



Analysis of Delay Factors at the Pre-Contract Phase of Public Private Partnership Project in Abuja, Nigeria

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ABSTRACT

Public Private Partnership has been used for infrastructural development globally and time delays occur in all phases of PPP project implementation. Previous studies focused on causes of delays in the construction phase and the planning and design phases of non PPP projects. This study analysed delay factors at the pre-contract process of PPP projects in Nigeria. Questionnaire and interviews were used to solicit the perception of the public party respondents and private party respondents on the severity of the identified factors. The data was analysed using descriptive and non-parametric statistics to determine the severity of each factor on a 5 point Likert scale. The result shows that the first three (3) most severe public party factors responsible in causing delays are "pursuit of personal interest by top-level management team over public interest", "lack of strategic planning", and "incessant changes in public party requirement during bidding" while the private party factors are "lack of transparency in communication during the pre-contract process", "inadequate scheduling of the project by the private party", and "high level of tolls proposed by private party". The finding is good justification for many public party procurers who usually ignore the interest of the general public by putting their self-interests first, and change their requirements during bidding that really delay the pre-contract process. Public sector clients should sanitize the top management team to ensure that adequate team coordination amongst the management are met. Proper communication channels by the private sector should be adequately adhered to and the private stakeholders should be more transparent in communicating amongst the team during the whole pre-contract stages of PPP.

Keywords: Public private Partnership, Pre-contract process, Delays, Projects

INTRODUCTION

The procurement process of PPP projects is tedious and complex and delays in the different phases of construction projects are among the various challenges facing the construction industry globally. Lengthy time overruns during the procurement process of PPP projects have been observed in different countries (Klynelde Peat Marwick Goerdeler (KPMG), 2010). This is attributable to the complexity and long term contractual arrangement of PPP which runs between 20 to 30 years or more (Casady, 2016). The goal of every construction projects is to meet quality at the appropriate time, budgeted cost, and satisfy the stakeholders and these are the major concerns in Public Private Partnership (PPP) project execution. These goals may be thwarted by the actors involved in the procurement process of PPP projects, resulting to prolonged pre-contract process such as protracted pre-qualification, negotiation etc. Since the adoption of PPP in different parts of the world, there has been an increase in the number of problems as a result of its implementation by government around the globe.

PPP as a method of construction project acquisition has challenges throughout its life cycle irrespective of the skill exchange between the public and private parties and increase in the quality of public infrastructural development. Ismail and Harris (2014) state that



very few PPP schemes have actually reached the contract stage and that most of the schemes are aborted before the contract stage. Some of the challenges of PPP according to Ismail and Harris (2014) are lengthy delays because of political debate, higher charge to direct users, high participation costs, high project costs, great deal of management time spent in contract transaction, lack of experience and appropriate skills, confusion over government objectives and evaluation criteria, excessive restrictions on participation, and lengthy delays in negotiation. It is necessary to point out the fact that PPP is not fast quick fix solution to project delivery and realisation. Nevertheless, proper implementation brings about numerous advantages and benefits for both public and private party.

Delay comes to play where the time scheduled for a particular activity is extended due to certain circumstances and this has significant effect on the whole project outcome especially quality and cost. Construction projects are said to be successful when it is completed on time, within budget, in accordance with the specifications and to stakeholders' satisfaction (Majid, 2006 in Abisuga, Amusu, & Salvador, 2014). Delay affects all the parties involved in construction processes particularly time and cost overrun. Delay results in loss of money by contractors due to increase in maintenance of temporary facility, rate of overhead costs of a project and labour costs (Assaf & Al-Hejji, 2006). Construction project delay is classified into two dimensions: project management and project environment (Al Hussein, 2016). According to AlSehaimi, Koskela, and Patricia (2014), the project management factors are control and inefficient planning, poor communication between the project's participants, unreliable availability of materials, inefficient site management etc. Project environmental factors are labour shortages, problems in material supply, and financial problems, etc., and these have links to the economic state of a project. Based on observations, many developing countries such as India, Egypt, Dubai and Nigeria are struggling to identify the cause of delay in the different phases of construction (Najuwa & Mohd, 2016). Delay in construction project can occur through multiple sources or means such as the attributes of the project, internal and external factors affecting the construction organisation, social, economic and cultural issues and so on (Abisuga, et al., 2014). In addition, lengthy periods of procurement discourage prospective bidders and disrupt the competitive bidding process and undermine the ability of PPP projects to achieve greater Value for Money. According to Burger and Hawkesworth (2011), competition amongst the private parties is one of the important factors that contribute to the success of PPP and absence of competition will make the procurement process not achieve a better value for money.

LITERATURE REVIEW

Pre-Contract Process of PPP

PPP is a contractual agreement among different parties partnering for the purpose of achieving value for money. The initial stage of PPP is one of the most important phases that requires proper attention and care by the various parties in order to reduce the rate of future uncertainties in the scheme. The major purpose of PPP is to reduce life cycle cost of the project, increased quality and profit, equitable risk distribution among practitioner,



understanding working objective and scope of both parties and build the trust to bring success of the project (Rahman, Memon, & Zulkiffli, 2014). The entire phases of PPP projects according to Ahadzi and Bowles (2004) are the planning and feasibility phase, the bidding and negotiation phase, the construction phase, the operation phase and possibly the transfer and/or renegotiation phase. The pre-contract phase is the period that runs from the conception to the financial close/contract award which comprises of the planning and feasibility phase and the bidding and negotiation phase and this is the phases that are of interest in this study. The pre-contract stages are further broken down into different stages: Planning and feasibility, Expression of Interest (EOI), Request for Qualification (RFQ), Request for Proposal (RFP), Select the Preferred Bidder, Contract Negotiations, Contract award/financial close (Ekow, 2011).

According to Ahadzi and Bowles (2004), the PPP pre-contract phase in terms of how efficiently it is conducted with respect to time and cost will be determined by the characteristic attributes each player brings to bear on the process. Ahadzi and Bowles (2004) studied public private partnerships and contract negotiations, the study focused on their effects on bidding costs, the study also identified the attributes of both parties that influence successful negotiation. The analytical tool used in the study by Ahadzi and Bowles (2004) is that of Multi-Criteria Decision Theory which is based on the principle that among all achievable scores for any *i*th attribute, there is at least one extreme or ideal value that is preferred to all others. The study focused on identifying the factors that are important for the parties during negotiation stage of PPP in UK construction industry and states that the strength of the organisation is the most significant factor that makes negotiation successful, the study did not look at the factors that cause time consumption and did not cover other stages of the pre-contract process of PPP. The study concludes that an excellent understanding of things that are important to each party in the different stages such as negotiations is an important step in improving the PPP process as a whole. The first study that used Duration Analysis Framework to analyse lengthy tendering process is Reeves, Palcic, and Flannery (2015). The study was on PPP procurement in Ireland, an analysis of the tendering periods. The research show that PPP projects in Ireland has the average tendering period of 34 months and sheds light on questions such as how tendering periods vary across PPP models and sectors. The study also finds that tendering periods are getting shorter over time and that significant further improvements are required if a target of 15–18 months is to be met in the short to medium term. Casady (2016), employed the same Duration Analysis Framework to examine tendering duration in Canada, by isolating the factors that influence tendering period duration for different sectors and provinces. The study concludes that minimal sectoral variation and differences in tendering across various Canadian provinces. Tendering is significantly affected by both the degree of private participation in a PPP project and the level of competition present in the procurement process (Casady, 2016). These studies established that long tendering periods for PPP projects exist for different countries using Duration Analysis Framework for different sectors but the characteristics of the public and private parties responsible for delays were not covered during the whole pre-contract process.



DELAY FACTOR IN CONSTRUCTION

Delay Factors in Construction

Researchers in various parts of the world have carried out studies on the causes of delays or delay factors in the construction industry in both developed and several developing countries across the globe including US, UK, Canada, Ghana, Ethiopia, Egypt, Palestine, Iran, Israel, Indonesia, Saudi-Arabia, Kenya, United Arab Emirate (UAE) etc. This results to identification of various delay factors. However, some of these study areas have characteristics that are similar to Nigeria, since Nigeria has remained as a developing nation or rather better put as third world country. Studies outlined the following as the prominent factors that cause delays in construction. Delay in progress payment by owner, change order by owner during construction, late in revising and approving design document by owner, poor communication and coordination by owner and other parties, slowness in decision making by owner, suspension of work by owner, lack of finance to complete the work by the client, change in the scope of the project, conflicts between joint-ownership of the project, poor qualification and supervision of owners' engineer, poor planning and scheduling of the project (Assaf & Al Hejji, 2006; Alkharashi & Skitmore, 2009). In a study carried out by Wilson and Odesola (2015) on the analysis of delay to the performance of oil and gas projects in Niger-Delta area of Nigeria, the study grouped different causes as related to offshore project delays as; natural factor, environmental factor, worksite related, contractor related, and client related. The study further broke it down to lack of installation materials, inadequate construction resources, offshore weather challenges, security threat, deliverables and work permit delay, rework due to construction error, worksite access restriction, Offshore scope growth, simulation operation restriction, frequent changes to work scope, poor work condition, inexperienced construction team, inadequate interface and communication, labour absenteeism and low motivation, community disruptions, and language barrier.

Study by Abisuga et al (2014) in construction delay in Nigeria: A perception of indigenous and multinational construction firms and concluded that the causes of delay are shortage of construction materials, client's financial difficulties, inadequate consultant experience and incompetent project team and so on were the causes of delay in construction projects. Assaf and Al-Hejji (2006) identified various causes of delay in construction projects in Saudi Arabia. The delay was between 10 percent to 30 percent of planned duration. The most common cause of delay was change order. In Pourrostan and Ismail (2011), twenty-five causes of delays on Construction project in Iran were identified. These causes are: poor site management, ineffective planning and scheduling of project by contractor, change orders by client during construction, financial difficulties by contractor, delay in progress payments by client, inadequate contractor experience, change orders by client during construction, slowness in decision making process by client, incompetent subcontractor, delay in delivery of materials to site, equipment unavailability, lack of materials on market, delays in producing design documents, mistakes and discrepancies in design documents, mistakes during construction, inaccurate estimates, lack of communication between the parties, obstacles from government, late in reviewing and



approving design documents by client, lack of consultant's experience, improper construction method by subcontractors etc.

According to Oshodi and Iyagba (2013), causes of delay from Nigerian contractors perspective includes: ineffective planning and scheduling of project by contractor, inadequate contractor experience, delay in progress payments by client, equipment unavailability, financial difficulties by contractor, delay in delivery of materials to site and incompetent subcontractor, obstacles from government; problem with neighbours and site condition, type of project bidding and award, problems with subcontractors and shortage of labours. Mohammed and Isah (2012) investigated the causes of delay in Nigeria construction industry. The study investigated professionals in the Nigerian construction industry such as clients, contractors, consultants and stakeholders in the construction organisation. The study found that improper planning, lack of communication, design errors and shortage of supply are ranked high on the causes of delays in Nigeria construction industry. The studies considered the construction stage of non PPP projects and did not cover pre-contract process of any procurement method. Yang and Wei (2010) studied the causes of delay in the planning and design phases for construction projects in Taiwan. The main purpose of the study was to identify and rank delay causes in the planning and design phases of non PPP construction projects with respect to Taiwanese construction industry. The study did not consider the private sector attributes that delays the planning or design phase and the PPP pre-contact process greatly differs from convention projects. The study identified the following as the causes of delay: Changes in client's requirement, Poor scope definition, Unreasonable or unpractical initial plan, Change orders by client, Project complexity, Unreasonable contract duration, Insufficient or ill-integrated basic project data etc. The study focused on the design and planning phase of non PPP projects which entails single stage during the tendering process while PPP is comprised of multiple stages that must be considered before contract award/financial close (Ekow, 2011).

RESEARCH METHOD

Delays are one of the main problems in construction projects in developing countries, and it has negative effects on the projects. Forty one (41) delay factors associated to the public party and the private party were identified through interview of procurement experts in the study area and literature review (Ahadzi & Bowles, 2004; Yom, 2010; Makund, 2017, PPP Manual, 2017). A questionnaire survey was requested to solicit the causes of delay at the pre-contract stages of PPP from public party and private party viewpoint. The questionnaire was divided into two, section A covers the respondents' demographic information while section B contains the identified factors. Respondents were asked to rate the degree of severity of the identified delay factors at the pre-contract process of PPP from their own perspective using a 5-point Likert scale, 1 not severe to 5 very severe. The statistical techniques employed to analyse the quantitative data acquired from the questionnaire survey is non-parametric. Descriptive analysis was first conducted to obtain the severity of each delay factors. The 5-point Likert scale was used to



calculate the mean score for each factor, which was then used to determine their relative rankings in descending order of severity. Spearman's rank correlation coefficient (Rho) was used to measure the level of agreement as perceived between two surveyed groups that is the private party and the public party on their rankings of the delay factors which is presented in Equation (1). The coefficient, Rho, ranges between +1 and -1. A value of +1 represents a perfect positive linear correlation or association of ranks whereas -1 (negative) indicate a perfect negative linear correlation or association of ranks which means that high ranking on one is directly associated with low ranking on the other. If the correlation is close to 0, then it implies that no linear relationship exists between the two groups, thus weak relationship exists between the ranks (Albright, Winston, & Zappe, 2006). The Spearman's rank correlation coefficient was calculated by the following equation (Norusis, 2002):

$$Rho = 1 - \frac{6\sum d^2}{N(N^2 - 1)} \quad (1)$$

Where Rho is the Spearman rank correlation coefficient between two parties, d is the difference between ranks assigned to variables for each cause. N is the number of pairs of delay factor rank. The level of significance is determined at 5% significant level. The decision criterion is based on whether the calculated value of Rho is within the acceptance region of the tabulated value. If the calculated Rho is lower than the tabulated, null hypothesis is accepted. In addition, independent sample t-tests were performed to compare the means of both the public and private party to see whether significant difference exists in the perception of these two groups of respondents on the severity of the delay factors in the pre-contract process of PPP projects in Nigeria. If the test result was significant, then the null hypothesis which states that there is no significant difference in the mean values between the two groups of respondents can be rejected (Norusis, 2002).

RESULT AND DISCUSSION

In general, results show that all factors have a mean rating higher than midpoint 3 of the 5-point Likert scale, indicating the severity of the identified factors in causing delays during the pre-contract period of PPP projects.

Table 1: Response rate of the questionnaires administered

Respondents Category	Administered Questionnaires	Received Questionnaires	Response Rate
Public Party	80	55	68.8%
Private Party	100	70	70%
Total	180	125	69.4%

Table 2: Professional qualification of the respondents

Profession	Private Party		Public Party	
	Frequency	Percent%	Frequency	Percentage%
Architect	13	18.6	9	16.4



Builder	23	32.9	13	23.6
Engineer	27	38.6	19	34.5
Quantity Surveyor	7	10.0	14	25.5
Total	70	100.0	55	100.0

Table 3: Respondents years of experience in PPP procurement process

Years	Private Party		Public Party	
	Frequency	Percent%	Frequency	Percentage%
1-5 years	15	21.4	10	18.2
6-10 years	18	25.7	10	18.2
11-15 years	19	27.1	20	36.4
16-20 years	15	21.4	13	23.6
20 years and above	3	4.3	2	3.6
Total	70	100.0	55	100.0

Table 4: Factors causing delays during the pre-contract stages of PPP projects (Public party)

Public Party delay factors	Private Party			Public Party			Combined		
	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank
Lack of Government Management Commitment	3.37	1.092	7	3.33	1.106	13	3.35	1.099	11
Inadequate Scheduling	3.47	1.126	5	3.35	1.004	12	3.41	1.065	6
Lack of Strategic Planning	3.51	1.032	3	3.55	0.939	3	3.53	0.986	2
Slowness in Government Decision Making	3.33	1.032	10	3.49	1.016	5	3.41	1.024	6
Slow land expropriation due to resistance from occupants	3.24	0.999	14	3.42	0.994	9	3.33	0.997	12
Insufficient data collection and survey during feasibility	3.57	1.149	2	3.49	1.034	5	3.53	1.092	2
Inability to obtain planning permission on time	3.34	1.020	9	3.53	0.979	4	3.44	0.999	4
Improper conduction of project due diligence during feasibility	3.50	1.046	4	3.29	1.066	12	3.39	1.056	7
Poor Financial Assessment during feasibility	3.47	1.126	5	3.38	1.009	11	3.43	1.068	5
Incessant changes in public party requirement during bidding	3.50	0.944	4	3.56	1.014	2	3.53	0.979	2
Inability to define	3.57	1.015	2	3.40	1.180	10	3.49	1.098	3



clearly the evaluation criteria before and during bidding									
Wrong cost estimation by public sector team	3.37	1.092	7	3.38	1.254	11	3.38	1.173	8
Lack of transparency in communication	3.46	1.045	6	3.42	1.166	9	3.44	1.105	4
Reluctance in accepting risks by public party	3.47	1.059	5	3.27	1.269	13	3.37	1.164	9
Poor collaboration and commitment among the public sector team	3.36	1.192	8	3.38	1.147	11	3.37	1.169	9
Low level of tolls proposed by the public party	3.30	1.208	11	3.47	1.120	6	3.39	1.164	7
Poor quality of legal proposal	3.27	1.318	13	3.45	1.288	7	3.36	1.303	10
Poor scope definition and project parameter	3.24	1.109	14	3.27	1.269	13	3.26	1.189	13
Excessive desire to drive down cost to an unfavourable level by public party	3.29	1.156	12	3.44	1.273	8	3.37	1.215	9
Corruption among public team members	3.57	1.057	2	3.49	1.136	5	3.53	1.097	2
Pursuit of personal interest by top-level management team over public interest	3.60	1.082	1	3.64	1.078	1	3.62	1.080	1

SD-Standard Deviation

Table 5: Factors causing delays during the pre-contract stages of PPP projects (Private party)

Private Party delay factors	Private Party			Public Party			Combined		
	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank
Inexperienced bid manager	3.67	1.133	5	3.55	1.051	9	3.61	1.092	7
Project size and complexity	3.77	0.981	1	3.47	0.997	12	3.62	0.989	6
Poor quality of technical proposal i.e RFQ/RFP	3.74	1.086	2	3.47	.979	12	3.61	1.033	7
Insufficient project information to the private sector	3.61	1.171	8	3.40	.974	14	3.59	1.073	9
Poor quality of the financial proposal during bidding	3.64	1.104	6	3.56	.938	8	3.60	1.021	8
Lack of transparency in communication during the pre-contract process	3.73	1.048	3	3.69	.858	2	3.71	0.953	1



Reluctance in accepting risks by private parties	3.63	1.119	7	3.65	.985	4	3.64	1.052	5
Unwillingness to share good ideas	3.51	1.164	11	3.58	.975	7	3.55	1.069	10
Bad reputation of the private consortium	3.57	1.044	10	3.60	0.955	6	3.59	0.999	9
Inexperience of working together as a team among the consortium team	3.44	1.002	13	3.65	0.886	4	3.55	0.944	10
Inexperience of the private party in PPP method of procurement	3.43	.894	14	3.53	.997	10	3.48	0.946	12
Undefined/unclear responsibilities/tasks	3.60	.999	9	3.71	1.031	1	3.66	1.015	4
High level of tolls proposed by private party	3.69	.971	4	3.67	1.055	3	3.68	1.013	3
Unreasonable length of concession period proposed by private party	3.63	1.079	7	3.65	1.092	4	3.64	1.086	5
Lack of multi-disciplinary profession among the private sector team	3.40	1.095	15	3.64	1.095	5	3.52	1.095	11
Inadequate scheduling of the project by the private party	3.73	.962	3	3.65	1.075	4	3.69	1.019	2
Pursuit of personal interest by top-level management team over organisation interest	3.43	.986	14	3.53	.959	10	3.48	0.972	12
Corruption	3.63	.871	7	3.56	.918	8	3.59	0.895	9
Lack of team corporation and coordination among consortium members	3.49	1.004	12	3.44	.996	13	3.47	1.000	13
Wrong construction method proposed	3.39	1.054	15	3.49	.879	11	3.44	0.967	14

SD- Standard Deviation

Table 6: Independent T-test on the difference between public and private respondents Perceptions regarding the severity of delay factors in the pre-contract period of PPP project in Nigeria.

Variable	Category of respondents	N	Mean	S.D	Df	Tcalculated	Tcritical	P(sig)
Severity of delay factors	Private	70	143.53	43.954	123	0.0051	1.98	.10
	Public	55	143.49	43.036				



$P > 0.05$, $T_{\text{calculated}} < 1.98$

Table 7 Spearman rank correlation between private and public parties on delay factors

Comparison	Rho	Sig.	Correlation
Private and Public party	0.902	0.317	Reject Ho at 5% sig. level and accept HA

Ho = there is no significant correlation on the ranking of delay factors at pre-contract process of PPP project

HA = there is significant correlation on the ranking of delay factors at the pre-contract process of PPP projects

The questionnaire was administered by hand, a total number of 180 questionnaires were administered to both public and private party. Out of the 180 questionnaires, 125 were retrieved which represent a response rate of 69.4%. Table 1 shows the response rate of the 100 and 80 questionnaires administered to the private sector and public sector respectively, out of the number administered, 70 (70%) and 55 (68.7%) were retrieved from private and public parties and these questionnaires were found fit for the analysis compared to 21% of Ahadzi and Bowles (2004). Majority of the respondents are Engineers for both public party and private party respondents as indicated in table 2 and most of the respondents have years of experience between 11 to 16 years which indicates that they are well experienced in the procurement process of PPP projects in Nigeria.

Public Party Factors

Table 4 shows public party delay factors/attributes that cause delays during the pre-contract stages of PPP projects in Nigeria. The factors that are responsible for delays were analysed to obtain the most factor that severely affects the time of pre-contract process based on five point likert scale, that ranges from 1 "not severe" to 5 "very severe", and this type of scale was employed by Yom (2010) in analysing delay related factor during the construction stage. Table 4 shows the public party factors, the first ranked factor that severely affects this process is pursuit of personal interest by top-level management team over public interest (3.60) while the least among this factors is poor scope definition and project parameter (3.26) by both group of respondents. The respondents viewed pursuit of personal interest by top-level management team over public interest probably because most average Nigerians believe that where you work is where you eat, this belief prompts them to always expect something for their personal gain even before the process is complete. This could also be influenced by hard conditions of the economy were the average salary of a civil servant cannot afford to cater for a family of four thus, leading to most of the top management of MDAs putting their interest first. A situation where the private party does not meet up with the high expectations the whole process may be halted thus leading to time delays. This factor is prominent in negotiation, thus during negotiation MDAs should appoint committed top management team that sees the objectives of the project as a priority and are ready to negotiate for the benefit of the public so as to minimise protracted negotiations. Poor scope definition and project parameter is ranked least because the public party are the determinants of how large the project should



be thus, mapping it out may not necessarily consume time during this period, ensuring that private party also have good understand of project scope is important.

Private Party Factor

Table 5 shows private party delay factors that cause delays during the pre-contract stages of PPP projects in Nigeria. The factors that are responsible for delays were analysed to obtain the most factor that severely affects the time of pre-contract process based on five point likert scale, that ranges from 1 "not severe" to 5 "very severe", and this type of scale was employed by Yom (2010) in analysing delay related factor during the construction stage. Table 5 shows the private party factors, lack of transparency in communication during pre-contract process is ranked first (3.71) while wrong construction method proposed is the least private factor with mean value of 3.44 by both group respondents, but differences exist in the individual group ranking as shown in table 5 below. Lack of transparency in communication among the private team is a big challenge in the pre-contract process in the sense that when communication channel is not well established conflicts among the team is inevitable. The success of every team is the ability of each team member to understand the pre-defined objectives of the team during negotiation. Conflicts of superiority/or interest among the private team members could also cause communication problem and according to PPP manual (2017), negotiation must be a careful thought through and planned process, and transparency in every aspect must be adhered to for any team to arrive at a satisfactory negotiation. Poor flow of information irrespective of the group under negotiation would definitely lead to protracted negotiation, thus, channel of communication must be well planned and settled before undergoing any negotiation.

Proposed wrong construction method is ranked least probably because, prior to the qualification of the private sector, the consortium must be technically sound, the technical criteria must be assessed thus, every wrong construction method proposed would be easily noticed and identified during bidding period without wasting much time. These severe factors cause delays during negotiation, thus justifying the fact that delays occur most at negotiation. Independent T-test in table 6, shows that significant difference does not exist between public and private respondents' perception on the severity of delay factors in the pre-contract period of PPP in Nigeria because the calculated p (sig) value of 0.1 is greater than the 0.05 alpha level of significance. The calculated t-value of 0.0051 is less than the t-critical value of 1.98 at degree of freedom (df) of 123. Therefore, the null hypothesis which states that "there is no significant difference between public and private respondents' perception on delay factors in the pre-contract process of PPP project" is accepted.

CONCLUSION

The tendering/pre-contract stage of PPP projects is very crucial to the success of PPP scheme. Therefore, it is paramount to explore the vital factors of the public party and private party that severely retard the progress of this stage and thus leading to protracted



pre-contract process. The study revealed that pursuit of personal interest by top-level management team over public interest is ranked first as the most severe public factor that causes delays during procurement of PPP by both private and public parties. For the private party factor, lack of transparency in communication during the pre-contract process is ranked first as the most severe factor that causes delays during PPP procurement by both parties. The study is not only significant in contributing to the field of PPP procurement strategies and information for minimising the stress encountered in PPP implementation, but also assists key project stakeholders in reducing the effects of time consumption during this stage and thus, maximising the full benefits achieved from implementing the PPP scheme. Public sector clients should sanitize the top management team to ensure that adequate team coordination amongst the management are met. Proper communication channels by the private sector should be adequately adhered to and the private stakeholders should be more transparent in communicating during evaluation/selection and negotiation stages.

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