).

Summary

The literature contains a vast amount of information on the subject matter of PPP. Various scholars are of the opinion that the concept lacks a clear definition. However, having reviewed the literature, I discovered that it actually has a very clear definition. What are being confused as divergent are the appendages that underline each author's focus regarding the type or model being considered.

PPP has various models and types, and it could be argued that every individual project is a type in itself, because the details for almost every project are different. In PPPs, roles, accountability, authority, risks, and responsibility are shared and/or allocated to the partners.

The literature clearly shows lack of information on the application of the concept in Nigeria in general and Lagos State of Nigeria in particular, which forms the incentive for this study.

In Chapter 3 I set out the approaches, strategies, techniques and methods that will be applied in carrying out the study.

Majority of the bottlenecks and other undesirable issues are brought about mainly by the fact that the partners come into the arrangement, having very different motives – the private sector being concerned with profitability and increase of financial value for their owners, while the public partner is interested in the improvement of welfare of the people.

PPP has come under criticism due to the view that it is a very complicated concept which is difficult to successfully implement, owing to issues like diverse objectives and ideologies of partners, varying cultures of partners, inadequate implementation mechanisms, resistance to change by the people, inadequacy of legislation, and complex arrangements embedded in the process. The factors critical to the successful implementation of PPPs are quite visible in the literature, and could be identified as favorable legal framework, efficient and transparent bidding process, evaluation of value addition potential of projects, identification, assessment and allocation of risks, understanding of the goals and objectives of each partner, commitment and participation by top management of both partners, the financing structure, engineering and technical structure, identification of required competencies, staffing and training of team members, monitoring and evaluation of projects as they progress, effective communication, good leadership, and transparency and trust.

All these variables were the subject of survey in this study, in determining their presence and level of application in the PPP processes of Lagos State.

In chapter 3, I discuss the method, approach, strategy, and design that were applied in this research study.

Chapter 3: Research Method

Introduction

Many governments around the world have employed PPPs as a means of ensuring the growth in the infrastructural needs of the people, which is at a rate that is likened to a geometric progression, with the finances generated by the governments growing only at an arithmetic progression rate (Macneil, 1980).

However, some factors come into play that reduce the efficacy of the PPP concept in reaching the desired goals (Kwak et al., 2009).

Lagos State Government is in the infant stage of the adoption of the PPP concept and is therefore prone to errors, mistakes, and other pitfalls that can render the process unsuccessful. Through this study, the workings of PPP in Lagos State were uncovered to reveal areas that need improvements, benchmarking best practices drawn from around the successful economies of the world that have succeeded through the application of the PPP concept. Therefore, I expected that this study would contribute immensely in assisting the state to measure up with the rest of successful governments around the developed world, in terms of PPP usage, for the construction of public goods and provision of services to the populace.

In this chapter, I give details of the research theories, design, procedures, strategies, and methods that underlined the study, including the data gathering instruments and protocols, samples, population, data analysis, and the general conduct of the research. The chapter shows the process designed to gain knowledge about the workings of the PPP in Lagos State, through a quantitative survey method. Data
gathering was through a 5-point Likert scale structured questionnaire, which was administered to a population sample size that was determined scientifically through the G* Power software. The data were analyzed statistically making use of analysis of variance (ANOVA), and the hypotheses were tested by use of chi-square technique.

Research Questions and Hypotheses

All these strategies, methods, and techniques were applied in finding answers to the following research questions:

Research Question 1: Is the existence and application of the critical success factors of public private partnerships in Lagos State significant?

Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is significant

Null Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is not significant

Research Question 2: Are the challenges faced in the implementation of public private partnerships in Lagos State significant?

Hypothesis 2: The challenges faced in the implementation of public private

partnerships in Lagos State is significant.

Null Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is not significant.

Answers to the above questions exposed details of what the Lagos State Government needs to add to, or remove from, its PPP policies, protocols, and organization. Also covered in this chapter are the procedures adopted in the research process in order to ensure reliability and validity of data collected, as well as considerations for adherence to ethical standards.

The study made use of the survey method, and the quantitative technique, in order to find out the details about the workings of the Lagos State Government in the process of the construction of PPP assets.

Literature Review

I carried out an extensive review of the work of the scholars who have gone ahead of me on similar and relevant missions. The literature contained a vast amount of information on the history, development, achievements, success factors, challenges, as well as the level of application of the concept of PPP by governments in various parts of the world. Cost and schedule ranked at the top in the yardsticks for measurement of success or otherwise of PPP projects.

The literature exposed the fact that what drives success in PPPs in different parts of the world has not exactly been the same, but it has been largely similar. However, there are key variables that must be present before a PPP can succeed; these have been revealed by the literature review. It is these key variables that this research looked out for, in terms of their presence, recognition, and level of application by the Lagos State Government, to determine possible ways of improving the process and making PPPs to be more acceptable and implementable in the State.

Contribution of the Study

This study sought to improve the workings of PPPs in Lagos State by comparing its practices with best practices around the world and suggesting improvements to its processes, policies, and procedures in the adoption, contracting, and administration of PPPs. If PPPs become functional, acceptable, and well administered in Lagos State, there is no doubt that the masses will experience a positive change in their welfare as well as the economy in general.

The literature suggested that there is a very strong link between economic development level and PPP usage. This is because most developed countries have embraced PPP long ago, while it is scarcely used or nonexistent in the developing and under developed countries.

Economies that have witnessed remarkable developments have made use of PPPs for funding and expertise to meet their economic needs in so many areas, including roads, railways, harbors, airports, prisons, schools, hospitals, sports facilities, universities, public sector offices, water supply lines, wastewater, etc. (Kruzic & Skokic, 2008).

For more than 200 years, the United States, according to NCPPP (2011), have utilized PPP for infrastructural development. Similarly, Minow (2003) discovered that PPP in the United States dated back to the 1800s.

PPPs became very functional in the United States during World War II through the New Deal Initiative, which President Roosevelt initiated (Hanger, 2012). As regards the United Kingdom, Cheung et al. (2009) and Checherita (2009) disagreed, while the former posited that it was first adopted in 1992, the latter argued that it started as far back as 1980s.

Southeast Asia, Latin America, Europe, and Australia began the adoption of PPPs in the 1990s (Checherita, 2009). In Australia, PPPs came into consideration between 1980s and 1990s (Jefferies & McGeorge, 2009).

The Chinese government began to consider the adoption of PPP to speed up their development since 1950s but became more serious with the concept around 1990s (Lee, 2010).

Despite the wide application of the PPP concept around the world, many countries and states are just waking up to it (Hossain, 2011), the Lagos State Government being one of them.

This study was particularly important at this time because Lagos State is at the start-up stage of adoption of the PPP concept and is prone to the pitfalls associated with the concept. This research summed up the elements that have aided success of PPPs around the world and benchmark with what is obtainable in Lagos State. Through this process, areas of improvement of the process in the state have been shown, the processes can thus be improved, and the masses will benefit more from functional and well-structured PPPs.

Variables

Independent Variables

The independent variables in this study are the factors, upon which the success of the PPP process in Lagos State depends, and they were identified through the literature review as follows:

- Effective Legal framework
- Favorable economic, political and social conditions
- Effective planning
- Involvement of the affected persons at the planning stage
- Efficient bidding process
- Evaluation of value addition potential of projects
- Identification, assessment, and allocation of risks
- Understanding of the goals and objectives of each partner
- Commitment and participation by top management of both parties
- Adequate Financing structure
- Adequate Engineering and technical structure
- Proper Identification of required competencies
- Adequate Staffing and training of team members
- Proper monitoring and project evaluation
- Effective Communication
- Good leadership

- Adequate Transparency and trust
- Diverse objective and ideologies of the partnering organizations
- Master-Master relationship of the team members
- inadequate mechanisms to tackle problems arising from the PPP
- Varying organizational cultures of the partners
- Resistance to change by the beneficiaries
- Bureaucracy,
- Complex nature of the PPP concept.

Dependent variable

The level of application of the critical success factors and challenges of PPP contracts in Lagos State is the dependent variable.

Research Method, Design and Approach

In quantitative research, the researcher asks questions that assist an inquiry as to how variables are related, and the hypotheses show the researchers' predictions concerning how the variables might be related (Creswell, 2009).

Ex post facto research method

Where a researcher is not in a position to cause an effect on the variables through the introduction of a treatment, but studies the phenomenon by examining the effects of a treatment or treatments that have already occurred, the research design is the Ex post facto (Tuckman, 1999). Experimental design was not possible for this study due to the fact that the researcher cannot cause an effect on the variables by means of introducing a treatment; hence the ex post facto design was considered most appropriate and was adopted.

Quantitative survey research design

This study is a quantitative survey. "A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population..." (Creswell 2009, P. 145). In this research, the opinions of the respondents were the subject for quantitative and numeric description.

It was designed as a self-assessment quantitative survey, leveraging on the following 4 factors identified by Creswell (2009), as the advantages of the survey design:

- It saves time and money
- Observing the respondents to determine causes and effects would be impracticable given the circumstances of the phenomenon being studied
- Quantitative survey is adjudged to be more effective than qualitative examination of documents, because the number of documents that will need to be examined in order to generate the required data will be near prohibitive
- Treatment need not be administered during the research, rather effects of past treatments is the focus.

Through the selected approach, design, and technique, I have been able to measure in quantitative terms, the existence and significance of each of the independent variables earlier identified.

Population and sample

Participation and Data Collection

I gathered preliminary data from the websites of the 3 key actors in the Lekki-Epe Expressway concession: the Lagos state office of PPPs, The Lekki Concessions Company, Hitech Construction Company, as well as from the media.

This preliminary data was quite useful, because it helped me in designing the questionnaire. I also, through this process, gained basic knowledge of what this very first PPP project of Lagos State Government was set to achieve as well as information about those that are behind it.

The data collection was effected through a survey, conducted with a structured questionnaire.

The sample population

The sample was drawn from a population of those involved in the single major PPP project in Lagos State, which is also the first in the State, participants were drawn from the PPP Bureau/office of Lagos state, the Private partner company, and the Project contractors in charge of the building of the PPP asset. This approach was appropriate due to the fact that there was only one significant PPP project that has been executed in the state as at the time of this study, with others still in their preliminary stages.

The project under reference is the Eti Osa Lekki-Epe Expressway rehabilitation which was concessioned to Lekki Concession Company by Lagos State Government. This project is the First road project concession in Lagos State, in Nigeria, and in the whole of Africa, with the exception of South Africa. It is significant in the sense that the financial outlay is quite huge, and given its pioneer status (Lekki Concession Company website, 2014; Lagos State PPP Bureau Website, 2014).

In 2008 when the PPP deal was concluded and the agreement signed, the project won 3 awards as follows:

- Africa Investor 2008 Transport Deal of the year
- EuroMoney International 2008 Africa PPP of The Year
- Reuters 2008 African Infrastructure Deal of The Year

The concession was for Lekki Concession Company to rehabilitate and expand the Lekki/Epe Express way, spanning a 49.36 kilometers; a PPP project whose cost is put at N49.4billion (forty nine billion, four hundred million naira) which was approximately \$309million (Lekki Concession Company website, 2014; Lagos State PPP Bureau Website, 2014).

Sampling method

Simple random sampling method, which is a basic method of sample generation in quantitative survey, was adopted for this study (Babbie, 1998). The selection process under this method is considered to be objective as it gives equal chance of selection to the members of the target population (Bryman & Bell, 2003).

The target population was made up of those who, by virtue of their position, possess knowledge and information, relevant to the study.

Specifically the following, as well as their immediate subordinates were included in the sample

• Decision makers in the PPP

- Project managers under the PPP contract
- The Director General of the PPP
- Director, Social infrastructure directorate
- Director, Legal, compliance and risk management directorate
- Director, Communications directorate
- Director, Shared Services Directorate
- Director, Inspectorate directorate
- Head, Engineering Planning & Services
- Head, Human Resources & Administration
- Head, Commercial
- The Site Engineers
- The Civil Engineers, and
- The direct reports of all the above categories of persons

With a minimum of 8 participants from each of the above classes, including their direct subordinates, the optimal sample size, which was 105 participants, as discussed in the sample size analysis was adequately covered, and at the same time, ensuring that only those who possess relevant information and who should have valid opinions are sampled.

Sample size analysis

It is not always practicable to study an entire population, and where it is possible, it could amount to waste of time and resources (Columb & Stevens, 2008). They, at the same time, warned that a sample size that is too small could lead to a misleading result. The power and sample size analysis was applied to determine the optimal sample size. In a situation where it is necessary to assess quantitatively, any uncertainty in the outcome of a study, it becomes imperative to employ the power and sample size analysis (Columb & Stevens, 2008). According to Lang & Buchner (2007), it is important to determine the required sample size that is capable of resulting in a statistical significance that is appropriate, without increasing the chance of Type I or Type II error, or having an excess sample size.

The sample size for this study was based on the sample size calculation with G*Power software (Erdfelder, Faul, & Buchner, 1996).

Buchanan (2014) used the G* Power software to determine the appropriate sample size for her study titled "Big Five Personality Factor Associations with Individuals' Experience in Their Relationship with God". Also, Pruitt (2012) utilized this method to derive the appropriate sample size for his study titled "Identifying types of parental involvement that most effectively support academic achievement". Based on these precedents therefore, I chose to use the G* Power software for the sample

size calculation.

I set the parameters for the calculation as follows:

P=.05 for alpha, i.e. I accept 5% chance of error, which is the usual acceptable margin (Pruitt, 2012).

Power set = 0.80, i.e. the power at which it becomes adequate to reject a false null hypothesis; Kohl, (2000) suggests 0.80. Effect size = 0.25, i.e. the medium effect size of

0.25 is chosen for this study (Cohen, 1988). I inputted the above parameters into the



G*Power sample size calculator and the result was as shown in fig 1.

Figure 1. Calculation of sample size on G*Power software

The sample size calculated is 95. However, I envisage that about 10% of the respondents may not submit their completed questionnaires; therefore the sample size is increased to 105.

Data collection and the research instrument

Structured questionnaire was used as the data collection instrument. The contents of the questionnaire were based mainly on the literature that was reviewed, as shown in the previous chapter, out of which the independent variables were extracted. An expert reviewed and certified the instrument in terms of reliability before its application (Creswell, 2009). The questionnaire had 3 sections that cover the categories of questions.

Section one of the questionnaire covers the background information about the respondents and the partnership project; common sense was applied in drawing up the questions.

Section two questions were based on a 5 point Likert scale that sought information about the presence and application of the critical success factors.

The third section is also a 5 point Likert scale, which sought to reveal what the challenges were in the Lagos State PPP arrangements, and the degree of their impact on the success or otherwise of the projects. (See appendix I)

Demographic information

Data on demographic information was based on Gender, Marital status, age, qualification, profession, professional involvement in PPP projects.

Informed consent

I obtained the informed consent of the participants by including a statement of consent in the questionnaire thus: "I have read and understood the information above, and I consider the information to be sufficient for me to make a decision as to whether or not to participate in the research study.

By completing and returning this questionnaire, I have given my informed consent, and I do not need to write my name or sign my signature, to ensure anonymity."

I hereby state that the ethical requirements in a research involving human subjects are well understood by me; I have undergone the necessary training (internet-based), by National Institute of Health (NIH), to equip myself with the required knowledge. Upon completion of that training, I was issued Certificate No.518476, dated 09/24/2010 (see appendix II).

The research instrument

The instrument for data collection was developed on the basis of the contents of the literature that had been reviewed. Basically, the variables that form the crux of the structured questionnaire were as identified by previous researches, and the instrument was subjected to test and review by an expert before application (Creswell 2009)

Validity and Reliability

All researchers, irrespective of their research design and approach must ensure validity and reliability of their findings (Creswell, 2009). Basically, validity means accuracy of findings, while reliability means that the findings and procedures are consistent with best practices and can be trusted (Creswell, 2009).

Validity

Validity in research means "trustworthiness, authenticity, and credibility" in addition to accuracy (Creswell & Miller, as cited in Creswell, 2009 p.191).

Threats to Validity

Careless completion of the questionnaires by respondents could pose a serious threat to validity; I introduced a question which had an obvious correct answer in the questionnaire which has an obvious answer. Completed questionnaires with wrong answers to this question were excluded from the analysis because the rest of the answers are probably wrong. I also enhanced the validity of this study, leaning on the recommendation of (Creswell 2009), by carrying out data triangulation, crosschecking the data collected with other available sources of information.

Secondly, when a researcher brings his personal experiences to bear in the conduct of his research, his overall view and tone of narratives could be biased (Creswell, 2009). In recognition of this fact, I had, as much as practicable, separated myself and my personal views from the research in order to ensure validity.

In additional to this, as Creswell (2007) suggests, I carried out data triangulation in order to address the issue of possible misinformation by the respondents.

Reliability

As suggested by Gibbs (as cited in Creswell, 2009), to ensure the reliability of my study, I checked my transcripts thoroughly to eliminate all errors and ensure uniformity in my definition of codes and their application.

Operational definition of key variables

Legal Framework: These are the legal pronouncements, rules and regulations that enable, regulate, and oversee the workings of PPPs.

Favorable economic, political and social conditions: This is the whole system of inflation, interest rates, taxation, socio cultural environment, available market, the nature, education level and the general disposition of the people within the environment where PPP is contracted or planned.

Involvement of the affected persons at the planning stage: This is the system of consulting, educating, and seeking the buy-in of the end users of a PPP product or service, before implementing the project.

Efficient bidding process: The process of calling potential partners to submit their quotations for a particular project. It involves transparency in selecting the best quote in terms of value, track record and price.

Evaluation of value addition potential: This is the determination of the capability of a planned project in improving the lives of the people.

Identification, assessment, and allocation of risks: It is the process of envisaging the unfavorable conditions that may crop up at any phase of the project, which may have adverse effect on its success, and apportioning them to the partners before the commencement of the project.

Economic, political and social conditions: The whole system of taxation, infrastructure, culture, and general economic conditions that operate within the system.

Financing structure: This is the source and nature of funds that are applied to a PPP project.

The Scale Scores

The data collection instrument is a 5 point Likert scale, which sought to reveal the opinions and perceptions of the respondents. The responses indicated rankings on the continuous scale, and equal values were assigned to the items on the scale (Frankfort-Nachmias & Nachmias, 2008).

Data Analysis

Quantitative data was collected using a 5 point Likert scale, ranging from strongly agree, to strongly disagree, with a measure for indifference. It was subjected to quantitative data analysis. I chose the quantitative technique because it gives results that are clear, straight to the point and convincing.

The nature of the predictors (independent variables) and the dependent variables (outcome variables) determines the type of statistical analysis to be applied for the analysis of a set of research data (Creswell, 2009).

The SPSS analytical software was employed for this analysis

Data cleaning and screening

Careless or inattentive responses to survey questions by respondents could hamper the reliability of the study as it may result to false variability. Correlations can thus be affected and type II error could result. In order to screen the data and get rid of false responses, I introduced a bogus question in the questionnaire. A bogus question is one with an obvious correct answer; once a respondent gives a wrong answer to it, it could then be concluded that he ultimately gave wrong answers to the rest of the questions (Lin, 2010). .

Question 18 on section C of the structured questionnaire is the bogus question introduced for this purpose, and all the questionnaires with the wrong answer to that question were excluded from the analysis.

Research Questions and Hypotheses

Research Question 1: Is the existence and application of the critical success factors of public private partnerships in Lagos State significant?

Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is significant.

Null Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is not significant.

Research Question 2: Are the challenges faced in the implementation of public private partnerships in Lagos State significant?

Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is significant.

Null Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is not significant.

Data Analysis

The quantitative data was collected through self-administered, 5 point Likert scale questionnaires.

To determine the effect of the profession of the respondents on their responses, the analysis of variance (ANOVA) was employed to analyze the perceptions and opinions concerning the existence of the critical success factors and issues that constitute challenges to PPPs in Lagos State, given by professionals engaged in Accounting and Finance, Engineering and technical, legal, Marketing, Human Resources, Consultancy, and others, on each of the independent variables. The SPSS software was employed for this analysis.

Hypothesis testing is an integral part of quantitative research, Columb & Stevens (2008), therefore, a test of significance was conducted separately for each of the independent variables, using the Chi square technique, with the p<.05, and degree of freedom being 2, i.e. ((3-1) x (2-1)). This was used to establish whether or not there is a relationship between the independent variables and the dependent variable, as well as the significance level. Thus each of the critical success factors, and the factors constituting challenges was evaluated individually to establish which of them are applicable to Lagos state, and the significance of their application. This analysis was used to determine whether to accept or reject the hypotheses.

Assurance for Cooperation and Approval

I sought for, and obtained a letter of corporation from the office of PPPs under the Lagos State Government Governor's office, in order to have assurance of their corporation, and also to serve as formal authorization for me to have access to the participants (see appendix III).

I also sought for, and obtained the approval of Walden University IRB, through the laid down procedures, to conduct the research. The IRB approval number is 10-20-14-0194352

Ethical Consideration

Ethics in research seeks to make sure that human subjects do not suffer unwarranted consequences due to their involvement or association with any research (Fowler, 2002). Participation in research studies should be voluntary, and the respondents who volunteer to partake in a study must be educated with the necessary details.

Protection of the human subjects therefore becomes paramount, and in this case, the potential harm that this study could inflict on the participants could be in the form of exposure to criticisms or disciplinary measures by their organizations, in cases where their participation is misconstrued to be a form of divulging of information about the project, which may be considered confidential, or exposure of the inefficiencies in their systems which they would rather keep private.

Participants who were not willing to participate in the study were excluded from it, and those who accepted to participate were assured of anonymity; their responses and submissions was treated as confidential. I also assured the participants that the documents pertaining to the study shall be secured to avoid unauthorized access, and that their participation shall remain confidential even after the publication of the dissertation. The data will be destroyed after 5 years subsequent to the publication of the findings of this research study.

Summary

The study is a quantitative survey. To select the participants, the random sampling method was adopted to suit the nature of the study. A letter of cooperation was sought for and was obtained from the relevant department in the Lagos State Governor's office to serve as a written permission to conduct the study, as well as an assurance of their cooperation during the data collection process. Structured questionnaire is the research instrument, drawn on a 5 point Likert scale. Analysis of variance (ANOVA) and Chi Square were employed to analyze the data collected.

In chapter 4, I set out the data collected in tables and pictorial charts, and also lay out the data analysis, showing the results.

Chapter 4: Results

Introduction

Purpose of the Study

This study had the purpose of examining the workings of PPP arrangements in Lagos State in order to uncover how the concept has been applied in terms of the existence and extent of application of the critical success factors, as well as how the inherent challenges have played out. This exercise enabled me to benchmark the realities of the state with the best practices employed by other countries around the world who have successfully utilized the PPP concept for economic and social development. Thus, the state is advised on what amendments, regarding its policies and operational protocols, are necessary for the PPP concept to yield maximum results in the state. This is particularly important because the state is at the beginners' stage of PPP adoption.

The Data Collection Instrument

A structured questionnaire was used as the data collection instrument. The questionnaire had three sections that cover the necessary categories of questions.

Section 1 covers the background information about the respondents, and therefore common sense was applied in drawing up the questions in that section.

Section 2 questions are based on a 5-point Likert scale and elicit information about the presence and application of the critical success factors. Questions in this category were drawn based on the literature review findings.

The third section is also a 5-point Likert scale and addresses what the challenges are in the Lagos State PPP arrangements and the degree of their impact on the success or otherwise of the projects. The literature review findings also formed the basis for the questions under this category.

Research Questions and Hypotheses

The research questions and hypotheses of this study are as follows:

Research Question 1: Is the existence and application of the critical success factors of public private partnerships in Lagos State significant?

Hypothesis 1: The presence and application of the critical success factors of public private partnerships in Lagos state is significant.

Null Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is not significant.

Research Question 2: Are the challenges faced in the implementation of public

private partnerships in Lagos State significant?

Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State are significant.

Null Hypothesis 2: the challenges faced in the implementation of public private partnerships in Lagos State are not significant.

Preview of the Chapter

This chapter starts with an explanation of the purpose of study and a description of the data collection instrument, as well as the research questions and hypotheses, data collection time frame, and response rates.

The results are presented to show the demographic characteristics of the sample, descriptive statistics, evaluation of statistical assumptions, and data analysis by survey

questions, data analysis by research questions and hypotheses, analysis by professional groups, and a test of the hypotheses.

Data Collection

Data Collection Timeframe and Response Rates

The data collection process was initiated by meetings and discussions with the head of the organization whose staff, contractors, and consultants were sampled. Our discussions included a preview of the content of existing literature concerning the usefulness of the PPP concept in the acceleration of economic and social development. This was with emphasis on how successful and developed economies around the world have utilized the concept and focus on the elements that were found to be the ingredients of success in those countries.

After fulfilling the necessary protocols within the organization for an activity of this nature to be allowed and supported, a letter of corporation was issued to me by the organization. It preceded my application to Walden University IRB for the approval of my proposal.

After obtaining the IRB approval for this study, I collected from the partnering organization the organogram and the job description of the staff members, as well as those of the resident consultants and the representatives of the main contractor who were charged with the execution of the project.

From the above information, I drew the sample, making use of random sampling method, the sample size being 105 participants, a number that was earlier calculated by the use of the G*power software.

The response rate was 94%, translating to 99 participants. Out of this number, two responses were discarded because they were screened out due to the fact that they failed the bogus question on the structured questionnaire, which suggested that the rest of their responses could be misleading. Therefore, the number of responses subjected to analysis in this chapter was 97.

Discrepancies in Data Collection Plan

My initial plan was that the issuance of the structured questionnaires to the sampled persons, as well as the collection of their responses, was to run concurrently for 2 weeks; however, due to the unavailability of some officials, the process lasted for $2\frac{1}{2}$ weeks, because I had to wait till they became available.

Demographic Characteristics of the Sample

The sample size was determined by the G*Power software, and it included people who could be males, females, married, single, and who may have been rendering services to the Bureau of Public Private Partnerships of Lagos State in the following areas: accounting and finance, engineering, legal, technical consultancy, marketing, human resources, and other relevant capacities that facilitate the process of utilizing the PPP concept in the state. The persons included in the sample from these groups were people who, by virtue of their official positions, were adjudged to possess knowledge and experience at a level that would enable them to meaningfully contribute to the study. Having covered the above groups, there was adequate representation of the population in the sample.

Results

Descriptive Statistics

To describe the main features of the data collected in order to show the emergence of patterns, a measure of central tendency or a measure of spread can be adopted (Trochim, 2006). This is necessary in order to visualize what the data shows, to enable a simpler interpretation of it. I therefore give the descriptive statistics below by use of a measure of central tendency: mean.

Distribution of responses by gender.

Seventy-six percent of respondents were male, and 24% were female. The mode is male professionals.

Table 1

Distribution of Responses by Gender

	Frequency	Percent
Male	74	76
Female	23	24
Total	97	100



Figure 2. Distribution of responses by gender.

Distribution of respondents by marital status.

Among the respondents, 70% were married, 11% were divorced, 6% were widowed, 9% were single, and 3% were separated from their spouses. The mode is Married professionals.

Distribution	of Responses	by Marital	Status
	J 1	~	

	Frequency	Percent
Married	68	70.1
Divorced	11	11.3
Widowed	6	6.2
Single	9	9.3
Separated	3	3.1
Total	97	100



Figure 3. Distribution of responses by marital status

Distribution of respondents by highest educational qualification.

Four percent of the respondents were doctorate degree holders, 40% were Master's degree holders, 37% were bachelor's degree holders, and 19% had Higher National Diploma as their highest educational qualification. The mode is Master's Degree holders.

	Frequency	Percent
Doctorate degree	4	4
Master's degree	39	40
Bachelor's degree	36	37
Higher National Diploma	18	19
Total	97	100



Figure 4. Distribution of responses by highest qualification

Distribution of responses by their professional engagement in the States PPP administration.

Twenty three percent of the respondents were engaged in accounting and Finance roles, 61% in engineering and technical roles, 4% in roles pertaining to the legal aspects, 3% in marketing roles, 5% in human resources roles, and 4% in technical consultancy. The mode is Engineering and technical professionals.

Distribution	of Responses	by Professional	Engagement
Distribution	oj nesponses	by I rojessionai	Lingugement

	Frequency	Percent
Accounting and Finance	22	23
Engineering and technical	59	61
Legal	4	4
Marketing	3	3
Human Resources	5	5
Technical Consultancy	4	4
Total	97	100



Figure 5. Distribution of responses by professional engagement

Evaluation of statistical assumptions

According to Cohen (1969), as cited in Garson (2012), parametric statistical analysis is a powerful tool in the evaluation of statistical assumptions. This type of analysis is applicable when there is need to assume homogeneity of variances between samples, or groups. Z tests, F tests, and t-tests are parametric in nature and are widely applied for this sort of analysis. The statistical assumptions of this study are thus evaluated as shown below.

Analysis of Variance (ANOVA)

ANOVA which is a form of F test has been adopted for the purpose of this analysis.

The statistical assumption that underlines this study is that there will not be significant variances in the responses of the different professional groups. This is particularly important because the different professional groups are not equally represented, and a significant degree of violation of this assumption will affect the suitability of the data analysis method and its interpretation. However, according to Garson (2012), it has been empirically established that "moderate violations have little or no effect on the conclusions in the most instances" (p.8).

To test this statistical assumption, a one way or single factor Analysis of variance (ANOVA) has been applied (Frankfort-Nachmias & Nachmias, 2008). The ANOVA technique has been applied in this study, to test whether or not the different professionals represented in the sample have varying opinions as a result of their differing professional engagement in the PPP process in the state (Green & Salkind, 2011).

Each of the independent variables is hereby subjected to the ANOVA technique individually rather than collectively; this is because the depth of knowledge of each class of the professionals on each variable may differ. For instance, a Legal personnel's opinion on variables relating to legal aspects may differ from the opinion of an engineer or a technical expert.

SQ1 - The legal framework is adequate

The F statistic (F) 2.66 is greater than the Critical value (F crit) 2.3, and the pvalue (p) .03 is less than the alpha value of 0.05. This means that, the variability among the means of the six groups exceeds that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.48 and 2.44 respectively, which depicts a wide gap in the responses by groups. Therefore, the responses to this variable vary among the different professional groups.



Figure 6. Mean for responses to SQ1 by professional groups

Table 5

Distribution of SQ1 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	61	2.8	0.6
Engineering and technical	59	181	3.1	0.3
Legal	4	15	3.8	0.3
Marketing	3	7	2.3	0.3
Human Resources	5	15	3.0	0.5
Technical Consultancy	4	11	2.8	0.3

Table6

ANOVA of SQ1 by Professional Groups

					P-	F
Source of Variation	SS	Df	MS	F	value	crit
Between Groups	5.23	5.00	1.05	2.66	0.03	2.31
Within Groups	35.76	91.00	0.39			
Total	41.0	96				

Table 7

Confidence Interval of SQ1

Mean	2.966666667
Standard Error	0.201108042
Median	2.9
Mode	2.8
Standard Deviation	0.492612085
Sample Variance	0.242666667
Kurtosis	1.852810651
Skewness	0.69153671
Range	1.5
Minimum	2.3
Maximum	3.8
Sum	17.8
Count	6
Confidence Level (95.0%)	0.516964679
Upper	3.483631346
Lower	2.449701988

SQ2 - There is favorable economic, political and social conditions.

The F statistic (F) 0.5 is less than the Critical value (F crit) 2.3 and the p-value (p) 0.8 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 1.95 and 1.47 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 7. Mean for response to SQ2 by professional groups

Table 8

Distribution of SQ2 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	37	1.7	1.0
Engineering and technical	59	104	1.8	0.5
Legal	4	8	2.0	0.0
Marketing	3	5	1.7	0.3
Human Resources	5	9	1.8	0.2
Technical Consultancy	4	5	1.3	0.3

Table 9

2110 110 502 $0y$ 10 $essional Oroups$	ANOVA	of SQ2	by	Profession	nal Groups
----------------------------------------------	-------	--------	----	------------	------------

					P-	
Source of Variation	SS	df	MS	F	value	F crit
Between Groups	1.4	5.0	0.3	0.5	0.8	2.3
Within Groups	49.7	91.0	0.5			
Total	51.0	96.0				

Table 10

Confidence Interval of SQ2

Mean	1.7166666667
Standard Error	0.094575073
Median	1.75
Mode	1.7
Standard Deviation	0.231660671
Sample Variance	0.053666667
Kurtosis	2.665406427
Skewness	-1.168983288
Range	0.7
Minimum	1.3
Maximum	2
Sum	10.3
Count	6
Confidence Level (95.0%)	0.243112965
Upper	1.959779632
Lower	1.473553702

SQ3 - There is efficient and effective Planning processes and procedures

The F statistic (F) 0.99 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.43 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 1.5 and 1.01 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 8. Mean for response to SQ3 by professional groups

Distribution	of SQ3	by Professional	l Groups
--------------	--------	-----------------	----------

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	28	1.3	0.2
Engineering and technical	59	72	1.2	0.3
Legal	4	4	1.0	-
Marketing	3	4	1.3	0.3
Human Resources	5	6	1.2	0.2
Technical Consultancy	4	7	1.8	0.9

Table 12

ANOVA of SQ3 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	1.35	5	0.27	0.99	0.43	2.31
Within Groups	24.72	91	0.27			
Total	26.06	96				

Table 13

Confidence Interval of SQ3

Mean	1.3
Standard Error	0.109544512
Median	1.25
Mode	1.3
Standard Deviation	0.268328157
Sample Variance	0.072
Kurtosis	3.310185185
Skewness	1.490711985
Range	0.8
Minimum	1
Maximum	1.8
Sum	7.8
Count	6
Confidence Level (95.0%)	0.281593131
Upper	1.581593131
Lower	1.018406869
SQ4 - The affected public are involved/consulted at the planning stage. The F

statistic (F) 1.52 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.19 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.2 and 1.8 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 9. Mean for response to SQ4 by professional groups

Distribution of SQ4 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	50	2.3	1.26
Engineering and technical	59	100	1.7	0.70
Legal	4	9	2.3	0.25
Marketing	3	6	2.0	-
Human Resources	5	10	2.0	1.50
Technical Consultancy	4	8	2.0	-

ANOVA of SQ4 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	6.13	5	1.23	1.52	0.19	2.31
Within Groups	73.62	91	0.81			
Total	79.75	96				

Table 16

Mean	2.05
Standard Error	0.092195445
Median	2
Mode	2
Standard Deviation	0.225831796
Sample Variance	0.051
Kurtosis	-0.103806228
Skewness	-0.31256996
Range	0.6
Minimum	1.7
Maximum	2.3
Sum	12.3
Count	6
Confidence Level (95.0%)	0.236995935
Upper	2.286995935
Lower	1.813004065

SQ5 - There is efficient bidding process. The F statistic (F) 1.58 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.17 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.7 and 2.1 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 10. Mean for response to SQ5 by professional groups

Distribution of SQ5 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	52	2.4	0.43
Engineering and technical	59	135	2.3	0.21
Legal	4	8	2.0	-
Marketing	3	8	2.7	0.33
Human Resources	5	14	2.8	0.20
Technical Consultancy	4	9	2.3	0.25

ANOVA of SQ5 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	2.03	5	0.41	1.58	0.17	2.31
Within Groups	23.41	91	0.26			
Total	25.44	96				

Table 19

Mean	2.4166666667
Standard Error	0.119489656
Median	2.35
Mode	2.3
Standard Deviation	0.292688686
Sample Variance	0.085666667
Kurtosis	-0.665415071
Skewness	0.042541316
Range	0.8
Minimum	2
Maximum	2.8
Sum	14.5
Count	6
Confidence Level (95.0%)	0.307157938
Upper	2.723824605
Lower	2 100508720

SQ6 - Evaluation of value addition potential is in place and effective

The F statistic (F) 0.96 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.44 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.8 and 3.2 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 11. Mean for response to SQ6 by professional groups

Table 20

Distribution of SQ6 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	69	3.1	1.4
Engineering and technical	59	201	3.4	0.3
Legal	4	14	3.5	0.3
Marketing	3	12	4.0	-
Human Resources	5	18	3.6	0.8
Technical Consultancy	4	14	3.5	0.3

ANOVA of SQ6 by professional groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
	2.86	5	0.57	0.96	0.44	2.31
Between Groups						
Within Groups	54.03	91	0.59			
Total	56.89	96				

Table 22

Mean	3.516666667
Standard Error	0.119489656
Median	3.5
Mode	3.5
Standard Deviation	0.292688686
Sample Variance	0.085666667
Kurtosis	1.852715408
Skewness	0.473272141
Range	0.9
Minimum	3.1
Maximum	4
Sum	21.1
Count	6
Confidence Level (95.0%)	0.307157938
Upper	3.823824605
Lower	3.209508729

SQ7 - Identification, assessment, and allocation of risks is in place and effective

The F statistic (F) 1.0 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.4 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.0 and 2.7 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 12. Mean for response to SQ7 by professional groups

Distribution of SQ7 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	62	2.8	0.8
Engineering and technical	59	183	3.1	0.3
Legal	4	12	3.0	0.0
Marketing	3	8	2.7	0.3
Human Resources	5	14	2.8	0.2
Technical Consultancy	4	11	2.8	0.3

ANOVA of SQ7 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	2.1	5	0.4	1.0	0.4	2.3
Within Groups	38.9	91	0.4			
Total	41.0	96				

Table 25

Mean	2.866666667
Standard Error	0.06146363
Median	2.8
Mode	2.8
Standard Deviation	0.150554531
Sample Variance	0.022666667
Kurtosis	- 0.648788927
Skewness	0.840031766
Range	0.4
Range Minimum	0.4
RangeMinimumMaximum	0.4 2.7 3.1
RangeMinimumMaximumSum	0.4 2.7 3.1 17.2
RangeMinimumMaximumSumCount	0.4 2.7 3.1 17.2 6
RangeMinimumMaximumSumCountConfidence Level (95.0%)	0.4 2.7 3.1 17.2 6 0.15799729
RangeMinimumMaximumSumCountConfidence Level (95.0%)Upper	0.4 2.7 3.1 17.2 6 0.15799729 3.024663957

SQ8 - There are processes put in place to foster understanding of the goals and objectives of each partner

The F statistic (F) 1.1 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.4 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. Although the confidence intervals at the upper and lower levels which are 1.58 and 0.64 respectively, depicts a gap in the responses; 2 groups as can be seen in the bar chart below are at the high range, while the rest are at the low range, this gap is within the value that can occur due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 13. Mean for response to SQ8 by professional groups

Distribution	of SQ8	by Proj	fessional	Groups
--------------	--------	---------	-----------	--------

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	32	1.5	1.6
Engineering and technical	59	61	1.0	1.0
Legal	4	3	0.8	0.9
Marketing	3	3	1.0	3.0
Human Resources	5	3	0.6	1.8
Technical Consultancy	4	7	1.8	1.6

ANOVA of SQ8 by professional groups

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	6.4	5	1.3	1.1	0.4	2.3
Within Groups	110.1	91	1.2			
Total	116.5	96				

Table 28

Mean	1.116666667
Standard Error	0.183333333
Median	1
Mode	1
Standard Deviation	0.44907312
Sample Variance	0.201666667
Kurtosis	-0.719541015
Skewness	0.670987198
Range	1.2
Minimum	0.6
Maximum	1.8
Sum	6.7
Count	6
Confidence Level (95.0%)	0.471273337
Upper	1.587940003
Lower	0.64539333

SQ9 - Commitment and participation by top management of both parties are ensured

The F statistic (F) 2.1 is less than the Critical value (F crit) 2.3 and the p-value (p) 0.1 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. However, the confidence intervals at the upper and lower levels which are 3.1 and 1.6 respectively, suggest that the responses do have a considerable variability, although this is given rise by only one group – Human resources group – which is out of range with the rest of the groups. This variability is within the value that can occur due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 14. Mean for response to SQ9 by professional groups

Distribution of SQ9 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	55	2.5	1.3
Engineering and technical	59	144	2.4	1.4
Legal	4	10	2.5	0.3
Marketing	3	9	3.0	-
Human Resources	5	5	1.0	0.5
Technical Consultancy	4	12	3.0	-

Table 30

ANOVA of SQ9 by Professional Groups

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	12.6	5	2.5	2.1	0.1	2.3
Within Groups	111.0	91	1.2			
Total	123.7	96				

Table 31

Mean	2.4
Standard Error	0.3
Median	2.5
Mode	2.5
Standard Deviation	0.734846923
Sample Variance	0.54
Kurtosis	3.594650206
Skewness	-1.746395465
Range	2
Minimum	1
Maximum	3
Sum	14.4
Count	6
Confidence Level (95.0%)	0.771174551
Upper	3.171174551
Lower	1.628825449

SQ10 - The financing structure is right. The F statistic (F) 1.0 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.4 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.0 and 1.43 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 15. Mean for response to SQ10 by professional groups

Table 32

Distribution of SQ10 by Professional Groups

Profession				
	Count	Sum	Mean	Variance
Accounting and Finance	22	38	1.7	0.6
Engineering and technical	59	112	1.9	0.5
Legal	4	5	1.3	0.3
Marketing	3	6	2.0	-
Human Resources	5	10	2.0	-
	4	6	1.5	0.3
Technical Consultancy				

ANOVA of SQ10 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	2.5	5	0.5	1.0	0.4	2.3
Within Groups	45.5	91	0.5			
Total	48.0	96				

Table 34

Mean	1.733333333
Standard Error	0.117378779
Median	1.8
Mode	2
Standard Deviation	0.287518115
Sample Variance	0.082666667
Kurtosis	-1.219432882
Skewness	-0.650730386
Range	0.7
Minimum	1.3
Maximum	2
Sum	10.4
Count	6
Confidence Level (95.0%)	0.301731757
Upper	2.035065091
Lower	1.431601576

SQ11 - The engineering and technical aspects of PPP projects are carefully structured and evaluated

The F statistic (F) 1.5 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.2 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.9 and 2.6 respectively, which depicts a narrow gap in the responses, a gap that is created by the variability of one of the groups. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 16. Mean for response to SQ11 by professional groups

Distribution of SQ11 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	70	3.2	1.6
Engineering and technical	59	171	2.9	1.4
Legal	4	9	2.3	2.3
Marketing	3	12	4.0	-
Human Resources	5	19	3.8	0.2
Technical Consultancy	4	14	3.5	0.3

ANOVA of SQ11 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	10.6	5	2.1	1.5	0.2	2.3
Within Groups	25.2	91	1.4			
Total	35.8	96				

Table 37

Mean	3.283333333
Standard Error	0.254841999
Median	3.35
Standard Deviation	0.624232863
Sample Variance	0.389666667
Kurtosis	-0.285058625
Skewness	-0.606253109
Range	1.7
Minimum	2.3
Maximum	4
Sum	19.7
Count	6
Confidence Level (95.0%)	0.655092214
Upper	3.938425547
Lower	2.62824112

SQ12 - The required competencies are systematically identified both within and outside the organization. The F statistic (F) 1.2 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.3 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.7 and 3.0 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 17. Mean for response to SQ12 by professional groups

Table 38

Distribution of SQ12 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	72	3.3	0.5
Engineering and technical	59	189	3.2	0.5
Legal	4	16	4.0	-
Marketing	3	9	3.0	-
Human Resources	5	17	3.4	0.3
Technical Consultancy	4	13	3.3	0.3

ANOVA of SQ12 by Professional Groups

					P-	
Source of Variation	SS	df	MS	F	value	F crit
Between Groups	2.7	5	0.5	1.2	0.3	2.3
Within Groups	39.9	91	0.4			
Total	42.6	96				

Table 40

Mean	3.3666666667
Standard Error	0.138242942
Median	3.3
Mode	3.3
Standard Deviation	0.338624669
Sample Variance	0.114666667
Kurtosis	3.32105192
Skewness	1.541804454
Range	1
Minimum	3
Maximum	4
Sum	20.2
Count	6
Confidence Level (95.0%)	0.355364797
Upper	3.722031463
Lower	3.01130187

SQ13 - There is adequate staffing and training of team members

The F statistic (F) 0.9 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.5 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.0 and 2.5 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 18. Mean for response to SQ13 by professional groups

Table 41

Distribution of SQ13 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	64	2.9	0.4
Engineering and technical	59	159	2.7	0.4
Legal	4	12	3.0	-
Marketing	3	7	2.3	1.3
Human Resources	5	15	3.0	0.5
Technical Consultancy	4	11	2.8	0.3

ANOVA of SQ13 by Professional Groups

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.8	5	0.4	0.9	0.5	2.3
Within Groups	35.7	91	0.4			
Total	37.5	96				

Table 43

Mean	2.783333333
Standard Error	0.107754866
Median	2.85
Mode	3
Standard Deviation	0.263944439
Sample Variance	0.069666667
Kurtosis	2.290469541
Skewness	-1.493717296
Range	0.7
Minimum	2.3
Maximum	3
Sum	16.7
Count	6
Confidence Level (95.0%)	0.276992701
Upper	3.060326034
Lower	2.506340633

SQ14 - PPP projects are adequately monitored and evaluated. The F statistic (F) 0.1 is less than the Critical value (F crit) 2.3, and the p-value (p) 1.0 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.26 and 2.0 respectively, which depicts a gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 19. Mean for response to SQ14 by professional groups

Distribution of SQ14 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	46	2.1	1.0
Engineering and technical	59	127	2.2	1.1
Legal	4	8	2.0	-
Marketing	3	6	2.0	1.0
Human Resources	5	11	2.2	0.2
Technical Consultancy	4	9	2.3	2.3

ANOVA of SQ14 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	0.3	5	0.1	0.1	1.0	2.3
Within Groups	95.0	91	1.0			
Total	95.3	96				

Table 46

Mean	2.133333333
Standard Error	0.049441323
Median	2.15
Mode	2.2
Standard Deviation	0.121106014
Sample Variance	0.014666667
Kurtosis	-1.549586777
Skewness	0.075065711
Range	0.3
Minimum	2
Maximum	2.3
Sum	12.8
Count	6
Confidence Level (95.0%)	0.127092967
Upper	2.260426301
Lower	2.006240366

SQ15 - There is effective communication within the organization as well as among the partners and other stakeholders. The F statistic (F) 4.1 is greater than the Critical value (F crit) 2.3, and the p-value (p) 0.0 is less than the alpha value of 0.05. This means that, the variability among the means of the six groups exceeds that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.87 and 1.59 respectively, depicts a wide gap in the responses. Therefore, the responses to this variable vary among the different professional groups.



Figure 20. Mean for response to SQ15 by professional groups

Distribution of SQ15 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	62	2.8	0.7
Engineering and technical	59	124	2.1	0.7
Legal	4	5	1.3	0.3
Marketing	3	9	3.0	-
Human Resources	5	11	2.2	0.2
Technical Consultancy	4	8	2.0	1.3

ANOVA of SQ15 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	14.3	5	2.9	4.1	0.0	2.3
Within Groups	64.2	91	0.7			
Total	78.6	96				

Table 49

Mean	2.233333333
Standard Error	0.248551358
Median	2.15
Mode	#N/A
Standard Deviation	0.608824003
Sample Variance	0.370666667
Kurtosis	-0.081614564
Skewness	-0.259965738
Range	1.7
Minimum	1.3
Maximum	3
Sum	13.4
Count	6
Confidence Level (95.0%)	0.638921607
Upper	2.872254941
Lower	1.594411726

SQ16 - There are measures to ensure good leadership to achieve the PPP

objectives. The F statistic (F) 1.4 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.2 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.3 and 1.6 respectively, for which the slight gap is attributable to only one group as can be seen in the bar chart below; it is within the value that could occur due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 21. Mean for response to SQ16 by professional groups

Distribution of SQ16 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	50	2.3	0.4
Engineering and technical	59	131	2.2	0.8
Legal	4	5	1.3	0.3
Marketing	3	6	2.0	-
Human Resources	5	10	2.0	-
Technical Consultancy	4	8	2.0	0.7

ANOVA oj SQ10 by Projessional Group	rofessional Groups
-------------------------------------	--------------------

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	4.1	5	0.8	1.4	0.2	2.3
Within Groups	55.2	91	0.6			
Total	59.4	96				

Table 52

Mean	1.966666667
Standard Error	0.142984071
Median	2
Mode	2
Standard Deviation	0.350238014
Sample Variance	0.122666667
Kurtosis	3.65164225
Skewness	-1.720879421
Range	1
Minimum	1.3
Maximum	2.3
Sum	11.8
Count	6
Confidence Level (95.0%)	0.367552255
Upper	2.334218921
Lower	1.599114412

SQ17 - There is transparency and trust among the partners and

stakeholders. The F statistic (F) 1.2 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.3 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. Although the confidence intervals which at the upper and lower levels are 2.8 and 1.8 respectively, suggest a gap in the responses, this gap is due largely to one group as can be seen in the chart below. It is within the value that can occur due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 22. Mean for response to SQ17 by professional groups

Distribution of SQ17 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	53	2.4	1.0
Engineering and technical	59	130	2.2	0.8
Legal	4	7	1.8	2.3
Marketing	3	9	3.0	-
Human Resources	5	14	2.8	0.2
Technical Consultancy	4	8	2.0	1.3

ANOVA of SQ17 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	5.1	5	1.0	1.2	0.3	2.3
Within Groups	78.4	91	0.9			
Total	83.5	96				

Table 55

Mean	2.366666667
Standard Error	0.189150146
Median	2.3
Mode	#N/A
Standard Deviation	0.463321343
Sample Variance	0.214666667
Kurtosis	-1.417769376
Skewness	0.300289285
Range	1.2
Minimum	1.8
Maximum	3
Sum	14.2
Count	6
Confidence Level (95.0%)	0.48622593
Upper	2.852892596
Lower	1.880440737

SQ18 - Diverse objective and ideologies of the partnering organizations is a problem

The F statistic (F) 1.2 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.3 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 2.8 and 1.8 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 23. Mean for response to SQ18 by professional groups

Distribution of SQ18 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	49	2.2	1.3
Engineering and technical	59	114	1.9	0.8
Legal	4	10	2.5	1.0
Marketing	3	6	2.0	3.0
Human Resources	5	6	1.2	0.2
Technical Consultancy	4	9	2.3	1.6

ANOVA of SQ18 by Professional Groups

					Р-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	5.9	5	1.2	1.2	0.3	2.3
Within Groups	86.1	91	0.9			
Total	92	96				

Table 58

Mean	2.366666667
Standard Error	0.189150146
Median	2.3
Mode	#N/A
Standard Deviation	0.463321343
Sample Variance	0.214666667
Kurtosis	-1.417769376
Skewness	0.300289285
Range	1.2
Minimum	1.8
Maximum	3
Sum	14.2
Count	6
Confidence Level (95.0%)	0.48622593
Upper	2.852892596
Lower	1.880440737

SQ19 - Master-Master relationship: the nominees from both sides cannot be subordinated, being leaders in their organizations. The F statistic (F) 1.4 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.2 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. Although the confidence intervals, which at the upper and lower levels are 3.3 and 1.9 respectively, suggest that the gap in the means is wide, this is due largely to one group as shown in the bar chart below. It is however within the value that can occur due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 24. Mean for response to SQ19 by professional groups

Distribution of SQ19 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	57	2.6	1.2
Engineering and technical	59	156	2.6	1.3
Legal	4	15	3.8	0.3
Marketing	3	7	2.3	0.3
Human Resources	5	13	2.6	0.3
Technical Consultancy	4	7	1.8	0.9

ANOVA of SQ19 by Professional Groups

					Р-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	8.4	5	1.7	1.4	0.2	2.3
Within Groups	108.2	91	1.2			
Total	116.6	96				

Table 61

Mean	2.616666667
Standard Error	0.268845267
Median	2.6
Mode	2.6
Standard Deviation	0.658533725
Sample Variance	0.433666667
Kurtosis	2.74124262
Skewness	1.135100441
Range	2
Minimum	1.8
Maximum	3.8
Sum	15.7
Count	6
Confidence Level (95.0%)	0.691088761
Upper	3.307755428
Lower	1.925577906

SQ20 - There are inadequate mechanisms to tackle problems arising from the PPP

The F statistic (F) 2.5 is greater than the Critical value (F crit) 2.3, and the p-value (p) 0.0 is less than the alpha value of 0.05. This means that, the variability among the means of the six groups exceeds that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.5 and 2.4 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable vary among the different professional groups.



Figure 25. Mean for response to SQ20 by professional groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	67	3.0	0.2
Engineering and technical	59	181	3.1	0.3
Legal	4	15	3.8	0.3
Marketing	3	7	2.3	0.3
Human Resources	5	15	3.0	0.5
Technical Consultancy	4	11	2.8	0.3

ANOVA of SQ20 by Professional Groups

					Р-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	3.9	5	0.8	2.5	0.0	2.3
Within Groups	28.9	91	0.3			
Total	32.7	96				

Table 64

Mean	3
Standard Error	0.19832633
Median	3
Mode	3
Standard Deviation	0.485798312
Sample Variance	0.236
Kurtosis	1.936943407
Skewness	0.423904732
Range	1.5
Minimum	2.3
Maximum	3.8
Sum	18
Count	6
Confidence Level (95.0%)	0.509814062
Upper	3.509814062
Lower	2.490185938

SQ21 - The varying organizational cultures of the partners poses a problem for the team drawn from both sides

The F statistic (F) 2.2 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.1 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.8 and 2.5 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 26. Mean for response to SQ21 by professional groups

Table 65

Distribution of SQ21 by professional groups

Profession				
	Count	Sum	Mean	Variance
Accounting and Finance	22	70	3.2	0.7
Engineering and technical	59	189	3.2	0.9
Legal	4	16	4.0	-
Marketing	3	8	2.7	2.3
Human Resources	5	19	3.8	0.2
Technical Consultancy	4	9	2.3	0.9

ANOVA of S21Q by professional groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	8.8	5	1.8	2.2	0.1	2.3
Within Groups	73.0	91	0.8			
Total	81.9	96				

Table 67

Mean	3.2
Standard Error	0.262043253
Median	3.2
Mode	3.2
Standard Deviation	0.641872261
Sample Variance	0.412
Kurtosis	-1.063012537
Skewness	-0.142937432
Range	1.7
Minimum	2.3
Maximum	4
Sum	19.2
Count	6
Confidence Level (95.0%)	0.673603627
Upper	3.873603627
Lower	2.526396373
SQ22 - Resistance to change by the beneficiaries and affected persons is a challenge

The F statistic (F) 2.5 is greater than the Critical value (F crit) 2.3, and the p-value (p) 0.0 is less than the alpha value of 0.05. This means that, the variability among the means of the six groups exceeds that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.9 and 3.2 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable vary among the different professional groups.



Figure 27. Mean for response to SQ22 by professional groups

Distribution	n of SQ22	by Professional	Groups
--------------	-----------	-----------------	--------

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	70	3.18	0.5
Engineering and technical	59	206	3.5	0.3
Legal	4	16	4.0	-
Marketing	3	11	3.7	0.3
Human Resources	5	19	3.8	0.2
Technical Consultancy	4	13	3.3	0.3

Table 69

ANOVA of SQ22 by Professional Groups

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.8	5	0.8	2.5	0.0	2.3
Within Groups	28.2	91	0.3			
Total	32.0	96				

Table 70

Confidence Interval of SQ22

Mean	3.58
Standard Error	0.127017059
Median	3.6
Mode	#N/A
Standard Deviation	0.311126984
Sample Variance	0.0968
Kurtosis	-1.360255447
Skewness	-8.32667E-16
Range	0.82
Minimum	3.18
Maximum	4
Sum	21.48
Count	6
Confidence Level (95.0%)	0.326507745
Upper	3.906507745
Lower	3.253492255

SQ23 - There is inadequate Training and education for those saddled with the task of running the PPP

The F statistic (F) 0.9 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.5 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. Although the confidence intervals which at the upper and lower levels are 1.96 and 1.16 respectively, depicts a relatively wide gap in the responses, this is still within the value that could be due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 28. Mean for response to SQ23 by professional groups

Distribution	of SQ	23 by	Profe	ssional	Groups
	~~~	~			

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	34	1.5	1.1
Engineering and technical	59	116	2.0	1.8
Legal	4	4	1.0	-
Marketing	3	6	2.0	3.0
Human Resources	5	7	1.4	0.8
Technical Consultancy	4	6	1.5	1.0

# Table 72

# ANOVA of SQ23 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	6.9	5	1.4	0.9	0.5	2.3
Within Groups	139.6	91	1.5			
Total	146.5	96				

Table 73

Confidence Interval of SQ23

Mean	1.5666666667
Standard Error	0.156347192
Median	1.5
Mode	1.5
Standard Deviation	0.382970843
Sample Variance	0.146666667
Kurtosis	-0.573347107
Skewness	-0.130558242
Range	1
Minimum	1
Maximum	2
Sum	9.4
Count	6
Confidence Level (95.0%)	0 401903252
Upper	1.968569918
Lower	1.164763415

SQ24 - Bureaucracy, particularly from the government stifles the progress of the PPP

The F statistic (F) 1.5 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.2 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.5 and 3.0 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 29. Mean for response to SQ24 by professional groups

Table 74

### Distribution of SQ24 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	72	3.3	0.5
Engineering and technical	59	206	3.5	0.3
Legal	4	14	3.5	0.3
Marketing	3	9	3.0	-
Human Resources	5	15	3.0	-
Technical Consultancy	4	14	3.5	0.3

# Table 75

# ANOVA of SQ24 by Professional Groups

					Р-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	2.2	5	0.4	1.5	0.2	2.3
Within Groups	27.1	91	0.3			
Total	29.3	96				

Table 76

Confidence Interval of SQ24

Mean	3.3
Standard Error	0.1
Median	3.4
Mode	3.5
Standard Deviation	0.244948974
Sample Variance	0.06
Kurtosis	-2.166666667
Skewness	-0.612372436
Range	0.5
Minimum	3
Maximum	35
Sum	19.8
Count	6
Confidence Level (95.0%)	0.257058184
Upper	3.557058184
Lower	3.042941816

**SQ25 - Inadequacy of legislation and enabling laws has adversely affected the PPP.** The F statistic (F) 0.9 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.5 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. Although the confidence intervals which at the upper and lower levels are 2.0 and 1.3 respectively, suggests variability, this is attributable to only one group, and is within the value that could occur due to chance. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 30. Mean for response to SQ25 by professional groups

Distribution of SQ25 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	31	1.4	0.5
Engineering and technical	59	87	1.5	0.5
Legal	4	7	1.8	0.3
Marketing	3	7	2.3	1.3
Human Resources	5	8	1.6	0.8
Technical Consultancy	4	6	1.5	1.0

# Table 78

# ANOVA of SQ25 by Professional Groups

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2.6	5	0.5	0.9	0.5	2.3
Within Groups	51.6	91	0.6			
Total	54.2	96				

Table 79

Confidence Interval of SQ25

Mean	1.683333333
Standard Error	0.135195332
Median	1.55
Mode	1.5
Standard Deviation	0.331159579
Sample Variance	0.109666667
Kurtosis	2.687059432
Skewness	1.655782597
Range	0.9
Minimum	1.4
Maximum	2.3
Sum	10.1
Count	6
Confidence Level (95.0%)	0.347530665
Upper	2.030863998
Lower	1.335802669

# SQ26 - The Complex nature of the PPP arrangement makes it cumbersome for administrators and executors

The F statistic (F) 1.5 is less than the Critical value (F crit) 2.3, and the p-value (p) 0.2 is greater than the alpha value of 0.05. This means that, the variability among the means of the six groups does not exceed that which is expected to occur due to chance. The confidence intervals at the upper and lower levels are 3.6 and 2.3 respectively, which depicts a narrow gap in the responses. Therefore, the responses to this variable do not vary among the different professional groups.



Figure 31. Mean for response to SQ26 by professional groups

Distribution of SQ26 by Professional Groups

Profession	Count	Sum	Mean	Variance
Accounting and Finance	22	68	3.1	1.0
Engineering and technical	59	185	3.1	1.2
Legal	4	15	3.8	0.3
Marketing	3	7	2.3	1.3
Human Resources	5	11	2.2	1.2
Technical Consultancy	4	14	3.5	0.3

# Table 81

# ANOVA of SQ26 by Professional Groups

					P-	F
Source of Variation	SS	df	MS	F	value	crit
Between Groups	8.2	5	1.6	1.5	0.2	2.3
Within Groups	98.0	91	1.1			
Total	106.2	96				

## Table 82

Confidence Interval of SQ 26

Mean	3
Standard Error	0.260768096
Median	3.1
Mode	3.1
Standard Deviation	0.638748777
Sample Variance	0.408
Kurtosis	-1.531862745
Skewness	-0.24864788
Range	1.6
Minimum	2.2
Maximum	3.8
Sum	18
Count	6
Confidence Level (95.0%)	0.670325731
Upper	3.670325731
Lower	2.329674269

## Data analysis by survey questions

The responses to the research questions are analyzed as shown below:

## SQ1 - The legal framework is adequate.

Sixty four percent of the respondents agreed with this assertion, 19% strongly agreed, 15% disagreed, and 2% strongly disagreed. Therefore 83% of the respondents are in agreement with this assertion.

Table 83

#### Frequency Distribution by Research Question and Response Type - SQ1

	Frequency	Percent	Valid Percent	Cumulative percent
agree	62	64	64	64
strongly agree	18	19	19	83
Neutral	0	-	-	83
disagree	15	15	15	98
strongly disagree	2	2	2	100
Total	97	100	100	



Figure 32. Frequency for response to SQ1 by response type

### SQ2 - There is favorable economic, political and social conditions

Nine percent of the respondents agreed with this assertion, 2% strongly agreed, 1% were neutral, 49% disagreed, and 38% strongly disagreed. Therefore only 11% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid Percent	Cumulative percent
Agree	9	9	9	9
Strongly agree	2	2	2	11
Neutral	1	1	1	12
Disagree	48	49	49	62
Strongly disagree	37	38	38	100
Total	97	100	100	





Figure 33. Frequency for response to SQ2 by response type

## SQ3 - There is efficient and effective Planning process and procedures

Four percent of the respondents agreed with this assertion, none strongly agreed, 16% disagreed, and 79% strongly disagreed. Therefore only 4% of the respondents are in agreement with this assertion.

Frequency Distribution by Research Question and Response Type - SQ3

	Frequency	Percent	Valid Percent	Cumulative percent
Agree	4	4	4	4
Strongly agree	0	-	-	4
Neutral	0	-	-	4
Disagree	16	16	16	21
Strongly disagree	77	79	79	100
Total	97	100	100	



Figure 34. Frequency for response to SQ3 by response type

### SQ4 - The affected public are involved/consulted at the planning stage

Nineteen percent of the respondents agreed with this assertion, 3% strongly agreed, 8% were neutral, 51% disagreed, and 20% strongly disagreed. Therefore only 21% of the respondents are in agreement with this assertion.

Frequency Distribution by Research Question and Response Type - SQ4

	Frequency	Percent	Valid Percent	Cumulative percent
Agree	18	19	19	19
Strongly agree	3	3	3	22
Neutral	8	8	8	30
Disagree	49	51	51	80
Strongly disagree	e 19	20	20	100
Total	<b>97</b>	100	100	



Figure 35. Frequency for response to SQ4 by response type

## SQ5 - There is efficient bidding process

Twenty nine percent of the respondents agreed with this assertion, 2% strongly agreed, 0% were neutral, 69% disagreed, and 0% strongly disagreed. Therefore only 31% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	28	29	29	29
Strongly agree	2	2	2	31
Neutral	0	-	-	31
Disagree	67	69	69	100
Strongly disagree	0	-	-	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ5



Figure 36. Frequency for response to SQ5 by response type

### SQ6 - Evaluation of value addition potential is in place and effective

Forty three percent of the respondents agreed with this assertion, 49% strongly agreed, 2% were neutral, 6% disagreed, and 0% strongly disagreed. Therefore 92% of the respondents are in agreement with this assertion.

Frequency Distribution by Research Question and Response Type - SQ6

	Frequency	Percent	Valid percent	Cumulative percent
Agree	42	43	43	43
Strongly agree	48	49	49	92
Neutral	2	2	2	95
Disagree	5	6	6	100
Strongly disagree	0	-	-	100
Total	97	100	100	



Figure 37. Frequency for response to SQ6 by response type

# SQ7 - Identification, assessment, and allocation of risks is in place and effective

Sixty seven percent of the respondents agreed with this assertion, 18% strongly agreed, 0% were neutral, 12% disagreed, and 3% strongly disagreed. Therefore 85% of the respondents are in agreement with this assertion.

	frequency	percent	valid percent	cumulative percent
agree	65	67	67	67
strongly agree	17	18	18	85
neutral	0	-	-	85
disagree	12	12	12	97
strongly disagree	3	3	3	100
total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ7



Figure 38. Frequency for response to SQ7 by response type

# SQ8 - There are processes put in place to foster understanding of the goals

## and objectives of each partner

Nine percent of the respondents agreed with this assertion, 2% strongly agreed, 39% were neutral, 27% disagreed, and 23% strongly disagreed. Therefore only 11% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	9	9	9	9
Strongly agree	2	2	2	11
Neutral	38	39	39	51
Disagree	26	27	27	77
Strongly disagree	22	23	23	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ8



Figure 39. Frequency for response to SQ8 by response type

# SQ9 - Commitment and participation by top management of both parties are ensured

Forty eight percent of the respondents agreed with this assertion, 12% strongly agreed, 8% were neutral, 16% disagreed, and 14% strongly disagreed. Therefore only 61% of the respondents are in agreement with this assertion.

Table 91

Frequency Distribution by Research Question and Response Type - SQ9

	Frequency	Percent	Valid Percent	Cumulative percent
agree	47	48	48	48
strongly agree	12	12	12	61
Neutral	8	8	8	69
disagree	16	16	16	86
strongly disagree	14	14	14	100
Total	97	100	100	



Figure 40. Frequency for response to SQ9 by response type

## SQ10 - The financing structure is right

Eighteen percent of the respondents agreed with this assertion, 0% strongly agreed, and 0% was neutral, 47% disagreed, and 35% strongly disagreed. Therefore only 18% of the respondents are in agreement with this assertion.

Frequency Distribution by Research Question and Response Type - SQ10

	Frequency	Percent	Valid percent	Cumulative percent
Agree	17	18	18	18
Strongly agree	0	-	-	18
Neutral	0	-	-	18
Disagree	46	47	47	65
Strongly disagree	34	35	35	100
Total	97	100	100	



Figure 41. Frequency for response to SQ10 by response type

# SQ11 - The engineering and technical aspects of PPP projects are carefully structured and evaluated

Thirty eight percent of the respondents agreed with this assertion, 44% strongly agreed, 5% were neutral, 0% disagreed, and 13% strongly disagreed. Therefore 82%% of the respondents are in agreement with this assertion.

$\Gamma$ $D' \cdot I \cdot I$	1 D 1 O	· 1D	T CO11
ΕΓΟΠΙΟΝΟΥ Ι ΠΩΤΓΙΝΠΤΙΟ	n nv <i>kosoarch</i> i n	ιρεπιού ανά κρε	$n_0 n_0 \rho I v n_0 - N I I I$
I requerie y Distributie	n o y nescuren o i	$\alpha$	

	Frequency	Percent	Valid percent	Cumulative percent
Agree	37	38	38	38
Strongly agree	43	44	44	82
Neutral	5	5	5	88
Disagree	0	-	-	88
Strongly disagree	12	13	13	100
Total	97	100	100	



*Figure 42.* Frequency for response to SQ11 by response type

## SQ12 - The required competencies are systematically identified both within

## and outside the organization

Forty nine percent of the respondents agreed with this assertion, 38 % strongly agreed, 0% were neutral, 13% disagreed, and 0% strongly disagreed. Therefore 87% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	48	49	49	49
Strongly agree	37	38	38	88
Neutral	0	-	-	88
Disagree	12	13	13	100
Strongly disagree	0	-	-	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ12



Figure 43. Frequency for response to SQ12 by response type

### SQ13 - There is adequate staffing and training of team members

Sixty eight percent of the respondents agreed with this assertion, 6% strongly agreed, 0% were neutral, 22% disagreed, and 4% strongly disagreed. Therefore 74% of the respondents are in agreement with this assertion.

|--|

	Frequency	Percent	Valid percent	Cumulative percent
Agree	66	68	68	68
Strongly agree	6	6	6	74
Neutral	0	-	-	74
Disagree	21	22	22	96
Strongly disagree	4	4	4	100
Total	97	100	100	



Figure 44. Frequency for response to SQ13 by response type

### SQ14 - PPP projects are adequately monitored and evaluated

Ten percent of the respondents agreed with this assertion, 16% strongly agreed, 0% were neutral, 46% disagreed, and 28% strongly disagreed. Therefore only 26% of the respondents are in agreement with this assertion.

### Table 96

Neutral

Total

Disagree

**Strongly disagree** 

	Frequency	Percent	Valid percent	Cumulative percent
Agree	10	10	10	10
Strongly agree	15	16	16	26

-

46

28

100

Frequency Distribution by Research Question and Response Type - SQ14

0

45

27

97



Figure 45. Frequency for response to SQ14 by response type

26

72

100

-

46

28

100

### SQ15 There is effective communication within the organization as well as

## among the partners and other stakeholders

Forty four percent of the respondents agreed with this assertion, 4% strongly agreed, 0% were neutral, 25% disagreed, and 27% strongly disagreed. Therefore only 48% of the respondents are in agreement with this assertion.

Table 97

	Frequency	Percent	Valid percent	Cumulative percent
Agree	43	44	44	44
Strongly agree	4	4	4	48
Neutral	0	-	-	48
Disagree	24	25	25	73
Strongly disagree	26	27	27	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ15



Figure 46. Frequency for response to SQ15 by response type

# SQ16 - There are measures to ensure good leadership to achieve the PPP objectives

Nineteen percent of the respondents agreed with this assertion, 7% strongly agreed, 0% were neutral, 58% disagreed, and 16% strongly disagreed. Therefore only 26% of the respondents are in agreement with this assertion.

Table 98

Frequency Distribution by Research Question and Response Type - SQ16

	Frequency	Percent	Valid percent	Cumulative percent
Agree	18	19	19	19
Strongly agree	7	7	7	26
Neutral	0	-	-	26
Disagree	56	58	58	84
Strongly disagree	16	16	16	100
Total	97	100	100	



Figure 47. Frequency for response to SQ16 by response type

## SQ17 - There is transparency and trust among the partners and

#### stakeholders.

Thirty nine percent of the respondents agreed with this assertion, 7% strongly agreed, 0% were neutral, 28% disagreed, and 26% strongly disagreed. Therefore only 46% of the respondents are in agreement with this assertion.

Frequency Distribution	by Research	Question and	Response	Type - Se	Q17
------------------------	-------------	--------------	----------	-----------	-----

	Frequency	Percent	Valid percent	Cumulative percent
Agree	38	39	39	39
Strongly agree	7	7	7	46
Neutral	0	-	-	46
Disagree	27	28	28	74
Strongly disagree	25	26	26	100
Total	97	100	100	



*Figure 48.* Frequency for response to SQ17 by response type

# SQ18 - Diverse objective and ideologies of the partnering organizations is a problem

Seven percent of the respondents agreed with this assertion, 14% strongly agreed, 0% were neutral, 45% disagreed, and 34% strongly disagreed. Therefore only 21% of the respondents are in agreement with this assertion.

Table 100

	Frequency	Percent	Valid percent	Cumulative percent
Agree	7	7	7	7
Strongly agree	13	14	14	21
Neutral	0	-	-	21
Disagree	44	45	45	66
Strongly disagree	33	34	34	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ18



*Figure 49.* Frequency for response to SQ18 by response type

### SQ19 - Master-Master relationship: the nominees from both sides cannot be

## subordinated, being leaders in their organizations

Twenty eight percent agreed with this assertion, 28% strongly agreed, 0% was neutral, 23% disagreed, and 21% strongly disagreed. Therefore 56% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	27	28	28	28
Strongly agree	27	28	28	56
Neutral	0	-	-	56
Disagree	23	23	23	79
Strongly disagree	20	21	21	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ 19



*Figure 50.* Frequency for response to SQ19 by response type

# SQ20 - There are inadequate mechanisms to tackle problems arising from the PPP

Sixty six percent of the respondents agreed with this assertion, 20% strongly agreed, 0% were neutral, 14% disagreed, and 0% strongly disagreed. Therefore 86% of the respondents are in agreement with this assertion.

Table 102

Frequency Distribution by Research Question and Response Type - SQ20

	Frequency	Percent	Valid percent	Cumulative percent
Agree	64	66	66	66
Strongly agree	19	20	20	86
Neutral	0	-	-	86
Disagree	14	14	14	100
Strongly disagree	0	-	-	100
Total	97	100	100	



Figure 51. Frequency for response to SQ20 by response type

### SQ21 - The varying organizational cultures of the partners poses a problem

#### for the team drawn from both sides

Thirty three percent of the respondents agreed with this assertion, 47% strongly agreed, 0% were neutral, 13% disagreed, and 7% strongly disagreed. Therefore 80% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	32	33	33	33
Strongly agree	46	47	47	80
Neutral	0	-	-	80
Disagree	12	13	13	93
Strongly disagree	7	7	7	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ21



Figure 52. Frequency for response to SQ21 by response type

# SQ22 - Resistance to change by the beneficiaries and affected persons is a challenge

Forty six percent of the respondents agreed with this assertion, 49% strongly agreed, 0% were neutral, 5% disagreed, and 0% strongly disagreed. Therefore 95% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	45	46	46	46
Strongly agree	48	49	49	95
Neutral	0	-	-	95
Disagree	4	5	5	100
Strongly disagree	0	-	-	100
Total	97	100	100	



*Figure 53.* Frequency for response to SQ22 by response type

## SQ23 - There is inadequate Training and education for those saddled with

## the task of running the PPP

Eleven percent of the respondents agreed with this assertion, 19% strongly agreed, 0% were neutral, 0% disagreed, and 70% strongly disagreed. Therefore only 30% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	11	11	11	11
Strongly agree	18	19	19	30
Neutral	0	-	-	30
Disagree	0	-	-	30
Strongly disagree	68	70	70	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ23



Figure 54. Frequency for response to SQ23 by response type

# SQ24 - Bureaucracy, particularly from the government stifles the progress of the PPP

Fifty four percent of the respondents agreed with this assertion, 43% strongly agreed, 0% were neutral, 3% disagreed, and 0% strongly disagreed. Therefore 97% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	52	54	54	54
Strongly agree	42	43	43	97
Neutral	0	-	-	97
Disagree	3	3	3	100
Strongly disagree	0	-	-	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ24



Figure 55. Frequency for response to SQ24 by response type

# SQ25 - Inadequacy of legislation and enabling laws has adversely affected the PPP

Fifteen percent of the respondents agreed with this assertion, 0% strongly agreed, and 0% was neutral, 20% disagreed, and 65% strongly disagreed. Therefore only 15% of the respondents are in agreement with this assertion.

Table 107

Frequency Distribution by Research Question and Response Type - SQ25

	Frequency	Percent	Valid Percent	Cumulative percent
agree	15	15	15	15
strongly agree	0	-	-	15
Neutral	0	-	-	15
disagree	19	20	20	35
strongly disagree	63	65	65	100
Total	97	100	100	



Figure 56. Frequency for response to SQ25 by response type

### SQ26 - The Complex nature of the PPP arrangement makes it cumbersome

#### for administrators and executors

Thirty six percent of the respondents agreed with this assertion, 44% strongly agreed, 0% were neutral, 5% disagreed, and 15% strongly disagreed. Therefore 80% of the respondents are in agreement with this assertion.

	Frequency	Percent	Valid percent	Cumulative percent
Agree	35	36	36	36
Strongly agree	43	44	44	80
Neutral	0	-	-	80
Disagree	4	5	5	85
Strongly disagree	15	15	15	100
Total	97	100	100	

Frequency Distribution by Research Question and Response Type - SQ26



Figure 57. Frequency for response to SQ26 by response type
## Data analysis by Research Questions and Hypotheses

### Analysis of research questions by professional groups

Before attempting to answer the research questions, I give below, details of how the different professional groups perceived each of the factors depicted in the various questions

## SQ1 - The legal framework is adequate

Out of the Accounting and Finance professionals, 15 respondents agreed, 2 strongly agreed, none was neutral, 3 disagreed, and 2 strongly disagreed; of the Engineering and technical professionals, 39 respondents agreed, 12 strongly agreed, none were neutral, 8 disagreed, and none strongly disagreed; of the Legal professionals, 1 respondent agreed, 3 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 1 respondent agreed, none strongly agreed, none was neutral, 2 disagreed, and none strongly disagreed; of the Human resources professionals, 3 respondents agreed, 1 strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and of the Technical Consultants, 3 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed.

# Table 109

Frequency of Responses by Professions and Response Types - SQ1

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	15	2	-	3	2
Engineering and technical	39	12	-	8	-
Legal	1	3	-	-	-
Marketing	1	-	-	2	-
Human resources	3	1	-	1	-
Technical consultancy	3	-	-	1	-



*Figure 58.* Frequency for responses to SQ1 by profession and response types

### SQ2 - There is favorable economic, political and social conditions

Out of the Accounting and Finance professionals,1 respondent agreed, 2 strongly agreed, 1 was neutral, 8 disagreed, and 10 strongly disagreed; of the Engineering and technical professionals, 8 respondents agreed, none strongly agreed, none was neutral, 29 disagreed, and 22 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, 4 disagreed, and none strongly disagreed; of the Marketing professionals, no respondent agreed, none strongly agreed, none was neutral, 2 disagreed, and 1 strongly disagreed; of the Human resources professionals, no respondent agreed, none strongly agreed, none strongly agreed, none strongly agreed, none was neutral, 2 disagreed, and 1 strongly disagreed; of the Human resources professionals, no respondent agreed, and 1 strongly agreed, none was neutral, 4 disagreed, and 1 strongly disagreed; and of the Technical Consultants, no respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 3 strongly disagreed.

Table 110

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	1	2	1	8	10
Engineering and technical	8	-	-	29	22
Legal	-	-	-	4	-
Marketing	-	-	-	2	1
Human resources	-	-	-	4	1
Technical consultancy	-	-	-	1	3



Figure 59. Frequency for responses to SQ2 by profession and response types

#### SQ3 - There is efficient and effective Planning processes and procedures

Out of the Accounting and Finance professionals, no respondent agreed, none strongly agreed, none was neutral, 6 disagreed, and 16 strongly disagreed; of the Engineering and technical professionals, 3 respondents agreed, none strongly agreed, none was neutral, 7 disagreed, and 49 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, none disagreed, and 4 strongly disagreed; of the Marketing professionals, no respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 2 strongly disagreed; of the Human resources professionals, no respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 4 strongly disagreed; and of the Technical Consultants, 1 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and 2 strongly disagreed Table 111

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	-	-	-	6	16
Engineering and technical	3	-	-	7	49
Legal	-	-	-	-	4
Marketing	-	-	-	1	2
Human resources	-	-	-	1	4
Technical consultancy	1	-	-	1	2

Frequency of Responses by Professions and Response Types - SQ3



Figure 60. Frequency for responses to SQ3 by profession and response types

### SQ4 - The affected public are involved/consulted at the planning stage

Out of the Accounting and Finance professionals, 6 respondents agreed, 3 strongly agreed, 2 were neutral, 9 disagreed, and 2 strongly disagreed; of the Engineering and technical professionals, 9 respondents agreed, none strongly agreed, 5 were neutral, 28 disagreed, and 17 strongly disagreed; of the Legal professionals, 1 respondent agreed, none strongly agreed, none were neutral, 3 disagreed, and none strongly disagreed; of the Marketing professionals, no respondent agreed, none strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Human resources professionals, 2 respondents agreed, none strongly agreed, 1 was neutral, 2 disagreed, and none strongly agreed, none strongly disagreed; on the Technical Consultants, no respondent agreed, none strongly agr

Table 112

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	6	3	2	9	2
Engineering and technical	9	-	5	28	17
Legal	1	-	-	3	-
Marketing	-	-	-	3	-
Human resources	2	-	1	2	-
Technical consultancy	-	-	-	4	-



Figure 61. Frequency for responses to SQ4 by profession and response types

### SQ5 - There is efficient bidding process

Out of the Accounting and Finance professionals, 4 respondents agreed, 2 strongly agreed, none were neutral, 16 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 17 respondents agreed, none strongly agreed, none was neutral, 42 disagreed, and none strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, 4 disagreed, and none strongly disagreed; of the Marketing professionals, 2 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; of the Human resources professionals, 4 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and of the Technical Consultants, 1 respondent agreed, none strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed. Table 113

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	4	2	-	16	-
Engineering and technical	17	-	-	42	-
Legal	-	-	-	4	-
Marketing	2	-	-	1	-
Human resources	4	-	-	1	-
Technical consultancy	1	-	-	3	-

Frequency of Responses	by	Professions	and Respons	se Types	- SQ5
------------------------	----	-------------	-------------	----------	-------



*Figure 62.* Frequency for responses to SQ5 by profession and response types

#### SQ6 - Evaluation of value addition potential is in place and effective

Out of the Accounting and Finance professionals, 9 respondents agreed, 10 strongly agreed, 2 were neutral, 1 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 29 respondents agreed, 27 strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Legal professionals, 2 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, no respondent agreed, 3 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, no respondent agreed, 4 strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and of the Technical Consultants, 2 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed Table 114

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	9	10	2	1	-
Engineering and technical	29	27	-	3	-
Legal	2	2	-	-	-
Marketing	-	3	-	-	-
Human resources	-	4	-	1	-
Technical consultancy	2	2	-	-	-

Frequency of Responses	by	Professions	and Respon	ise Types	- SQ6
------------------------	----	-------------	------------	-----------	-------



Figure 63. Frequency for responses to SQ6 by profession and response types

SQ7 - Identification, assessment, and allocation of risks is in place and effective

Out of the Accounting and Finance professionals, 13 respondents agreed, 4 strongly agreed, none was neutral, 2 disagreed, and 3 strongly disagreed; of the Engineering and technical professionals, 39 respondents agreed, 13 strongly agreed, none was neutral, 7 disagreed, and none strongly disagreed; of the Legal professionals, 4 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 2 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; of the Human resources professionals, 4 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and of the Technical Consultants, 3 respondents agreed, none strongly agreed, none was neutral, 1 disagreed. Table 115

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	13	4	-	2	3
Engineering and technical	39	13	-	7	-
Legal	4	-	-	-	-
Marketing	2	-	-	1	-
Human resources	4	-	-	1	-
Technical consultancy	3	-	-	1	-

Frequency of Responses by Professions and Response Types - SQ7



*Figure 64.* Frequency for responses to SQ7 by profession and response types

# SQ8 - There are processes put in place to foster understanding of the goals and objectives of each partner

Out of the Accounting and Finance professionals, 2 respondents agreed, 2 strongly agreed, 6 were neutral, 6 disagreed, and 6 strongly disagreed; of the Engineering and technical professionals, 4 respondents agreed, none strongly agreed, 23 were neutral, 17 disagreed, and 15 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, 2 were neutral, 1 disagreed, and 1 strongly disagreed; of the Marketing professionals, 1 respondent agreed, none strongly agreed, 2 were neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, 1 respondent agreed, none strongly agreed, 4 were neutral, none disagreed, and none strongly disagreed; and of the Technical Consultants, 1 respondent agreed, none strongly agreed, 1 was neutral, 2 disagreed, and none strongly disagreed.

Table 116

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	2	2	б	6	6
Engineering and technical	4	-	23	17	15
Legal	-	-	2	1	1
Marketing	1	-	2	-	-
Human resources	1	-	4	-	-
Technical consultancy	1	-	1	2	-

Frequency of Responses by Professions and Response Types - SQ8



Figure 65. Frequency for responses to SQ8 by profession and response types

SQ9 - Commitment and participation by top management of both parties are ensured

Out of the Accounting and Finance professionals, 11 respondents agreed, 3 strongly agreed, 2 were neutral, 4 disagreed, and 2 strongly disagreed; of the Engineering and technical professionals, 27 respondents agreed, 9 strongly agreed, 5 were neutral, 9 disagreed, and 9 strongly disagreed; of the Legal professionals, 2 respondents agreed, none strongly agreed, none was neutral, 2 disagreed, and none strongly disagreed; of the Marketing professionals, 3 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, no respondent agreed, none strongly agreed, 1 was neutral, 1 disagreed, and 3 strongly disagreed; and of the Technical Consultants, 4 respondents agreed.

Table 117

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	11	3	2	4	2
Engineering and technical	27	9	5	9	9
Legal	2	-	-	2	-
Marketing	3	-	-	-	-
Human resources	-	-	1	1	3
Technical consultancy	4	-	-	-	-



Figure 66. Frequency for responses to SQ9 by profession and response types

## **SQ10** - The financing structure is right

Out of the Accounting and Finance professionals, 4 respondents agreed, none strongly agreed, none was neutral, 8 disagreed, and 10 strongly disagreed; of the Engineering and technical professionals, 13 respondents agreed, none strongly agreed, none were neutral, 27 disagreed, and 19 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none were neutral, 1 disagreed, and 3 strongly disagreed; of the Marketing professionals, no respondent agreed, none strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Human resources professionals, no respondent agreed, none strongly agreed, none was neutral, 5 disagreed, and none strongly disagreed; and of the Technical Consultants, no respondent agreed, none strongly agreed, none was neutral, 2 disagreed, and 2 strongly disagreed. Table 118

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	4	-	-	8	10
Engineering and technical	13	-	-	27	19
Legal	-	-	-	1	3
Marketing	-	-	-	3	-
Human resources	-	-	-	5	-
Technical consultancy	-	-	-	2	2



Figure 67. Frequency for responses to SQ10 by profession and response types

# SQ11 - The engineering and technical aspects of PPP projects are carefully structured and evaluated

Out of the Accounting and Finance professionals, 5 respondents agreed, 13 strongly agreed, 1 was neutral, none disagreed, and 3 strongly disagreed; of the Engineering and technical professionals, 26 respondents agreed, 21 strongly agreed, 3 were neutral, none disagreed, and 9 strongly disagreed; of the Legal professionals, 3 respondents agreed, none strongly agreed, 1 was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, no respondent agreed, 3 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, 1 respondent agreed, 4 strongly agreed, none was neutral, none disagreed, and none strongly disagree, and of the Technical Consultants, 2 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed. Table 119

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	5	13	1	-	3
Engineering and technical	26	21	3	-	9
Legal	3	-	1	-	-
Marketing	-	3	-	-	-
Human resources	1	4	-	-	-
Technical consultancy	2	2	-	-	-

Frequency	v of Res	sponses b	v Pro	fessions	and Re.	sponse Ty	vnes - SO11
1 requeries	, 0, 100	ponoes o.	,	,00010110	00000000		pes ser



Figure 68. Frequency for responses to SQ11 by profession and response types

# SQ12 - The required competencies are systematically identified both within and outside the organization

Out of the Accounting and Finance professionals,10 respondents agreed, 9 strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 29 respondents agreed, 21 strongly agreed, none were neutral, 9 disagreed, and none strongly disagreed; of the Legal professionals, no respondent agreed, 4 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 3 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, 3 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; and of the Technical Consultants, 3 respondents agreed, 1 strongly agreed, none was neutral, none disagreed, and none strongly disagreed. Table 120

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	10	9	-	3	-
Engineering and technical	29	21	-	9	-
Legal	-	4	-	-	-
Marketing	3	-	-	-	-
Human resources	3	2	-	-	-
Technical consultancy	3	1	-	-	-

Frequency of Responses by Professions and Response Types - SQ12



Figure 69. Frequency for responses to SQ12 by profession and response types

#### SQ13 - There is adequate staffing and training of team members

Out of the Accounting and Finance professionals,14 respondents agreed, 3 strongly agreed, none was neutral, 5 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 40 respondents agreed, 2 strongly agreed, none was neutral, 14 disagreed, and 3 strongly disagreed; of the Legal professionals, 4 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 2 respondents agreed, none strongly agreed, none was neutral, none disagreed, and 1 strongly disagreed; of the Human resources professionals, 3 respondents agreed, 1 strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and of the Technical Consultants, 3 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed. Table 121

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	14	3	-	5	-
Engineering and technical	40	2	-	14	3
Legal	4	-	-	-	-
Marketing	2	-	-	-	1
Human resources	3	1	-	1	-
Technical consultancy	3	-	-	1	-

Frequency of Responses by Professions and Response Types - SQ	<i>)13</i>
---------------------------------------------------------------	------------



*Figure 70.* Frequency for responses to SQ13 by profession and response types

### SQ14 - PPP projects are adequately monitored and evaluated

Out of the Accounting and Finance professionals,3 respondents agreed, 3 strongly agreed, none was neutral, 9 disagreed, and 7 strongly disagreed; of the Engineering and technical professionals, 4 respondents agreed, 11 strongly agreed, none was neutral, 27 disagreed, and 17 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, 4 disagreed, and none strongly disagreed; of the Marketing professionals, 1 respondent agreed, none strongly agreed, none was neutral, 4 disagreed, none strongly agreed, none was neutral, 1 disagreed, and 1 strongly disagreed; of the Human resources professionals, 1 respondent agreed; and of the Technical Consultants, 1 respondents agreed, 1 strongly agreed, none was neutral, none disagreed, and 2 strongly disagreed.

Table 122

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	3	3	-	9	7
Engineering and technical	4	11	-	27	17
Legal	-	-	-	4	-
Marketing	1	-	-	1	1
Human resources	1	-	-	4	-
Technical consultancy	1	1	-	_	2



Figure 71. Frequency for responses to SQ14 by profession and response types

# SQ15 - There is effective communication within the organization as well as among the partners and other stakeholders

Out of the Accounting and Finance professionals,12 respondents agreed, 4 strongly agreed, none was neutral, 4 disagreed, and 2 strongly disagreed; of the Engineering and technical professionals, 25 respondents agreed, none strongly agreed, none were neutral, 15 disagreed, and 19 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 3 strongly disagreed; of the Marketing professionals, 3 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, 1 respondent agreed, none strongly agreed, none was neutral, 4 disagreed, and none strongly disagreed; and of the Technical Consultants, 2 respondents agreed, none strongly agreed, none was neutral, none disagreed, and 2 strongly disagreed Table 123

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	12	4	-	4	2
Engineering and technical	25	-	-	15	19
Legal	-	-	-	1	3
Marketing	3	-	-	-	-
Human resources	1	-	-	4	-
Technical consultancy	2	-	-	-	2



Figure 72. Frequency for responses to SQ15 by profession and response types

SQ16 - There are measures to ensure good leadership to achieve the PPP objectives

Out of the Accounting and Finance professionals, 2 respondents agreed, 2 strongly agreed, none was neutral, 18 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 15 respondents agreed, 5 strongly agreed, none was neutral, 27 disagreed, and 12 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 3 strongly disagreed; of the Marketing professionals, no respondent agreed, none strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Human resources professionals, no respondent agreed, none strongly agreed, none was neutral, 5 disagreed, and none strongly disagreed; and of the Technical Consultants, 1 respondents agreed, none strongly agreed, none was neutral, 2 disagreed, and 1 strongly disagreed. Table 124

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	2	2	-	18	-
Engineering and technical	15	5	-	27	12
Legal	-	-	-	1	3
Marketing	-	-	-	3	-
Human resources	-	-	-	5	-
Technical consultancy	1	-	-	2	1

Frequency of Responses by Professions and Response Types - SQ16



Figure 73. Frequency for responses to SQ16 by profession and response types

### SQ17 - There is transparency and trust among the partners and stakeholders

Out of the Accounting and Finance professionals,8 respondents agreed, 3 strongly agreed, none was neutral, 6 disagreed, and 5 strongly disagreed; of the Engineering and technical professionals, 21 respondents agreed, 3 strongly agreed, none was neutral, 20 disagreed, and 15 strongly disagreed; of the Legal professionals, no respondent agreed, 1 strongly agreed, none was neutral, none disagreed, and 3 strongly disagreed; of the Marketing professionals, 3 respondents agreed, none strongly agreed, none was neutral, none disagreed; of the Human resources professionals, 4 respondents agreed, none strongly agreed, none strongly agreed, and none strongly agreed, none was neutral, 1 disagreed; and none strongly disagreed; and none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and none strongly disagreed; agreed, none strongly disagreed; and none strongly disagreed; and none strongly disagreed; none was neutral, 1 disagreed, and none strongly disagreed; and 2 strongly disagreed;

Table 125

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	8	3	-	6	5
Engineering and technical	21	3	-	20	15
Legal	-	1	-	-	3
Marketing	3	-	-	-	-
Human resources	4	_	-	1	-
Technical consultancy	2	-	-	-	2



Figure 74. Frequency for responses to SQ17 by profession and response types

SQ18 - Diverse objective and ideologies of the partnering organizations is a problem

Out of the Accounting and Finance professionals, 2 respondents agreed, 5 strongly agreed, none was neutral, 8 disagreed, and 7 strongly disagreed; of the Engineering and technical professionals, 5 respondents agreed, 5 strongly agreed, none was neutral, 30 disagreed, and 19 strongly disagreed; of the Legal professionals, no respondent agreed, 1 strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Marketing professionals, no respondent agreed, 1 strongly agreed, none was neutral, none disagreed, and 2 strongly disagreed; of the Human resources professionals, no respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 4 strongly disagreed; and of the Technical Consultants, no respondent agreed, 1 strongly agreed, none was neutral, 2 disagreed, and 1 strongly disagreed. Table 126

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	2	5	-	8	7
Engineering and technical	5	5	-	30	19
Legal	-	1	-	3	-
Marketing	-	1	-	-	2
Human resources	-	-	-	1	4
Technical consultancy	-	1	-	2	1

Frequency of Responses by Professions and Response Types - SQ18



Figure 75. Frequency for responses to SQ18 by profession and response types
# SQ19 - Master-Master relationship: the nominees from both sides cannot be subordinated, being leaders in their organizations

Out of the Accounting and Finance professionals,5 respondents agreed, 6 strongly agreed, none was neutral, 7 disagreed, and 4 strongly disagreed; of the Engineering and technical professionals, 16 respondents agreed, 18 strongly agreed, none were neutral, 11 disagreed, and 14 strongly disagreed; of the Legal professionals, 1 respondent agreed, 3 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 1 respondent agreed, none strongly agreed, none was neutral, 2 disagreed, and none strongly disagreed; of the Human resources professionals, 3 respondents agreed, none strongly agreed, and none strongly agreed, and none strongly agreed, and none strongly agreed, none strongly agreed, and none strongly agreed, none strongly agreed, none strongly agreed, none strongly agreed, and none strongly agreed, none strongly agr

Table 127

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	5	6	-	7	4
Engineering and technical	16	18	-	11	14
Legal	1	3	-	-	-
Marketing	1	-	-	2	-
Human resources	3	-	-	2	-
Technical consultancy	1	-	-	1	2

Frequency of Responses by Professions and Response Types - SQ19



Figure 76. Frequency for responses to SQ19 by profession and response types

SQ20 - There are inadequate mechanisms to tackle problems arising from the PPP

Out of the Accounting and Finance professionals,17 respondents agreed, 3 strongly agreed, none was neutral, 2 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 39 respondents agreed, 12 strongly agreed, none were neutral, 8 disagreed, and none strongly disagreed; of the Legal professionals, 1 respondent agreed, 3 strongly agreed, none were neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 1 respondent agreed, none strongly agreed, none was neutral, 2 disagreed, and none strongly disagreed; of the Human resources professionals, 3 respondents agreed, 1 strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed; and of the Technical Consultants, 3 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and none strongly disagreed. Table 128

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	17	3	-	2	-
Engineering and technical	39	12	-	8	-
Legal	1	3	-	-	-
Marketing	1	-	-	2	-
Human resources	3	1	-	1	-
Technical consultancy	3	_	-	1	_

Frequency of Responses by Professions and Response Types - SQ20



Figure 77. Frequency for responses to SQ20 by profession and response types

# SQ21 - The varying organizational cultures of the partners poses a problem for the team drawn from both sides

Out of the Accounting and Finance professionals, 9 respondents agreed, 9 strongly agreed, none was neutral, 3 disagreed, and 1 strongly disagreed; of the Engineering and technical professionals, 19 respondents agreed, 28 strongly agreed, none was neutral, 8 disagreed, and 4 strongly disagreed; of the Legal professionals, no respondent agreed, 4 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 1 respondent agreed, 1 strongly agreed, none was neutral, none disagreed, and 1 strongly disagreed; of the Human resources professionals, 1 respondents agreed, 4 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; and of the Technical Consultants, 2 respondents agreed, none strongly agreed, none was neutral, 1 disagreed, and 1 strongly disagreed. Table 129

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	9	9	-	3	1
Engineering and technical	19	28	-	8	4
Legal	-	4	-	-	-
Marketing	1	1	-	-	1
Human resources	1	4	-	-	-
Technical consultancy	2	-	-	1	1

Frequency of Responses by Professions and Response Types - SQ21



Figure 78. Frequency for responses to SQ21 by profession and response types

SQ22 - Resistance to change by the beneficiaries and affected persons is a challenge

Out of the Accounting and Finance professionals,10 respondents agreed, 8 strongly agreed, none was neutral, 4 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 30 respondents agreed, 29 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Legal professionals, no respondent agreed, 4 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 1 respondent agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, 1 respondents agreed, 4 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; and of the Technical Consultants, 3 respondents agreed, 1 strongly agreed, none was neutral, none disagreed, and none strongly disagreed. Table 130

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	10	8	-	4	-
Engineering and technical	30	29	-	-	-
Legal	-	4	-	-	-
Marketing	1	2	-	-	-
Human resources	1	4	-	-	-
Technical consultancy	3	1	-	-	-

Frequency of Responses by Professions and Response Types - SQ22



Figure 79. Frequency for responses to SQ22 by profession and response types

# SQ23 - There is inadequate Training and education for those saddled with the task of running the PPP

Out of the Accounting and Finance professionals, 3 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and 17 strongly disagreed; of the Engineering and technical professionals, 6 respondents agreed, 15 strongly agreed, none was neutral, none disagreed, and 38 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, none disagreed, and 4 strongly disagreed; of the Marketing professionals, no respondent agreed, 1 strongly agreed, none was neutral, none disagreed, and 2 strongly disagreed; of the Human resources professionals, 1 respondent agreed, none strongly agreed, none was neutral, none disagreed, and 4 strongly disagreed; and of the Technical Consultants, 1 respondent agreed, none strongly agreed, none was neutral, none disagreed, and 3 strongly disagreed; Table 131

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	3	2	-	-	17
Engineering and technical	6	15	-	-	38
Legal	-	-	-	-	4
Marketing	-	1	-	-	2
Human resources	1	-	-	-	4
Technical consultancy	1	-	-	-	3

Frequency of Responses by Professions and Response Types - SQ23



Figure 80. Frequency for responses to SQ23 by profession and response types

**SQ24** - **Bureaucracy, particularly from the government stifles the progress of the PPP.** Out of the Accounting and Finance professionals,10 respondents agreed, 9 strongly agreed, none was neutral, 3 disagreed, and none strongly disagreed; of the Engineering and technical professionals, 30 respondents agreed, 29 strongly agreed, none were neutral, none disagreed, and none strongly disagreed; of the Legal professionals, 2 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 3 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Human resources professionals, 5 respondents agreed, none strongly agreed, none was neutral, none disagreed, and none strongly disagreed; and of the Technical Consultants, 2 respondents agreed, 2 strongly agreed, none was neutral, none disagreed, and none strongly disagreed.

Table 132

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	10	9	-	3	-
Engineering and technical	30	29	-	-	-
Legal	2	2	-	-	-
Marketing	3	-	-	-	-
Human resources	5	-	-	_	-
Technical consultancy	2	2	-	-	-

Frequency of Responses by Professions and Response Types - SQ24



Figure 81. Frequency for responses to SQ24 by profession and response types

SQ25 - Inadequacy of legislation and enabling laws has adversely affected the PPP

Out of the Accounting and Finance professionals, 3 respondents agreed, none strongly agreed, none was neutral, 3 disagreed, and 16 strongly disagreed; of the Engineering and technical professionals, 8 respondents agreed, none strongly agreed, none was neutral, 12 disagreed, and 39 strongly disagreed; of the Legal professionals, no respondent agreed, none strongly agreed, none was neutral, 3 disagreed, and 1 strongly disagreed; of the Marketing professionals, 2 respondents agreed, none strongly agreed, none was neutral, none disagreed, and 1 strongly disagreed; of the Human resources professionals, 1 respondent agreed, none strongly agreed, none was neutral, 1 disagreed, and 3 strongly disagreed; and of the Technical Consultants, 1 respondents agreed, none strongly agreed, none was neutral, none disagreed, and 3 strongly disagreed. Table 133

	Agree	Strongl y agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	3	-	-	3	16
Engineering and technical	8	-	-	12	39
Legal	-	-	-	3	1
Marketing	2	-	-	-	1
Human resources	1	-	-	1	3
Technical consultancy	1	-	-	-	3

Frequency of Responses by Professions and Response Types - SQ25



*Figure 82.* Frequency for responses to SQ25 by profession and response types

# SQ26 - The Complex nature of the PPP arrangement makes it cumbersome for administrators and executors

Out of the Accounting and Finance professionals, 9 respondents agreed, 9 strongly agreed, none was neutral, 1 disagreed, and 3 strongly disagreed; of the Engineering and technical professionals, 18 respondents agreed, 29 strongly agreed, none was neutral, 3 disagreed, and 9 strongly disagreed; of the Legal professionals, 1 respondent agreed, 3 strongly agreed, none was neutral, none disagreed, and none strongly disagreed; of the Marketing professionals, 2 respondents agreed, none strongly agreed, none was neutral, none disagreed, and 1 strongly disagreed; of the Human resources professionals, 3 respondents agreed, none strongly agreed, none was neutral, none disagreed, and 2 strongly disagreed; and of the Technical Consultants, 2 respondents agreed, 2 strongly agreed, none was neutral, none disagreed; and none

Table 134

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Accounting and Finance	9	9	-	1	3
Engineering and technical	18	29	-	3	9
Legal	1	3	-	-	_
Marketing	2	-	-	-	1
Human resources	3	-	-	-	2
Technical consultancy	2	2	-	-	-

Frequency of Responses by Professions and Response Types - SQ26



Figure 83. Frequency for responses to SQ26 by profession and response types

#### Test of the hypotheses

#### Comparison of the actual means against the hypothesized mean

The Chi square statistic is useful in comparing observed data with the expected outcomes. I have applied in this section, the Chi test in comparing the responses with the expectations that are indicated in the hypotheses.

The applicable Chi square formula is:  $X^2 = \sum (observed value - expected value)$ 

Expected value

#### The effect size Analysis

In addition to the chi test, the effect size is analyzed by use of the t-test. A t-test's effect size is used to determine whether or not the magnitude of the difference found between the Mean of two groups, apart from being statistically significant, is meaningfully large and practically relevant (Kelley & Preacher 2012).

Effect size computation is useful where the hypothesis is rejected, as it has very little meaning where such is not the case. Therefore, this part of the analysis will be applicable to the survey questions for which the hypothesis has been rejected.

#### **Research Question 1 and Research Hypotheses 1**

Research Question 1: Is the existence and application of the critical success factors of public private partnerships in Lagos State significant?

Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is significant.

Null Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is not significant.

## SQ1 - The legal framework is adequate

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 2.27 which is less than the table value, and those in agreement with the assertion by this survey question amount to 82% of the respondents. I therefore accept hypothesis 1 regarding this variable.

Table 135

Category	Observed (0)	Expected (e)	о-е	( <b>o-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	80	84	-4	16	0.19
Neutral	0	1	-1	1	-
Disagree + strongly disagree	17	12	5	25	2.08
Total	97	97	0	42	2.27
Percentage of agree + strongly agree	82%				



Figure 84. Response percentage by response types for SQ1

## SQ2 - There is favorable economic, political and social conditions

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 507 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 11% of the respondents. I therefore reject hypothesis 1 regarding this variable.

Table 136

Category	Observed (0)	Expected (e)	о-е	( <b>0-e</b> ) ²	<u>(o-e)²</u> e
Agree and strongly agree	11	84	-73	5329	63.44
Neutral	1	1	0	0	-
Disagree + strongly disagree	85	12	73	5329	444.08
Total	97	97	0	10658	507.52
Agree + strongly agree	11%				

Two tail t-test -SQ2

	Agree + strongly agree	Disagree + strongly disagree
Mean	4.532614278	94.70980996
Variance	49.30761481	69.30341254
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-20.2819551	
P(T<=t) one-tail	9.3574E-10	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	1.87148E-09	
t Critical two-tail	2.228138852	



Figure 85. Response percentage by response types for SQ2

### SQ3 - There is efficient and effective Planning processes and procedures

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 623.9 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 4% of the respondents. Also, t statistic -15.5 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 138

Category	Observed (0)	Expected (e)	0-е	( <b>o-e</b> ) ²	$\frac{(0-\mathbf{e})^2}{\mathbf{e}}$
Agree and strongly agree	4	84	-80	6400	76.19
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	93	12	81	6561	546.75
Total	97	97	0	12962	623.94
Agree + strongly agree	4%				

Two tail t-test -SQ3

	Agree and strongly agree	Disagree and strongly disagree
Mean	5.014124294	94.98588
Variance	100.001197	100.0012
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-15.5834712	
P(T<=t) one-tail	1.21084E-08	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	2.42167E-08	
t Critical two-tail	2.228138852	



Figure 86. Response percentage by response types for SQ3

#### SQ4 - The affected public are involved/consulted at the planning stage

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 357 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 22% of the respondents. Also, t statistic -4.2 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 140

Category	Observed (0)	Expected (e)	о-е	( <b>0-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	21	84	-63	3969	47.25
Neutral	8	1	7	49	49.00
Disagree + strongly disagree	68	12	56	3136	261.33
Total	97	97	0	7154	357.58
Agree + strongly agree	22%				

Two Tail t-test -SQ4

	Agree and strongly agree	Disagree and strongly disagree
Mean	20.19388803	73.5452
Variance	336.8973582	617.7834
Observations	6	6
Hypothesized Mean Difference	0	
df	9	
t Stat	-4.229525191	
P(T<=t) one-tail	0.001104081	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	0.002208161	
t Critical two-tail	2.262157163	



Figure 87. Response percentage by response types for SQ4

## SQ5 - There is efficient bidding process

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 287 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 31% of the respondents. Also, t statistic -1.4 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 142

Category	Observed (0)	Expected (e)	о-е	( <b>o-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	30	84	-54	2916	34.71
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	67	12	55	3025	252.08
Total	97	97	0	5942	287.80
Agree + strongly agree	31%				

Two Tail t-test -SQ5

	Agree and strongly agree	Disagree and strongly disagree
Mean	37.95882554	62.04117
Variance	879.6465357	879.6465
Observations	6	6
Hypothesized Mean Difference	0	
Df	10	
t Stat	-1.406388716	
P(T<=t) one-tail	0.094957604	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.189915207	
t Critical two-tail	2.228138852	



Figure 88. Response percentage by response types for SQ5

### SQ6 - Evaluation of value addition potential is in place and effective

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 5.51 which is less than the table value, and those in agreement with the assertion by this survey question amount to 93% of the respondents. I therefore accept hypothesis 1 regarding this variable.

Table 144

Category	Observed (0)	Expected (e)	о-е	( <b>0-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	90	84	6	36	0.43
Neutral	2	1	1	1	1
Disagree + strongly disagree	5	12	-7	49	4.08
Total	97	97	0	86	5.51
Percentage of agree + strongly agree	93%				



Figure 89. Response percentage by response types for SQ6

#### SQ7 - Identification, assessment, and allocation of risks is in place and

**effective.** At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 1.80 which is less than the table value, and those in agreement with the assertion by this survey question amount to 85% of the respondents. I therefore accept hypothesis 1 regarding this variable.

Table 145

Category	Observed	Expected	о-е	$(0-e)^2$	$(0-e)^2$
	(0)	<b>(e)</b>			e
Agree and strongly	82	84	-2	4	0.05
agree					
Neutral	0	1	-1	1	1
<b>Disagree</b> + strongly	15	12	3	9	0.75
disagree					
Total	97	97	0	14	1.80
Percentage of agree +	85%				
strongly agree					



Figure 90. Response percentage by response types for SQ7

# SQ8 - There are processes put in place to foster understanding of the goals and objectives of each partner

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 1,540 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 11% of the respondents. Also, t statistic 1.45 is less than the two tail t critical value 2.36. I therefore reject hypothesis 1 regarding this variable.

Table 146

Category	Observed (0)	Expected (e)	0-е	( <b>0-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	11	84	-73	5329	63.44
Neutral	38	1	37	1369	1,369.00
Disagree + strongly disagree	48	12	36	1296	108.00
Total	97	97	0	7994	1,540.44
Agree + strongly agree	11%				

Two Tail t-test -SQ8

	Agree and strongly agree	Disagree and strongly disagree
Mean	17.21580209	34.79712
Variance	146.8700755	730.3702
Observations	6	6
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.454011561	
P(T<=t) one-tail	0.094631631	
t Critical one-tail	1.894578605	
P(T<=t) two-tail	0.189263261	
t Critical two-tail	2.364624252	



Figure 91. Response percentage by response types for SQ8

### SQ9 - Commitment and participation by top management of both parties are

**ensured.** At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 83.4 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 61% of the respondents. Also, t statistic 1.58 is less than the two tail t critical value 2.22. While hypothesis 1 is rejected on the strength of the chi-square value, the effect size points to the fact that the difference is quite minimal.

Table 148

Category	Observed (0)	Expected (e)	0-е	( <b>0-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	59	84	-25	625	7.44
Neutral	8	1	7	49	49
Disagree + strongly disagree	30	12	18	324	27
Total	97	97	0	998	83.44
Agree + strongly agree	61%				

Two Tail t-test -SQ9

	Agree and strongly agree	Disagree and strongly disagree
Mean	62.4422188	31.29687
Variance	1375.694146	939.5211
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	1.585525319	
P(T<=t) one-tail	0.071965082	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.143930164	
t Critical two-tail	2.228138852	



Figure 92. Response percentage by response types for SQ9

## **SQ10 - The financing structure is right**

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 439.7 which is higher than the table value, and those in agreement with the assertion by this survey question amount to only 18 % of the respondents. Also, t statistic -14.3 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 150

Category	Observed (0)	Expected (e)	о-е	( <b>0-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	17	84	-67	4489	53.44
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	80	12	68	4624	385.33
Total	97	97	0	9114	439.77
Agree + strongly agree	18%				

Two Tail t-test -SQ10

	Agree and strongly agree	Disagree and strongly disagree		
Mean	6.702619414	93.29738		
Variance	109.304109	109.3041		
Observations	6	6		
Hypothesized Mean Difference	0			
df	10			
t Stat	-14.3461049			
P(T<=t) one-tail	2.6808E-08			
t Critical one-tail	1.812461123			
P(T<=t) two-tail	5.3616E-08			
t Critical two-tail	2.228138852			



Figure 93. Response percentage by response types for SQ10

# SQ11 - The engineering and technical aspects of PPP projects are carefully structured and evaluated

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 1.92 which is less than the table value, and those in agreement with the assertion by this survey question amount to 82% of the respondents. I therefore accept hypothesis 1 regarding this variable.

Table 152

Category	Observed	Expected	о-е	$(\mathbf{0-e})^2$	$(0-e)^2$
	(0)	(e)			e
Agree and strongly	80	84	-4	16	0.19
agree					
Neutral	5	3	2	4	1.33
<b>Disagree</b> + strongly	12	10	2	4	0.40
disagree					
Total	97	97	0	24	1.92
Percentage of agree + strongly agree	82%				



Figure 94. Response percentage by response types for SQ11

### SQ12 - The required competencies are systematically identified both within

and outside the organization. At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 1.01 which is less than the table value, and those in agreement with the assertion by this survey question amount to 88% of the respondents. I therefore accept hypothesis 1 regarding this variable. Table 153

Category	Observed	Expected	о-е	$(0-e)^2$	$(0-e)^{2}$
	(0)	<b>(e)</b>			e
Agree and strongly	85	84	1	1	0.01
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree</b> + strongly	12	12	0	0	-
disagree					
Total	97	97	0	2	1.01
Percentage of agree +	88%				
strongly agree					



Figure 95. Response percentage by response types for SQ12
## SQ13 - There is adequate staffing and training of team members

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 1.19 which is less than the table value, and those in agreement with the assertion by this survey question amount to 74% of the respondents. I therefore accept hypothesis 1 regarding this variable.

Table 154

Category	Observed	Expected	о-е	$(0 - 0)^2$	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
	(0)	(t)		<b>(</b> )	<u> </u>
Agree and strongly	72	73	-1	1	0.01
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree</b> + strongly	25	23	2	4	0.17
disagree					
Total	97	97	0	6	1.19
Percentage of agree +	74%				
strongly agree					



Figure 96. Response percentage by response types for SQ13

## SQ14 - PPP projects are adequately monitored and evaluated

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 136.9 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 26% of the respondents. Also, t statistic -5.0 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 155

Category	Observed (0)	Expected (e)	0-е	( <b>0-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	25	73	-48	2304	31.56
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	72	23	49	2401	104.39
Total	97	97	0	4706	136.95
Agree + strongly agree	26%				

	Agree and strongly agree	Disagree and strongly disagree
Mean	26.0049649	73.99504
Variance	268.7459106	268.7459
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-5.070386672	
P(T<=t) one-tail	0.000242277	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.000484554	
t Critical two-tail	2.228138852	



Figure 97. Response percentage by response types for SQ14

# SQ15 - There is effective communication within the organization as well as among the partners and other stakeholders

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is41.9 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 48% of the respondents. Also, t statistic -0.3 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 157

Category	Observed (0)	Expected (e)	о-е	( <b>o</b> - <b>e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	47	73	-26	676	9.26
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	50	23	27	729	31.70
Total	97	97	0	1406	41.96
Agree + strongly agree	48%				

	Agree and strongly agree	Disagree and strongly disagree
Mean	47.51669235	52.48331
Variance	1287.540193	1287.54
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-0.239740139	
P(T<=t) one-tail	0.407687154	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.815374308	
t Critical two-tail	2.228138852	



Figure 98. Response percentage by response types for SQ15

# SQ16 - There are measures to ensure good leadership to achieve the PPP objectives

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 136.9 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 26% of the respondents. Also, t statistic -8 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 159

Category	Observed (0)	Expected (e)	о-е	( <b>o-e</b> ) ²	<u>(o-e)²</u> e
Agree and strongly agree	25	73	-48	2304	31.56
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	72	23	49	2401	104.39
Total	97	97	0	4706	136.95
Agree + strongly agree	26%				

	Agree and strongly	Disagree and strongly disagree
	agree	
Mean	12.84668721	87.15331
Variance	222.8898732	222.8899
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-8.620709257	
P(T<=t) one-tail	3.04198E-06	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	6.08397E-06	
t Critical two-tail	2.228138852	



Figure 99. Response percentage by response types for SQ16

### SQ17 - There is transparency and trust among the partners and stakeholders

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 48.3 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 46 % of the respondents. Also, t statistic 0.96 is less than the two tail t critical value 2.2. I therefore reject hypothesis 1 regarding this variable.

Table 161

Category	Observed (0)	Expected (e)	о-е	( <b>o-e</b> ) ²	<u>(o-e)²</u> e
Agree and strongly agree	45	73	-28	784	10.74
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	52	23	29	841	36.57
Total	97	97	0	1626	48.30
Agree + strongly agree	46%				

	Agree and strongly agree	Disagree and strongly disagree
Mean	57.61299435	42.38701
Variance	752.8308436	752.8308
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	0.96116385	
P(T<=t) one-tail	0.179567026	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.359134052	
t Critical two-tail	2.228138852	



Figure 100. Response percentage by response types for SQ17

### **Research Question 2 and Research Hypotheses 2**

Research Question 2: Are the challenges faced in the implementation of public private partnerships in Lagos State significant?

Hypothesis 2: The challenge faced in the implementation of public private partnerships in Lagos State is significant.

Null Hypothesis 2: The challenge faced in the implementation of public private partnerships in Lagos State is not significant.

#### SQ18 - Diverse objective and ideologies of the partnering organizations is a

**problem.** At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 166 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 21% of the respondents. Also, t statistic -7.9 is less than the two tail t critical value 2.2. I therefore reject hypothesis 2 regarding this variable.

Table 163

Category	Observed (0)	Expected (e)	о-е	( <b>0-</b> <b>e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	20	73	-53	2809	38.48
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	77	23	54	2916	126.78
Total	97	97	0	5726	166.26
Percentage of agree + strongly agree	21%				

	Agree and strongly agree	Disagree and strongly disagree
Mean	22.01677795	77.98322
Variance	150.4701019	150.4701
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-7.902476883	
P(T<=t) one-tail	6.55414E-06	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	1.31083E-05	
t Critical two-tail	2.228138852	



*Figure 101.* Response percentage by response types for SQ18

**SQ19 - Master-Master relationship: the nominees from both sides cannot be subordinated, being leaders in their organizations.** At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 23 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 56% of the respondents. Also, t statistic 0.57 is less than the two tail t critical value 2.2. I therefore reject hypothesis 2 regarding this variable.

Table 165

Category	Observed (0)	Expected (e)	о-е	( <b>o-e</b> ) ²	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly agree	54	73	-19	361	4.95
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	43	23	20	400	17.39
Total	97	97	0	762	23.34
Agree + strongly agree	56%				

	Agree and strongly agree	Disagree and strongly disagree		
Mean	54.326742	45.67326		
Variance	689.7253078	689.7253		
Observations	6	6		
Hypothesized Mean Difference	0			
df	10			
t Stat	0.570707449			
P(T<=t) one-tail	0.290397501			
t Critical one-tail	1.812461123			
P(T<=t) two-tail	0.580795003			
t Critical two-tail	2.22813885 2			



Figure 102. Response percentage by response types for SQ19

# SQ20 - There are inadequate mechanisms to tackle problems arising from the PPP

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is which less than the table value is, and those in agreement with the assertion by this survey question amount to 86% of the respondents. I therefore accept hypothesis 2 regarding this variable.

Table 167

Category	Observed	Expected	о-е	$(0-e)^2$	$(0-e)^2$
	(0)	(e)			e
Agree and strongly	83	84	-1	1	0.01
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree</b> + strongly	14	12	2	4	0.33
disagree					
Total	97	97	0	6	1.35
Percentage of agree +	86%				
strongly agree					



Figure 103. Response percentage by response types for SQ20

## SQ21 - The varying organizational cultures of the partners poses a problem

for the team drawn from both sides. At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is which less than the table value is, and those in agreement with the assertion by this survey question amount to 80% of the respondents. I therefore accept hypothesis 2 regarding this variable. Table 168

Category	Observed (0)	Expected (e)	о-е	$(0-e)^2$	$\frac{(\mathbf{0-e})^2}{\mathbf{e}}$
Agree and strongly	78	73	5	25	0.34
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree + strongly</b>	19	23	-4	16	0.70
disagree					
Total	97	97	0	42	2.04
Percentage of agree + strongly agree	80%				



Figure 104. Response percentage by response types for SQ21

# SQ22 - Resistance to change by the beneficiaries and affected persons is a challenge

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is which less than the table value is, and those in agreement with the assertion by this survey question amount to 96% of the respondents. I therefore accept hypothesis 2 regarding this variable.

Table 169

Category	Observed	Expected	о-е	$(0-e)^2$	$(0-e)^2$
	(0)	(e)			e
Agree and strongly	93	88	5	25	0.28
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree</b> + strongly	4	8	-4	16	2.00
disagree					
Total	97	97	0	42	3.28
Percentage of agree +	96%				
strongly agree					



Figure 105. Response percentage by response types for SQ22

# SQ23 - There is inadequate Training and education for those saddled with the task of running the PPP

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 115.56 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 30% of the respondents. Also, t statistic is less than the two tail t critical value . I therefore reject hypothesis 2 regarding this variable.

Table 170

Category	Observed (0)	Expected (e)	0-е	( <b>o-e</b> ) ²	$\frac{(0-\mathbf{e})^2}{\mathbf{e}}$
Agree and strongly agree	29	73	-44	1936	26.52
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	68	23	45	2025	88.04
Total	97	97	0	3962	115.56
Agree + strongly agree	30%				

	Agree and strongly agree	Disagree and strongly disagree
Mean	22.77563773	77.22436
Variance	161.4278652	161.4279
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-7.422651773	
P(T<=t) one-tail	1.12759E-05	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	2.25518E-05	
t Critical two-tail	2.228138852	



Figure 106. Response percentage by response types for SQ23

## SQ24 - Bureaucracy, particularly from the government stifles the progress of

**the PPP.** At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 4.53 which is less than the table value, and those in agreement with the assertion by this survey question amount to 97% of the respondents. I therefore accept hypothesis 2 regarding this variable.

Table 172

Category	Observed	Expected	о-е	(0-	$(0-e)^2$
	(0)	<b>(e)</b>		$e)^2$	e
Agree and strongly	94	88	6	36	0.41
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree + strongly</b>	3	8	-5	25	3.13
disagree					
Total	97	97	0	62	4.53
Percentage of agree + strongly agree	97%				



Figure 107. Response percentage by response types for SQ24

# SQ25 - Inadequacy of legislation and enabling laws has adversely affected the PPP

At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 198 which is more than the table value, and those in agreement with the assertion by this survey question amount to only 15% of the respondents. Also, t statistic is less than the two tail t critical value . I therefore reject hypothesis 2 regarding this variable.

Table 173

Category	Observed (0)	Expected (e)	0-е	( <b>o-e</b> ) ²	<u>(0-e)²</u> e
Agree and strongly agree	15	73	-58	3364	46.08
Neutral	0	1	-1	1	1.00
Disagree + strongly disagree	82	23	59	3481	151.35
Total	97	97	0	6846	198.43
Agree + strongly agree	15%				

	Agree and strongly agree	Disagree and strongly disagree
Mean	23.14372539	76.85627
Variance	525.0915845	525.0916
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
t Stat	-4.059932967	
P(T<=t) one-tail	0.001143403	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.002286807	
t Critical two-tail	2.228138852	



Figure 108. Response percentage by response types for SQ25

## SQ26 - The Complex nature of the PPP arrangement makes it cumbersome

**for administrators and executors.** At a degree of freedom 2, and alpha value of 0.05, the chi-square distribution on the table is 5.99. The calculated chi-square is 2.04 which is less than the table value, and those in agreement with the assertion by this survey question amount to 80% of the respondents. I therefore accept hypothesis 2 regarding this variable.

Table 175

Category	Observed	Expected	о-е	(0-	$(0-e)^2$
	(0)	<b>(e)</b>		$e)^2$	e
Agree and strongly	78	73	5	25	0.34
agree					
Neutral	0	1	-1	1	1.00
<b>Disagree + strongly</b>	19	23	-4	16	0.70
disagree					
Total	97	97	0	42	2.04
Percentage of agree +	80%				
strongly agree					



Figure 109. Response percentage by response types for SQ26

#### **Summary**

This chapter started with an explanation of the purpose of study and a description of the data collection instrument, as well as the research questions and hypotheses, data collection time frame and response rates.

The results are analyzed to show the demographic characteristics of sample, descriptive statistics, evaluation of statistical assumptions, and data analysis by survey questions, data analysis by research questions and hypotheses – analysis by professional groups, and a test of the hypotheses.

In this chapter, I explained the data collection process as well as the data collection instrument. The results of the research were analyzed and presented based on the survey questions, and ultimately based on the research questions and hypotheses.

For Research Question 1: Is the existence and application of the critical success factors of PPPs in Lagos State significant? - There were 17 survey questions that sought to reveal the answer to this question. The results show that 6, out of the 17 critical success factors of PPPs were present and significantly applied by the Lagos State Government, while 11 factors were to the contrary.

For Research Question 2: Are the challenges faced in the implementation of public private partnerships in Lagos State significant? - There were 9 survey questions that sought to reveal the answer to this question.

The results show that 5 major challenges were significantly present in the administration of PPPs in Lagos state, while the other 4 were to the contrary.

In chapter 5, I give a full interpretation of the findings and a recommendation of the adjustments to be made in the system in order to maximize the benefits of PPPs in Lagos State. Limitations of the study is also pointed out to serve as a lead for future researches. Chapter 5: Discussion, Conclusions, and Recommendations

#### Introduction

Around the economies of the world, public funds and resources are growing at a pace that is akin to an arithmetic progression, while the need for infrastructure and public facilities are growing at a geometric progression (Macneil, 1980). This no doubt leads to a mismatch between available funds and required levels of growth in public goods and services.

Many governments therefore, have embraced the use of PPPs as a means of meeting up with the needs of the publics, despite the shortage of public funds ("The cracks," 2008).

The PPP concept enables governments to collaborate with private organizations, by pulling together, human and material resources, and making joint decisions in the provision of social infrastructure and amenities, for use by the public (Alexander & Nank, 2009).

The PPP concept has proven to be a successful tool for economic development; however, the experience of collaborators has not always been pleasant, owing to the challenges that are peculiar to such arrangements. These challenges manifest in undue delays, unexpected outcomes, and sometimes, project abandonment (Kwak et al., 2009).

Lagos State Government has recently joined the league of users of the PPP concept, in its effort to accelerate economic growth in the state. Arguably, being in this early stage of adoption of the concept, the process is susceptible to the pitfalls, challenges, and other undesirable issues that are peculiar to the PPP concept. Therefore, this study aimed at benchmarking best practices around the world, with the processes already put in place in the state. I conducted the study to find out to what extent the critical success factors and inherent challenges of PPPs were present in the administration and execution of PPPs in the state. The ultimate objective was the identification of required adjustments to the programs and processes of the state's PPP administration. This way, maximum gains can be derived from the process, and the economy of the state could be taken to the next level, positively.

The research was led by the following research questions and hypotheses:

Research Question 1: Is the existence and application of the critical success factors of public private partnerships in Lagos State significant?

Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is significant.

Null Hypothesis 1: The existence and application of the critical success factors of public private partnerships in Lagos state is not significant.

Research Question 2: Are the challenges faced in the implementation of public private partnerships in Lagos State significant?

Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is significant.

Null Hypothesis 2: The challenges faced in the implementation of public private partnerships in Lagos State is not significant.

This study found that 35.3% of the critical success factors of PPPs, as identified from the literature, were present and significantly applied in the PPPs process and

programs in Lagos State, while 55.6% of the inherent challenges, as identified from the literature, were also significantly present.

#### **Interpretation of the Findings**

Wood and Gray's (1991) theory of collaboration, as well as the network and collaborations theory by Kamensky and Burlin (2004), guided this study, and the following interpretation of findings are underlined by these theories.

If a finding is significant, the hypothesis is accepted, but if not insignificant, the hypothesis is rejected, indicating the acceptance of the null hypothesis.

The data collected and analyzed in the course of this research showed that of the 17 critical success factors of PPPs identified from the literature, six were present and significantly applied in Lagos State, representing 35.3%. Secondly, the research also showed that of the nine inherent challenges of PPPs identified from the literature, five were significantly present in the administration and execution of PPPs in the state, representing 55.6%.

Given below is a breakdown of these findings for each critical success factor, and inherent challenge.

#### The Critical Success Factors of PPPs in Lagos State

**Legal framework.** Previous researchers identified legal framework as the most critical of all the success factors of PPPs, and its efficiency and independence is compulsory for the success of any PPPs project (Cheung et al., 2012; Scott, 2009).

The relevant legislation should be able to cover all aspects of PPPs in a clear and unambiguous language that will foster confidence of the parties (Hill, 2011). This study showed that Lagos State Government has put in place an effective legal framework regarding PPPs in the state. In a nutshell, 82% of respondents agreed, while 18% disagreed that the legal framework for PPPs projects in the state were adequate (see Table 135 and Figure 84). From the data collected and analyzed, the development and application of the legal framework driving PPPs in the state was found to be significant, and therefore Hypothesis 1 was accepted regarding this variable.

This suggests that the state is in recognition of the fact that the legal framework is quite critical for the success of PPPs projects, confirming the findings of Hill (2011), whose study conducted in Chile revealed the criticality of legal framework to the success of PPPs. A similar study and same result was the case with Cheung et al. (2012), where in Hong Kong, the same confirmation was made regarding the importance of legal framework to the success of PPPs.

**Economic, political, and social conditions.** Weiermair et al. (2008) found that favorable economic, political, and social conditions form the foundation of the success of any PPPs project. Similarly studies by Jenkins (2012) and Cheung et al. (2012) showed that this factor is a prerequisite for any PPPs project to succeed.

This study showed that the economic, political, and social conditions in Lagos State were not exactly favorable for PPPs. In a nutshell, only11% of respondents agreed, while 89% disagreed that there were favorable economic, political, and social conditions for PPPs in the state (see Tables 136 & 137 and Figure 85). From the data that were collected and analyzed, the economic, political, and social conditions in the state were found not to be significantly favorable for PPPs, and therefore Hypothesis 1 was rejected regarding this variable.

There is need for stability in the social, economic, and social environment before a PPPs project can be implemented successfully, and it even becomes more important where PPPs is being introduced newly. PPPs projects have been found to fail in cases where there are unduly frequent changes in government (Cheung et al., 2012).

The fact is that PPPs projects can form part of government's efforts to stabilize the economy; therefore the government needs to leverage on incentives if it must embark on PPPs in the midst of this unfavorable conditions.

Incentives play an important role in every aspect of life as well as in business. In order to increase the efficiency of the private partners, especially where unforeseen economic or social challenges erupt, government will need to give concessions and incentives to the private partner to ensure success of their PPPs projects (Gerace, 2011).

**Planning.** Planning was identified in the literature as a very crucial success factor for PPPs, and it includes cost benefit analysis (Hardcastel et al., 2010), constructive negotiation (Agyemang, 2011), review and documentation of the expectations as well as the modus operandi, rules, structures, and procedures in clear and understandable language (Alexander & Zuckerman, 2000).

Also classified under this heading is workflow schedule, which must be detailed and clear, with timelines for each phase (Amponsah, 2010).

This study showed that planning for PPPs in the state is yet to be effective. Only 4 percent of respondents agreed, while 96 percent disagreed that there is an efficient

planning process for PPPs in the state (see tables 138 & 139, and figure 86). From the data that was collected and analyzed, the planning process for PPPs in the state is not efficient, and therefore hypothesis 1 was rejected regarding this variable.

According to the literature, so crucial is planning in PPPs, that no such project should be consummated without it (Alexander & Zuckerman, 2000).

In the eyes of the public, the PPPs project referenced in this study has experienced tremendous hitches and stoppages. I have seen on many occasions where the road construction is halted upon stumbling unto an electricity or telecommunication cabling point which points to the fact that there might not have been a proper planning to identify where such points are located, and how to manage them during the road construction process.

#### Involvement of the affected persons at the planning stage of PPPs projects.

Due to the fact that change, no matter how positive, could be resisted by the people, and even the targeted users, as long as they are ignored at the planning stage, consultation with the people becomes critical before any PPPs project can be successful (Agyemang 2011), (Boyer 2012), (Amponsah 2010), (Weiermair et al.,2008).

This study showed that the affected publics are not adequately consulted at the planning stage of PPPs in the state. Only 22 percent of respondents agreed, while 78 percent disagreed that there is effective consultation with the affected public during the planning stage (see tables 140 & 141, and figure 87). From the data that was collected and analyzed, there is no effective consultation with the affected publics; therefore hypothesis 1 was rejected regarding this variable.

This finding justifies the various public protests by different pressure groups, which have been witnessed against the construction of the concessioned Lekki-Epe express way in Lagos state.

The plan is to have two toll gates on the road; one has been constructed, it is operational at the time of this research study, and toll is being collected there. A second toll has been constructed, but for more than one year, the public has refused to pay toll at that gate, and therefore the road at that axis is being used free of charge by the road users, as government was forced to keep the gate open.

The targeted users must be sensitized and properly consulted before any PPPs project is embarked upon, in order to be able to sell the final output to them (Boyer 2012).

Efficient bidding process. When the bidding process is made to be efficient, overall project time could be cut by as much as 50% and cost could be reduced considerably (Apgar 2011). Low price, though crucial, should not form the major driver of the bidding process, since low price does not guarantee quality (Weiermair et al.,2008).

This study showed that the bidding process for PPPs in the state is not yet efficient. Only 31 percent of respondents agreed, while 70 percent disagreed that there is efficient bidding process for PPPs in the state (see tables 142 & 143, and figure 88). From the data that was collected and analyzed, the bidding process in the state for PPPs is not significantly efficient; therefore hypothesis 1 was rejected regarding this variable. **Evaluation of value addition potential of projects.** The sole reason why private organizations engage in PPPs is financial gains, and for the government, it is for the provision of goods and services to the public. These aspirations and goals must be evaluated before the commencement of the agreement (Tynkkynen & Lehto 2009).

Through this research study, it was revealed that there is proper evaluation of value addition potential of PPPs projects in the state. 93 percent of respondents agreed that that a process of evaluation of the value addition potential of PPPs projects in the state is in place and effective (see table 144 and figure 89). From the data that was collected and analyzed, this critical success factor is significantly applied in the state, and therefore hypothesis 1 was accepted regarding this variable.

**Identification, assessment, and allocation of risks.** Risk management is a major reason why PPPs are formed, as risks are allocated to the party who has the best capacity to handle them (Pantelias 2009), Cheung et al.,(2009), and the expertise employed in assessing and allocating them will determine how successful a PPPs can be (Hardcastel et al.,2010), Amponsah (2010), (Agyemang 2011) and (Jenkins 2012).

This study showed that the state has put in place, a functional and effective process of risk identification, assessment and allocation. 85 percent of respondents agreed that this process is in place and effective (see table 145 and figure 90). From the data that was collected and analyzed, this critical success factor is significant in existence and application therefore hypothesis 1 was accepted regarding this variable.

**Understanding of the goals and objectives of each partner.** In order that a clear agreement is reached, the partners must understand the goals and objectives of each other

(Neal 2010), (Belniak 2008). Although the goals of the partners will always be different under the PPPs, the vision must be unified (Cheung et al.,2012).

This study showed that a process has not been effective put in place for both parties to understand each other's goals and objectives. Only 11 percent of respondents agreed, while 49 percent disagreed; 39 percent where however neutral, about the existence and effectiveness of a system put in place to foster understanding of the goals and aspirations of each partner (see tables 146 &, 147 and figure 91). From the data that was collected and analyzed, this critical success factor is not significantly in place; therefore hypothesis 1 was rejected regarding this variable.

**Commitment and participation by top management of both parties.** Except there is adequate support for a PPPs project by the top management of the partnering organizations, success may not be guaranteed (Weiermair et al.,2008).

Specifically, (Neal 2010) argued that participation and personal involvement of the chief executives of the partnering organizations is mandatory for a successful outcome to be guaranteed., and also noted that for a PPPs to be successful, the public sector partner must not only be supportive, but also receptive. Similarly, Boyer (2012) posits that a high level of commitment by the senior management team is a prerequisite.

This study revealed that management commitment is on the average. 61% percent of respondents agreed that the top managements of both parties are committed to the PPPs projects. (See tables 148 & 149, and figure 92). From the data that was collected and analyzed, though there is a level of commitment by top management, it is not significant enough to conclude that that level is adequate. Therefore hypothesis 1 was rejected regarding this variable.

The top managements of both parties need to put in more efforts in this regard, to bring it to a significant level in order to ensure the success of the PPPs projects.

Adequate Financing structure. According to Pantelias (2009), funding in PPPs should be provided by the party who is capable of providing the cheapest means of funding. However, the state of the financial/capital market in any economy will greatly influence what financial structure is appropriate (Amponsah 2010).

From this study, it was revealed that the financing structure is not adequate. Only 18 percent of respondents agreed, that the financing structure of the PPPs is right (see tables 150 &151, and figure 93). From the data that was collected and analyzed, this critical success factor is not significantly in place in the PPPs arrangements of Lagos state, therefore hypothesis 1 was rejected regarding this variable.

Adequate Engineering and technical structure. The most fundamental of all the critical success factors is the engineering and technical structure. In most cases, the private partner is the provider of the required technical competence; however the party who possesses the required skills should contribute it (Pantelias 2009), (Belniak 2008).

This study showed that the engineering and technical structures are adequately structured. 82 percent of respondents agreed that this critical success factor is significantly present and adequately applied in the state (see table 152 and figure 94), therefore hypothesis 1 was accepted regarding this variable. This is a really good start and should be continually improved to ensure that success is achieved in the PPPs projects o the state.

**Proper Identification of required competencies.** Human resource forms the bedrock of any process. Identification of required competencies is a necessity in PPPs. Boyer (2012) found that many projects fail because governments pay more attention to technical skills and expertise, relegating some others, such as the financial skills to the background (Boyer 2012).

This study showed that the required competencies are systematically identified both within and outside the partnering organizations. 88 percent of respondents agreed, that this critical success factor is significantly present and applicable to the PPPs processes in the state, (see table 153and figure 95). From these results therefore hypothesis 1 was accepted regarding this variable.

Adequate Staffing and training of team members. Those who make up the team of executors of PPPs must have adequate training to be able to face the challenge of this type of arrangement which is always complex(Young 2010),

PPPs success depends largely on the requisite management skills required for planning execution and delivery of the projects. Boyer (2012) stressed therefore that it is important that, the competencies must be assessed and certified prior to the takeoff of PPPs project.

This study showed that the state has been able to bring the staffing and training of the team members to a significantly adequate level. 74 percent of respondents agreed that this critical success factor is adequately (see table 154 and figure 96), as a result of this therefore, hypothesis 1 was accepted regarding this variable.

**Proper monitoring and project evaluation.** Monitoring and continuous project evaluation of ongoing projects is critical to success as it aids documentation of learning by doing, and ensuring that mistakes are corrected on time (Boyer 2012). According to Busch & Givens (2011) when strict control and monitoring is absent, laxity, complacency and suboptimal performance may set in. Regular audits is very necessary in PPPs (Keanry et al., 2010), (Moszoro & Krzyzanowska 2008), (Amponsah 2010), (Young 2010), Boyer (2012), (Hanger 2012), (Weiermair et al., 2008), (Checherita 2009).

This study showed that processes have not been perfected to monitor and evaluate PPPs projects in the state. Only 26 percent of the respondents agreed, this critical success factor has been adequately put in place in the State (see tables 155 & 156, and figure 96), for this reason, hypothesis 1 was rejected regarding this variable.

**Effective Communication.** One of the very key elements of PPPs success is effective communication; keeping all the actors in the project informed about the projects progress and other information concerning the PPPs, without compromising sensitive information (Young 2010), (Amponsah 2010), (Keanry et al., 2010), (Neal 2010), (Titus-Howard 2012).

This study showed that the communication process within the organizations as well as among the partners and other stakeholders has not been perfected. Only 48 percent of respondents agreed, that this critical success factor has been adequately put in
place (see tables 157&, 158 and figure 98). For this reason therefore hypothesis 1 was rejected regarding this variable.

**Good leadership.** To ensure the success of PPPs, good government and leadership is a prerequisite (Hardcastel et al.,2010), (Mairembam, et al.,2012)

Leadership combines skills, expertise, poise and charisma. Project managers under PPPs need to possess project management skills, communication skills, coordination and arbitration skills Mistarihi et al.,(2012).

This study showed that specific measures to ensure good leadership and governance are yet to be significant. Only 26 percent of respondents agreed that this factor has been properly addressed by the state (see tables 159 & 160, and figure 99). Owing to this result, hypothesis 1 was rejected regarding this variable.

**Transparency and trust.** When trust is compromised, the PPPs becomes distressed and disorganized because distrust is quite distractive (Tynkkynen & Lehto2009).

Trust depends on transparency; trust occurs when both parties are confident that the other partner will fulfill his obligations as enshrined in their agreement, without compromising the other's rights ( Lasker et al. 2001, as quoted by Neal 2010), (Busch & Givens 2011).

No partner should hide under the guise of confidentiality and deprive the other party of useful information (Roach 2011), (Abramov 2009).

This study showed that though there is a level of transparency, it is not yet at a significant level. Only 46 percent of respondents agreed, that there is transparency and

trust among the PPPs partners and stakeholders (see tables 161 & 162, and figure 100). As a result of this result, 1 was rejected regarding this variable.

#### **Challenges facing PPPs implementation in Lagos state**

**Diverse objective and ideologies of the partnering organizations.** Diverse goals and objectives of partnering organizations from the private sector, and the public sector is the major cause of frictions in PPPs (Hardouin 2009), (Cheung, et al.,2009), (Roach 2011), (Checherita 2009). This is aggravated by the different ideologies and structures of the organizations (Callet 2010).

PPPs have the challenge of harmonizing the objectives to eliminate conflict of interest (Gerace 2011).

This study showed that the problems associated with the diverse objectives and ideologies of partnering organizations and stakeholders have been eliminated to a large extent. Only 21percent of respondents agreed that this factor is still a problem (see tables 163 & 164, and figure 101). Hypothesis 2 was rejected on the strength of these results, which suggests that the challenge faced in the PPPs administration in the state is not significant, in respect of this factor.

**Master-Master relationship of the team members.** Top officials from the partnering organizations, as well as the public partner, usually make up the joint team for PPPs execution. Many times, due to their high levels, the team is made up of bosses who do not agree to submit to each other's' authority, especially the government officials who are used to holding on to power, and in most cases, the private partner representatives may be quite more knowledgeable (Queen 2011).

This study showed that this factor does not constitute too much of a challenge in the PPPs management of the state. However, the level of its elimination is not significant enough to mean that the challenge does not exist. Only 56% percent of respondents agreed that the nominees from both sides of the partnership cannot be subordinated, being leaders in their organizations (see tables 165 & 166, and figure 102). Hypothesis 2 was rejected on the strength of these results, which suggests that the challenge faced in the PPPs administration in the state is not significant, in respect of this factor.

**Inadequate mechanisms to tackle problems arising from the PPPs.** There are more of reactive measures than there is proactive. Ahmed (2010) found that mechanisms to tackle challenges on reporting, monitoring, and technical issues are usually not adequate, which is a major cause of failure.

It was revealed through this study, that this challenge exists significantly in the state's PPPs process. 86 percent of respondents agreed that the mechanisms put in place to tackle problems arising from the PPPs is not adequate (see table 167 and figure 103). Hypothesis 2 was thus accepted on the strength of these results, which suggests that the challenges of PPPs in the state are significant, in respect of this factor.

Varying organizational cultures of the partners. Cyert & Goodman (1997) found that the differences in the cultures of partnering organizations pose a serious challenge to PPPs administration, which impedes success. The individual cultures of partnering organizations will certainly shape the culture of the PPPs implementation team (Jenkins 2012). Weiermair et al.,(2008) suggests strongly, that before entering into any PPPs arrangement, the cultures must form part of the initial considerations, and where the differences are utterly incompatible, the idea of the partnership may be shelved.

This study showed the varying cultures of the partners pose a challenge for the team drawn from both sides. 80 percent of respondents agreed, that this factor is posing a challenge to the success of PPPs in the state (see table168, and figure 104). Hypothesis 2 was thus accepted on the strength of these results, which suggests that the challenges faced in the PPPs process of the state are significant, in respect of this factor.

**Resistance to change by the beneficiaries.** Change is hard to accept, no matter how positive that change might seem especially where those who are to be impacted by it are not made to be part of the change process. Neal (2010) found that PPPs projects with bad public relation are almost certain to fail. If a bad image is labeled on any PPPs project, the possibility of success becomes very slim (Agyemang 2011), (Pantelias 2009).

This study revealed that resistance to change by the beneficiaries and affected persons is posing a serious challenge to the success of PPPs in the state. 96 percent of respondents agreed that this problem exist significantly (see tables 169 and figure105). Hypothesis 2 was accepted on the strength of these results, which suggests that the challenges experienced in Lagos state's PPPs projects implementation is significant, in respect of this factor.

**Inadequate Training.** Farooq (2011) found that the officials of the public sector lack the necessary training and education for PPPs implementation. In addition to this, Queen (2011) found that the failure of PPPs in some cases is as a result of lack of prerequisite knowledge by those saddled with the responsibility of implementation and

administration of PPPs, though in many cases they are desirous of adding value to the process but are limited by this predicament.

Through this study, it was revealed that Only 30 percent of respondents agreed that training, development and education of responsible officials in the state's PPPs affairs is posing a challenge, as the level of training appears to be adequate (see tables 170 & 171, and figure 106), owing to this result, hypothesis 2 is rejected, suggesting that the challenge in this area is not significant regarding this variable.

**Bureaucracy.** Unwarranted delays are brought about by bureaucratic bottlenecks, which results mainly from the nature of public organizations. The nature of the public partner in this regard, contrasts sharply with that of their private counterparts (Queen 2011).

According to (Tynkkynen & Lehto 2009), there is a high level of politicization in the decision making process of public organizations; the end result being problematic processes and limitation in the achievement of the overall goals of the PPPs (Callet 2010).

This study showed that bureaucracy is a big issue in the PPPs process of the state. 97 percent of respondents agreed, that bureaucracy, particularly from the government, stifles the progress of PPPs in the state (see table 172and figure 107). Hypothesis 2 was accepted on the strength of these results, which suggests that the challenges faced by the state in its PPPs processes are significant, in respect of this factor.

**Legislation and enabling laws.** In many instances, governments have made attempts to create legislation and enabling laws on PPPs, but these enactments do not

most of the time, cover all aspects (Lee 2010). The partial failure of a PPPs project on housing by the Nigerian government was, to a significant extent, due to the absence of specific legislation on PPPs (Ibem 2011).

This study showed that the challenge related to this factor has, to a very large extent been, eliminated by the state. Only 15 percent of respondents agreed, agreed that inadequacy of legislation and enabling laws has adversely affected the success of PPPs in the state (see tables 173 & 174, and figure 108). Hypothesis 2 was thus rejected on the strength of these results, which suggests that the challenges of PPPs in the state are not significant, in respect of this factor.

**Complex nature of the PPPs concept.** Through PPPs, a hybrid organization is formed, which requires special and specific management skills to manage its complexity (Mistarihi et al.,(2012). Farajian (2010) found that the interweaving of different cultures and management styles brings about mixed characteristics that breed uncertainty. According to Nachiappan (2009), the superior-superior, rather than superior-subordinate relationship that are applicable to PPPs lead to needless complications that impede the success of the projects under PPPs arrangements.

This study showed that the challenge related to this factor is significantly affecting the concept of PPP in the state. 80 percent of respondents agreed that the complex nature of the PPP arrangement in the state makes it cumbersome for administrators and executors. Hypothesis 2 was thus accepted on the strength of these results, which suggests that the challenges of PPPs in the state are significant, in respect of this factor.

#### Limitations of the Study

#### Generalizability and trustworthiness of the study

The findings of this study can, to a large extent be generalized in all PPPs projects in Lagos State. Besides Lagos state, generalizability is limited to only those locations where it could be established that similar structures exist. Since it could be difficult to establish whether or not a location is having similar workings and conditions as Lagos state, generalization is not recommended in such areas.

#### Validity and reliability of the findings

Careless completion of the survey questionnaire is one of the major ways by which a study could be made invalid. I introduced a bogus question in the questionnaire that had an obvious answer, and all respondents who are careful in completing the questionnaires must choose the correct option. I discarded the completed questionnaires where respondents failed to give the correct answer to that question, because chances are that such respondents did not think through the rest of the questions before answering them (Lin, 2010).

In addition to the above, leaning on the recommendations of Creswell (2009) I carried out data triangulation by checking the answers with other available sources of information.

#### **Recommendation for further research**

Regardless of the obvious hitches witnessed in the PPPs administration of Lagos state, the process has contributed immensely to enhancement of road network in Lagos state, and eliminated the countless loss of man-hour due to traffic hold-up in the Lekki-Ajah axis of the state.

Other states in Nigeria, as a result, have been seen lately, toeing the same line of action by starting up with the use of PPPs. It is recommended that a similar study be conducted for such states in order for us to achieve an overall success in PPPs across the states of Nigeria.

#### **Implications of study**

#### **Social Change**

The literature suggests that there is a very strong link between the accelerated advancement of public goods and services cum economic and social development, and the use of PPPs. Being a developing country, Nigeria as well as her states, is having social infrastructure that leaves a lot to be desired, due to limits in the available funds and expertise.

By embracing the concept of PPPs, the lives of the people will be improved tremendously if the results meet up to the expectations.

This study contributes to positive social change by suggesting ways in which the Lagos State Government can maximize the use of PPPs. The critical success factors identified in and around the world have been used as a benchmark against what is obtainable in Lagos State, thereby showing what is left to be done, in order to maximize the benefits of PPPs.

On the overall, all levels of the society will benefit from this study when social amenities and infrastructure are improved.

#### **Methodological implication**

The high response rate to this survey suggests that face-to-face administration of questionnaires, coupled with adequate explanations to the respondents is quite useful. In addition to this, careful sample design will, to a large extent, enhance the validity of the outcome of any research.

#### Conclusion

This study has come at the very right time; a time when the Lagos Statement Government is in the early stages of the adoption of PPPs in the state, which make it susceptible to the pitfalls of the concept.

The data collected and analyzed gives a picture of how the process is working at the time of this research, benchmarked with what the literature says should be best practices.

The ball is now in the court of the relevant authorities, to utilize this report in enhancing the working of PPPs in the state in order to achieve the desired level of economic and social development that will improve the lives of the people in the state.

#### References

- Abramov, I. (2009). Building peace in fragile states: Building trust is essential for effective public-private partnerships. *Journal of Business Ethics*, 89, 481-494. doi:10.1007/s10551-010-0402-8
- Agyemang, P. F. K. (2011). *Effectiveness of public private partnership for infrastructure projects* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (872553738).
- Ahmed, F., & Nisar, N. (2010). Public-private partnership scenario in the health care system of Pakistan/Projet de partenariat public-privé dans le système de santé du pakistan. *Eastern Mediterranean Health Journal*, 16(8), 910-2. Retrieved from http://search.proquest.com/docview/755497088?accountid=14872
- Amponsah, C. T. (2010). Public-private partnerships: Critical success factors for procurements of capital projects (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (219984817).
- Apgar, M. (. (2011). Public-private partnerships: Lessons from military housing. *Real Estate Issues*, 36(2), 63-64. Retrieved from http://search.proquest.com/docview/940913099?accountid=14872
- Aziz, D. (2012). Global public-private partnerships in international law. Asian Journal of International Law, 2(2), 339-374. doi:10.1017/S2044251312000148
- Babbie, E. (1998). *Survey research methods* (2nd ed.). Belmont, CA: Wadsworth Publishing.

Bansal, A. (2012). Comparison of public private partnership with traditional delivery

*methods in highway construction industry* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (1013441446).

- Belniak, S. (2008). A partnership of public and private sectors as a model for the implementation of urban revitalization projects. *Journal of European Real Estate Research*, 1(2), 139-150. doi:10.1108/17539260810918712
- Blanc-brude, F., Goldsmith, H., & Välilä, T. (2009). A comparison of construction contract prices for traditionally procured roads and public-private partnerships. *Review of Industrial Organization, 35*(1-2), 19-40. doi:10.1007/s11151-009-9224-1
- Bott, C. L. (2009). Collaborative consultation: A multicase study of the partnership between private and public special education programs for students with autism.
  Rutgers The State University of New Jersey - New Brunswick). ProQuest Dissertations and Theses, , 332-n/a. Retrieved from http://search.proquest.com/docview/304987831?accountid=14872. (304987831).
- Boyer, E. J. (2012). Building capacity for cross-sector collaboration: How transportation agencies develop skills and systems to manage public-private partnerships. The George Washington University). ProQuest Dissertations and Theses, , 287.
  Retrieved from http://search.proquest.com/docview/1038151296?accountid=14872. (1038151296).
- Brand, D. (2012). Public-private partnerships: Case studies on infrastructure development. *Choice*, *50*(1), 116-117. Retrieved from

http://search.proquest.com/docview/1095117567?accountid=14872

- Buchanan, B. M. (2014). Big five personality factor associations with individuals' experience in their relationship with god. (Order No. 3610988, Walden University). ProQuest Dissertations and Theses, , 110. Retrieved from http://search.proquest.com/docview/1501470132?accountid=14872. (1501470132).
- Busch, N. E., & Givens, A. D. (2011). Public-private partnerships in homeland security: Opportunities and challenges. *Homeland Security Affairs*, 8(1) Retrieved from http://search.proquest.com/docview/1266365905?accountid=14872
- Callet, V. (2010). Problems solved, problems created: A critical-case analysis of a public-private partnership in alternative education for at-risk students. University of Southern California). ProQuest Dissertations and Theses, , 208-n/a. Retrieved from http://search.proquest.com/docview/365535582?accountid=14872. (365535582).
- Checherita, C. D. (2009). A macroeconomic analysis of investment under public-private partnerships and its policy implications---the case of developing countries.
  George Mason University). ProQuest Dissertations and Theses, , 182-n/a.
  Retrieved from

http://search.proquest.com/docview/305123412?accountid=14872. (305123412).

Cheung, E., Chan, A. P. C., & Kajewski, S. (2009). Reasons for implementing public private partnership projects. *Journal of Property Investment & Finance*, 27(1), 81-95. doi:10.1108/14635780910926685

- Cheung E., A. P.C. Chan, & Kajewski, S. (2009). Enhancing value for money in public private partnership projects. *Journal of Financial Management of Property and Construction*, 14(1), 7-20. doi:10.1108/13664380910942617
- Cheung, E., A. P.C. Chan, & Kajewski, S. (2012). Factors contributing to successful public private partnership projects. *Journal of Facilities Management*, *10*(1), 45-58. doi:10.1108/14725961211200397
- Creswell, J.W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions.* Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W. (2002). *Research Design: Qualitative, quantitative, and mixed methods approaches (2nd ed.).* Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches (2nd ed.).* Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches (3rd ed.).* Thousand Oaks, CA: Sage Publications, Inc.
- Cooper, D.R., & Schindler, P.S. (2003). *Business research methods*. New York, NY: McGraw-Hill.

Curtis, J. M. (2008). Strike outs and home run: An analysis of the public-private partnership for the establishment of an independent frontier league baseball team in southwestern illinois. Saint Louis University). ProQuest Dissertations and Theses, , 281. Retrieved from

http://search.proquest.com/docview/304487950?accountid=14872. (304487950). Cyert, R. M., & Goodman, P. S. (1997). Creating effective university-industry alliances: An organizational learning perspective. Organizational Dynamics, 25(4), 45-58.

- DiMartino, C. C. (2009). Public-private partnerships and the small schools movement: A new form of education management. New York University). ProQuest Dissertations and Theses, , 241-n/a. Retrieved from http://search.proquest.com/docview/304957522?accountid=14872. (304957522).
- Farajian, M. (2010). Transaction cost model for infrastructure public private partnerships in the US. University of Maryland, College Park). ProQuest Dissertations and Theses, , 108-n/a. Retrieved from http://search.proquest.com/docview/741224400?accountid=14872. (741224400).
- Farooq, I. (2011). Private partnership for public benefit. University of Southern California). ProQuest Dissertations and Theses, , 169. Retrieved from http://search.proquest.com/docview/901456564?accountid=14872. (901456564).
- Foley, H. C., Freihaut, J., Hallacher, P., & Knapp, C. (2011). The greater Philadelphia innovation cluster for energy-efficient buildings: A new model for public-private partnerships. *Research Technology Management*, 54(6), 42-48. Retrieved from http://search.proquest.com/docview/906328284?accountid=14872
- Frankort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). New York, NY: Worth Publishers.
- Fuente, D. L., & Profiroiu, A. (2008). Public-private partnerships in spanish health care system-lessons for romania. *Administratie Si Management Public*, (11), 89-96.
  Retrieved from

http://search.proquest.com/docview/1312675920?accountid=14872

- Garson, G.D. (2012). Testing Statistical Assumptions (2012 ed.). North Carolina State
   University School of Public and International Affairs, Statistical Associates
   Publishing-Blue Book Series.
- Gerace, S. J. (2011). Measuring the organizational effectiveness of public-private partnerships: A case study of the department of energy's clean cities publicprivate partnership program. Rochester Institute of Technology). ProQuest Dissertations and Theses, , 124. Retrieved from http://search.proquest.com/docview/869983197?accountid=14872. (869983197).
- Goldman, M. (2012). Public-private partnerships need honest brokering. *Nature Medicine*, *18*(3), 341-341. doi:http://dx.doi.org/10.1038/nm0312-341

Gray, B. (1989). Collaboration. San Francisco: Jossey Bass, Inc.

- Green, S. B. & Salkind, N. J. (2011). Using SPSS for Windows and Macintosh: Analyzing and Understanding Data (6TH Ed.). New York: Prentice Hall
- Gross, M. E. (2010). Aligning public-private partnership contracts with public objectives for transportation infrastructure. Virginia Polytechnic Institute and State University). ProQuest Dissertations and Theses, , 215. Retrieved from http://search.proquest.com/docview/1029322165?accountid=14872. (1029322165)
- Hanger, L. M. (2012). Public and private partnerships: Performance standards and accountability. Georgetown University). ProQuest Dissertations and Theses, , 111. Retrieved from

(1010410661).

Hardouin, P. (2009). Banks governance and public-private partnership in preventing and confronting organized crime, corruption and terrorism financing. *Journal of Financial Crime*, 16(3), 199-209.

doi:http://dx.doi.org/10.1108/13590790910971757

- Hartley, J. (2014). Some thoughts on likert-type scales. International Journal of Clinical and Health Psychology, 14(1), 83-86. Retrieved from http://search.proquest.com/docview/1470779689?accountid=14872
- Hill, A. (2011). Foreign infrastructure investment in chile: The success of public-private partnerships through concessions contracts. *Northwestern Journal of International Law & Business, 32*(1), 165-190. Retrieved from http://search.proquest.com/docview/1173976628?accountid=14872
- Hochberg, Y. (1988). A sharper Bonferroni procedure for multiple tests of significance. Biometrika, 75(4), 800-802
- Hossain, K. Z. (2011). Contribution of public private partnerships (PPPs) between slum dweller's CBOs and public water supply authority to improve urban water governance: Experience of DSK, bangladesh. Royal Roads University (Canada)).
  ProQuest Dissertations and Theses, , 123. Retrieved from http://search.proquest.com/docview/920654961?accountid=14872. (920654961).
- Ibem, E. O. (2011). The contribution of public-private partnerships (PPPs) to improving accessibility of low-income earners to housing in southern nigeria. *Journal of Housing and the Built Environment*, 26(2), 201-217.

doi:http://dx.doi.org/10.1007/s10901-011-9213-1

- Iimi, A. (2010). Optimizing the size of public-private partnership contracts in the water sector: Implications from an estimated cost function of private operators. *Journal of Public Procurement, 10*(1), 1-30. Retrieved from http://search.proquest.com/docview/518413815?accountid=14872Jackson, P. A. (2012). *Assessment of a public-private partnership addressing childhood obesity in southern california.* University of California, Los Angeles). *ProQuest Dissertations and Theses,* , 190. Retrieved from http://search.proquest.com/docview/1022042207?accountid=14872. (1022042207).
- Jacobson, C., & Choi, S. O. (2008). Success factors: Public works and public-private partnerships. *The International Journal of Public Sector Management, 21*(6), 637-657. doi:http://dx.doi.org/10.1108/09513550810896514

Jefferies, M., & McGeorge, W. D. (2009). Using public-private partnerships (PPPs) to procure social infrastructure in australia. *Engineering, Construction and Architectural Management, 16*(5), 415-437. doi:http://dx.doi.org/10.1108/09699980910988348

Jenkins, J. A. (2012). Multiple case examinations of complex decisions to form networked public-private partnerships. Walden University). ProQuest Dissertations and Theses, , 264. Retrieved from http://search.proquest.com/docview/1146499799?accountid=14872. (1146499799).  Jones, J. E., Sr. (2008). A collaborative model for the church leading a faith-based public-private partnership to reduce health disparities in underserved communities. United Theological Seminary). ProQuest Dissertations and Theses, 204. Retrieved from

http://search.proquest.com/docview/304417801?accountid=14872. (304417801).

- Jung, H. H. (2012). The evaluation and implications of the diabetes pilot study in los angeles county community based clinics participating in the public private partnership (PPP) program. University of California, Los Angeles). ProQuest Dissertations and Theses, , 134. Retrieved from http://search.proquest.com/ docview/1026793972?accountid=14872. (1026793972).
- Jupp, V. (Ed.). (2006). The SAGE Dictionary of Social Research Methods. London, England: SAGE Publications, Ltd. doi: http://dx.doi.org/10.4135/9780857020116
- Kamensky, J. M., & Burlin, T. J. (Eds.). (2004). Collaboration: Using networks and partnerships. Rowman & Littlefield.
- Kearney, K. A., McEwen, E., Bloom-Ellis, B., & Jordan, N. (2010). Performance-based contracting in residential care and treatment: Driving policy and practice change through public-private partnership in illinois. *Child Welfare*, *89*(2), 39-55.
  Retrieved from http://search.proquest.com/docview/734392301?accountid=14872
- Kelejian, H., & Prucha, I. R. (2001). On the asymptotic distribution of the Moran test statistic with applications. *Journal of Econometrics*,104(2), 219-257.
- Kelley, Ken; Preacher, Kristopher J. (2012). "On Effect Size". Psychological Methods 17 (2): 137–152. doi:10.1037/a0028086.

- Kelly, E., McGuinness, S., & O'Connell, P. (2009). Benchmarking, social partnership and higher remuneration: Wage settling institutions and the public-private sector wage gap in ireland. *The Economic and Social Review*, 40(3), 339-370. Retrieved from http://search.proquest.com/docview/213064755?accountid=14872
- Kraak, V. I., Harrigan, P. B., Lawrence, M., Harrison, P. J., Jackson, M. A., & Swinburn,
  B. (2012). Balancing the benefits and risks of public-private partnerships to
  address the global double burden of malnutrition. *Public Health Nutrition*, 15(3),
  503-17. doi:http://dx.doi.org/10.1017/S1368980011002060
- Kruzic, D., & Skokic, V. (2008). Innovative business model in croatian tourism industry:
  Public-private partnership empirical evidence. Paper presented at the 1192-1202.
  Retrieved from http://search.proquest.com/docview/217738573?accountid=14872
- Kuehl, R.O. (2000). Statistical Principles of Research Design and Analysis. Belmont, CA:Duxbury Press.
- Laganga, S. (2011). Public-private partnerships in addressing counterfeit medicines: The development of the partnership for safe medicines and the partnership for safe medicines-india. *Journal of Commercial Biotechnology*, *17*(3), 260-265. doi:http://dx.doi.org/10.1057/jcb.2011.18

Lakkavalli, V. (2008). A model for real-time monitoring of pavements for public-private partnership. University of Calgary (Canada)). ProQuest Dissertations and Theses, , 140. Retrieved from

http://search.proquest.com/docview/304694076?accountid=14872. (304694076). Lee, S. (2010). Development of public private partnership (PPP) projects in the chinese water sector. *Water Resources Management*, *24*(9), 1925-1945. doi:http://dx.doi.org/10.1007/s11269-009-9531-1

- Leland, S., & Read, D. (2012). Stimulating real estate development through publicprivate partnerships: Assessing the perceived opportunities and challenges. *Public Administration Quarterly*, *36*(3), 311-340. Retrieved from http://search.proquest.com/docview/1312443503?accountid=14872
- Lin, H. L. (2010). Toward more authentic self-reports: An experimental manipulation based on self-determination theory. Retrieved from http://search.proquest.com/docview/852957994?accountid=14872
- Liu, T., & Wilkinson, S. (2011). Adopting innovative procurement techniques: Obstacles and drivers for adopting public private partnerships in new zealand. *Construction Innovation*, 11(4), 452-469. doi:http://dx.doi.org/10.1108/14714171111175918
- Macneil, I. R. (1980). The new social contract. New Haven, CT: Yale University Press.
- Mairembam, D. S., Lisam, S., Ved, R., Barua, J., Goel, P., Srivastava, R., & Mokashi, T. (2012). Public private partnership in meghalaya: Delivering healthcare in difficult to access tribal areas. *BMC Proceedings*, 6 doi:http://dx.doi.org/10.1186/1753-6561-6-S5-P3
- Marshall, C., & Rossman, G. B. (2006). *Designing Qualitative Research (4 th ed.)*. Thousand Oaks, CA: Sage Publications Inc .
- Martin, M. H., & Halachmi, A. (2012). Public-private partnerships in global health:
  Addressing issues of public accountability, risk management and governance. *Public Administration Quarterly, 36*(2), 189-237. Retrieved from

http://search.proquest.com/docview/1030144490?accountid=14872

- Mavalankar, D., Singh, A., Bhat, R., Desai, A., & Patel, S. R. (2008). Indian public-private partnership for skilled birth-attendance. *The Lancet*, 371(9613), 631-2.
  Retrieved from http://search.proquest.com/docview/199005550?accountid=14872
- Mayrand-Chung, S. (2008). The biomarkers consortium: A novel public--private partnership leading the cutting-edge of biomarker research. *Biomarkers in Medicine*, *2*(6), 617-20. doi:http://dx.doi.org/10.2217/17520363.2.6.617
- McAfee, M. A. (2008). CEOs as volunteer leaders: A case study of public private partnership. The George Washington University). ProQuest Dissertations and Theses, , 193-n/a. Retrieved from

http://search.proquest.com/docview/304639486?accountid=14872. (304639486).

- Merriam, S. B. (2009). *Qualitative Research: a guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Minow, M. (2003). *Public and Private Partnerships: Accounting for the New Religion*. Harvard Law Review Vol. 116 (No. 5):1229-70.

Mistarihi, A. M., Al Refai, M.,S., Al Qaid, B. A., & Qeed, M. A. (2012). Competency requirements for managing public private partnerships (PPPs): The case of infrastructure projects in jordan. *International Journal of Business and Management*, 7(12), 60-73. Retrieved from

http://search.proquest.com/docview/1081894610?accountid=14872

Moore, C. D. (2011). State building through partnership: Delegation, public-private partnerships, and the political development of american imperialism, 1898-1916.

Studies in American Political Development, 25(1), 27-55. doi:http://dx.doi.org/10.1017/S0898588X11000034

- Moszoro, M., & Krzyzanowska, M. (2008). Striving for the quality of public services through public-private partnerships. the case of 7 projects in the city of warsaw. Paper presented at the 204-215. Retrieved from http://search.proquest.com/docview/217741456?accountid=14872
- Nachiappan Subbiah, M. (2009). *Relationship dynamics in public private partnerships and its impact on outcomes: The role of values and interactions*. The University of Texas at Dallas). *ProQuest Dissertations and Theses*, , 214-n/a. Retrieved from http://search.proquest.com/docview/305059021?accountid=14872. (305059021).
- National Council for Public–Private Partnerships (NCPPP): Public–Private Partnerships Defined, http://www.ncppp.org/howpart/index.shtml#define.
- Neal, E. M. P. (2010). Playtime preservation: Public-private partnerships in public land management. Northeastern University). ProQuest Dissertations and Theses, , 280.
   Retrieved from

http://search.proquest.com/docview/305219269?accountid=14872. (305219269).

- Neuman, W. L. (2003). *Social research methods* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Njau, R. J. A., de Savigny, D., Gilson, L., Mwageni, E., & Mosha, F. W. (2009).
  Implementation of an insecticide-treated net subsidy scheme under a publicprivate partnership for malaria control in tanzania - challenges in implementation. *Malaria Journal*, 8(1), 201-201. doi:http://dx.doi.org/10.1186/1475-2875-8-201

Nwafor, S. O. (2012). Partnership between public and private organizations through the use of information technology systems in rivers state of nigeria. *Academic Research International*, 3(2), 239-244. Retrieved from http://search.proquest.com/docview/1266226486?accountid=14872

Pantelias, A. (2009). A methodological framework for probabilistic evaluation of financial viability of transportation infrastructure under public private partnerships. The University of Texas at Austin). ProQuest Dissertations and Theses, , 155. Retrieved from

http://search.proquest.com/docview/305019665?accountid=14872. (305019665).

- Partnerships British Columbia (2014). Understanding Public Private Partnerships. Retrieved from http://www.partnershipsbc.ca/pdf/2011-09-02_Understanding-Public-Private-Partnerships.pdf
- Prenzler, T. (2009). Strike force piccadilly: A public-private partnership to stop ATM ram raids. *Policing*, *32*(2), 209-225.

doi:http://dx.doi.org/10.1108/13639510910958145

Queen, J. Y. (2011). The adaptive challenges of collaborative leaders in a public-private partnership. University of Maryland, College Park). ProQuest Dissertations and Theses, , 174. Retrieved from

http://search.proquest.com/docview/923292442?accountid=14872. (923292442).

Read, R. B. (2011). Knowledge mobilization at the world bank: A bibliometric analysis of world bank publications on public-private partnerships in education. University of Toronto (Canada)). ProQuest Dissertations and Theses, , 161. Retrieved from

http://search.proquest.com/docview/926830898?accountid=14872. (926830898).

- Roach, S. A. (2011). Law and politics in public private partnerships: Transparency, conflict of interest, and renegotiation in concession arrangements. The University of Texas at Arlington). ProQuest Dissertations and Theses, , 119. Retrieved from http://search.proquest.com/docview/873933524?accountid=14872. (873933524).
- Robson, C. (2002). Real World Research. A Resource for Social Scientists and Practitioner Researche (2nd ed). Blackwell: Oxford
- Rockart, J. F. (1982). *The changing role of the information system executive: A Critical success factor perspective*. Sloan management Review, 24 (1), 3-13.
- Roumboutsos, A., & Chiara, N. (2010). A strategic partnering framework analysis methodology for public-private partnerships. *Journal of Financial Management of Property and Construction*, 15(3), 235-246. doi:http://dx.doi.org/10.1108/13664381011087498
- Scott, J. T. (2009). Cost-benefit analysis for global public-private partnerships: An evaluation of the desirability of intergovernmental organizations entering into public-private partnerships. *Journal of Technology Transfer, 34*(6), 525-559. doi:http://dx.doi.org/10.1007/s10961-009-9120-8
- Silversides, A. (2008). Public-private partnerships, part 2: Calculations of risk. Canadian Medical Association.Journal, 179(10), 991-4. Retrieved from http://search.proquest.com/docview/204851836?accountid=14872
- Singleton, R. A., & Straits, B. C. (2005). *Approaches to social research (4th ed.)*. New York, NY: Oxford University Press.

Stevens A.P. (2010). The role of public universities in workforce development: Assessing public-private partnerships in the california state university system. University of La Verne). ProQuest Dissertations and Theses, , 222. Retrieved from http://search.proquest.com/docview/858866550?accountid=14872. (858866550).

Teicher, J., Van Gramberg, B., Neesham, C., & Keddie, J. (2008). Public-private partnerships: Silver bullet or poison pill for transition economies? *Administratie Si Management Public*, (11), 66-82. Retrieved from http://search.proquest.com/docview/1312675935?accountid=14872

- The cracks are showing. (2008, June 26). *The Economist.*, Retrieved from http://www.economist.com/node/11636517
- The efficiency Unit of Hong kong (2013) Public-private partnerships: overview. Retrieved from

http://www.eu.gov.hk/english/psi/psi_ppp/psi_ppp_over/psi_ppp_over.html

Titus-Howard, T. (2012). Public-private partnerships: An evaluation of propositions for successful community coalitions. University of Missouri - Kansas City). ProQuest Dissertations and Theses, , 82. Retrieved from

http://search.proquest.com/docview/961669550?accountid=14872. (961669550).

- Tynkkynen, L., & Lehto, J. (2009). An analysis of ophthalmology services in finland has the time come for a public-private partnership? *Health Research Policy and Systems*, 7(1), 24-24. doi:http://dx.doi.org/10.1186/1478-4505-7-24
- UK National Audit office (2009), Performance of PFI Construction, retrieved from http://www.nao.org.uk/wpcontent/uploads/2009/10/2009_performance_pfi_constr

uction.pdf

- U.S. Department of Transport (2014), P3 Defined. Retrieved from http://www.fhwa.dot.gov/ipd/p3/defined/
- U.S. Department of Transportation (2007) Report to Congress on the Costs, Benefits, and Efficiencies of Public-Private Partnerships for Fixed Guideway Capital Projects Retrieved from http://www.fta.dot.gov/documents/Costs Benefits Efficiencies of Public-

Private_Partnerships.pdf

- Verma, S. (2010). Government obligations in public-private partnership contracts. Journal of Public Procurement, 10(4), 564-598. Retrieved from http://search.proquest.com/docview/847386579?accountid=14872
- Wang, C. L., Indridason, T., & Mark N.K. Saunders. (2010). Affective and continuance commitment in public private partnership. *Employee Relations*, 32(4), 396-417. doi:http://dx.doi.org/10.1108/01425451011051613
- Weiermair, K., Peters, M., & Frehse, J. (2008). Success factors for public private partnership: Cases in alpine tourism development. *Journal of Services Research*, , 7-21. Retrieved from

http://search.proquest.com/docview/195558895?accountid=14872

- Wood, D. J. & Gray, B. (1991). Toward a comprehensive theory of collaboration. Journal of Applied Behavioral Science, 27(2), 139-162.
- Worrall, L. (2007). Asking the community: A case study of community partner perspectives. Michigan Journal of Community Service Learning, 14(1), 5-17.

- Yin, R.K.(1994) *Case Study Research, Design and Methods, (2nd ed).* Newbury Park, Sage Publications.
- Yin, Robert K.:(2009) *Case Study Research. Design and Metho*ds (4th ed). Thousand Oaks, Sage Publications, Inc
- Yin, R.K.(2011) *Applications of Case Study Research (3rd ed)*. Cosmos corporation. Sage Publications, Inc.
- Young, C. K. (2010). Vital collaboratives, alliances, and partnerships: A search for key elements of an effective public-private partnership. East Tennessee State University). ProQuest Dissertations and Theses, , 116. Retrieved from http://search.proquest.com/docview/848643699?accountid=14872. (848643699).
- Ysa, T. (2007). Governance forms in urban public-private partnerships. International Public Management Journal, 10(1), 35-57. Retrieved from http://search.proquest.com/docview/218869387?accountid=14872
- Zhang, Z. A. (2011). Analysis of public-private partnerships in transportation infrastructure investment and managementt. Northwestern University). ProQuest Dissertations and Theses, 147. Retrieved from http://search.proquest.com/docview/894262956?accountid=14872. (894262956).

#### Appendix A: Structured Questionnaire

The Prevalence of the Critical Success Factors of Public Private Partnerships, in the case of Lagos State Government

Questionnaire

Section A: Information on the research study and informed consent of participant

Dear Respondent,

I invite you to take part in a research titled "The Prevalence of the Critical Success Factors of Public Private Partnerships, in the case of Lagos State Government"

This topic was selected in order to assist the government of Lagos state to imbibe best practices in the use of Public Private Partnerships, thereby improving the infrastructure available to the masses.

The research study is being conducted by Franca Igboka, a doctoral candidate from the School of Public Policy and Administration of Walden University, 100 Washington Avenue South, Suite 900, Minneapolis, MN 55401. This study is a requirement for the completion of her doctoral study; it is not being conducted by the Lagos State Government.

This research process involves the issuance of this structured questionnaire to persons who are adjudged to be knowledgeable and experienced, at a level that will add value to this study. The questionnaires when completed will be analyzed by the researcher in order to reveal what the real situation is and then to suggest ways of improvement to the state government.

Your selection as a potential participant in this study is based on the presumption that you have information regarding any of the operations, policies, execution, financing, administration, management, and other issues affecting the use of Public Private Partnerships by Lagos State Government.

Kindly read the contents of this questionnaire and seek clarifications that may be necessary to aid you in making a decision as to whether or not to participate.

The purpose of this research is to bring the experiences of successful PPPs around the world and benchmark with the case of Lagos State Government, in order to propose improvements where necessary.

There are four sections in this questionnaire; Section A is on the information concerning the research study, as well as the informed consent of the participant. Section B is on background information of participant, while sections C and D cover information on the subject matter of the research.

It should only take about 10 - 25 minutes to complete the questionnaire. If you complete the questionnaire, please slip it into the collection box at your security post. The box has the inscription "Research on PPP/Igboka/2014". The researcher will return after two weeks to collect the box.

#### Confidentiality

Your participation shall be treated with strict confidentiality, and your contributions will be anonymous. The questionnaire does not include any provision for you to include your name; therefore the questionnaire completed by you will not be linkable to you. Your name and any information relating to your identity will not reflect anywhere in the research results and publications, and the data will be securely kept to avoid unauthorized access. The data will be destroyed after 5 years subsequent to the publication of the findings of this research

#### Voluntary participation

Your participation in this study is entirely your choice and will not in any way affect future relationships. Even when you agree to participate, you are free to withdraw your participation afterwards as long as you have not submitted your completed questionnaire. Note that your organization, having shown support for this study, does not mandate you to participate

#### Your risks in participating

You have a minimal risk in participating; my discussions with you concerning your participation could indicate to your colleagues and/or employer that you may participate. Therefore it is capable of affecting your employability. Note however that your organization has given me a written consent, expressing willingness to support the conduct of this study, which mitigates this risk.

#### Benefits of participating

Since you are among those who run the business of PPPs in Lagos State, improvements in the process of the state's management and administration of PPPs will impact on your functions positively. In addition to this, if you reside in the state, you will benefit from improved welfare that will result from the recommendations of this study.

There is however no direct material or financial reward accruable to you for your participation in this study.

#### **Contact information**

The researcher's name is Franca Igboka. You may direct any questions to her email address – franca.igboka@waldenu.edu.

Her research Committee Chairman is Dr. Paul Rutledge, and can be reached through Walden University.

The Walden University Institutional Review Board (IRB) can be contacted by emailing to irb@waldenu.edu, if you need clarifications on your rights to participate.

The Walden University IRB approval number for this research is 10-20-14-0194352 and it expires on October 19, 2015.

#### Participants consent:

I have read and understood the information above, and I consider the information to be sufficient for me to make a decision as to whether or not to participate in the research study. By completing and returning this questionnaire, I have given my informed consent, and I do not need to write my name or sign my signature, in order to ensure anonymity.

You may keep this informed consent page for your records.

#### Section B: Background Information

(*Please tick 'X' on the option that applies to you*)

1. C	What is your gender?         Male       Female
2.	Marital status Single Married Divorced Widowed Separated
3.	What is your age         20 - 35 years       36 - 45 years       46 - 60 years       Above 60 years
4.	What is the highest level of education you have completed? Doctorate degree
Õ	Master's degree
	Bachelor's degree
	Higher National Diploma
	Ordinary National Diploma
	National Certificate in Education
	Senior School Certificate
	Junior School Certificate
	First School Leaving Certificate
	Other

5. What is your core profession?

Accounting and Finance

Engineering



### 6. What is your professional involvement in the Eti-Osa Lekki-Epe Express way Concession Arrangement?

$\bigcirc$	Accounting and Finance
	Engineering and technical
	Legal
	Marketing
	Human Resources
	Consultancy
	Other

#### 7. How many people are in the employment of your Organization?



## Section C: Information about the application of the critical success factors of PPP by Lagos State Government

	Basic success factors	Do not know	Agree	Strongly agree	Disagree	Strongly disagree
1	The legal framework is adequate	$\bigcirc$	0	0	0	$\bigcirc$
2	There is favorable economic, political and social conditions	$\bigcirc$		$\bigcirc$		$\bigcirc$
3	There is efficient and effective Planning processes and procedures	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

4	The affected public are involved/consulted at the planning stage		$\bigcirc$		$\bigcirc$	$\bigcirc$
5	There is efficient bidding process	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
6	Evaluation of value addition potential is in place and effective	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
7	Identification, assessment, and allocation of risks is in place and effective	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	•
8	There are processes put in place to foster understanding of the goals and objectives of each partner	$\bigcirc$				$\bigcirc$
9	Commitment and participation by top management of both parties are ensured	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$
10	The financing structure is right	$\bigcirc$				$\bigcirc$
11	The engineering and technical aspects of PPP projects are carefully structured and evaluated	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
12	The required competencies are systematically identified both within and outside the organization.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
13	There is adequate staffing and training of team members	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	Basic success factors	Do not know	Agree	Strongly agree	Disagree	Strongly disagree
14	PPP projects are adequately monitored and evaluated	0	0	0	0	0
15	There is effective communication within the organization as well as among the partners and other stakeholders	$\bigcirc$				•
16	There are measures to ensure good leadership to achieve the PPP objectives	$\bigcirc$	$\bigcirc$		$\bigcirc$	$\bigcirc$

17	There is transparency and trust among the partners and stakeholders	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$
18	No PPP project can succeed without adequate funding	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# Section D: Information on the challenges being experienced in the administration of the PPP

	Challenges	Do not know	Agree	Strongly agree	Disagree	Strongly disagree
1	Diverse objective and ideologies of the partnering organizations is a problem		•			
2	Master-Master relationship: the nominees from both sides cannot be subordinated, being leaders in their organizations					
3	There are inadequate mechanisms to tackle problems arising from the PPP	0				0
4	The varying organizational cultures of the partners poses a problem for the team drawn from both sides					•
5	Resistance to change by the beneficiaries and affected persons is a challenge		0			0

⁶ There is inadequate Training and education for those saddled with the task of running the PPP

	Challenges	Do not know	Agree	Strongly agree	Disagree	Strongly disagree
7	Bureaucracy, particularly from the government stifles the progress of the PPP	•		•	•	
8	Inadequacy of legislation and enabling laws has adversely affected the PPP		$\bigcirc$	0	•	•
9	The Complex nature of the PPP arrangement makes it cumbersome for administrators and executors		$\bigcirc$			$\bigcirc$



332


## Appendix B: National Institute of Health (NIH) Certificate

## Appendix C: Letter of Corporation



## OFFICE OF PUBLIC-PRIVATE PARTNERSHIPS

18th June 2014

Franca C. Igboka Doctoral Candidate Walden University Minneapolis, MN 55401 U.S.A

Dear Mrs. Igboka

## LETTER OF CO-OPERATION

Thank you for informing us of your intention to carry out a research titled "The Prevalence of the Critical Success Factors of Public Private Partnerships (PPPs), in the case of Lagos State Government", which is a requirement for your Doctorate Degree program at Walden University, USA.

We write to inform you that we have no objection concerning the exercise, and that you are allowed to collect data through your structured questionnaire on PPPs that you intend to administer to our staff.

Yours faithfully, For: Office of Public-Private Partnerships

Abiodun Dina

GOVERNOR'S OFFICE, Lagos House – Alausa – Ikeja – Lagos Email:info@lagosstateppp.gov.ng