

Predictors of Project Success at the South African Selected Energy State-Owned Enterprise

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Abstract: The study aimed to identify which predictor predicts project success the highest at the selected South African Energy state-owned enterprises (SOE). This study is motivated by the highest failure rates of timeously implementing projects in time by SOEs in the South African context. The literature reviewed revealed many predictors of project success, but the common ones entail the governance committee, project manager, governance structures and project team. Hence in this study, the focus was on them. This study was quantitative and deductive, with a positivist paradigm influenced it. There were 130 employees involved in the projects at the business unit, and a census was used as a sampling strategy. Only 82 responded by completing a close-ended questionnaire which was distributed via SurveyMonkey. The response rate was 63.07%. Statistical techniques like Kurtosis and Skewness were used to determine if the data were normally distributed. Normality and other statistical techniques were calculated in Statistical Package for Social Science (SPSS) version 27. Through exploratory factor analysis (EFA), these factors were extracted: governance committee, project manager; governance structures and processes; project team and project success. For all the predictors and the target variable (i.e. project success), Cronbach's alphas ranged from 0.7 to 0.83. The data showed that 65.9% of the respondents were males and the Pearson correlation results showed that predictors positively correlated with the target variable. The regression results showed that project team was the highest predictor ($\beta = 0.62$, $t = 5.15$, $p < 0.01$) and the second-highest predictor was project manager ($\beta = 4.70$, $t = 4.70$, $p < 0.01$). The R-squared (r^2) was 0.58, suggesting that the regression model only predicted 58% of project success at the selected energy SOE. Other predictors were not significant predictors of project success. The results imply that the business unit at the energy SOE should foster a teamwork culture and capitate and support project managers to enhance project success.

Keywords: Governance committee, Project manager, Governance structures and processes, Project team and project success

1. Introduction

Capital project research in the energy state-owned enterprise (SOE) is a topic of interest to researchers. Several studies have emphasised that the energy industry needs to develop capital projects for a competitive, productive, long-term development, modernisation, and sustainable demand for energy (Kripa & Xhafa, 2013). This is because of these capital projects' contribution to the economy. Barone (2020) defines a capital project as a long-term capital-intensive investment to improve, refurbish or construct a new capital asset. It is of concern that capital projects on the SOE are often over budget, not delivered on time, and not according to the specifications (Strand, Larsen, Volden & Andersen, 2021). Holgeid and Thompson (2013) define a successful project as the project executed within the specified duration, at the budgeted costs and delivering the expected value. Capital projects on the SOEs involve multiple

stakeholders and multiple objectives. Furthermore, political influence forms part of the strategic setting, consequently impacting measuring success and decision-making (Strand *et al.*, 2021).

The South African energy sector has varying state ownership and regulation patterns across sub-sectors. In South Africa, energy is the economy's lifeblood that directly impacts using labour and capital to produce energy, creating jobs and value by extracting, transforming, and distributing goods and services throughout the economy. The energy SOE that produces 95% of electricity is Eskom (Maleka, 2012). The generated electricity is sold to consumers and municipalities. Currently, the energy SOE has capacity constraints, adversely affecting the electricity supply to consumers and municipalities and impacting the economy negatively (Flepisi & Mlambo, 2021). These shortages have become a powerful hindrance to South Africa's fragile economic recovery

and probably weaken the credibility and legitimacy of the government (Kassides, 2020). The shortages are attributed due to delays in capital projects (Sturesson, McIntyre & Jones, 2015).

Lack of teamwork has been ruled as one factor contributing to the failure to complete most of the SOE's energy capital projects. The study conducted at Medupi and Kusile projects in South Africa revealed that internal factors contributed most to the delay (Flepisi & Mlambo, 2021). According to Ramdaloo (2020), lack of communication between team members has been identified as one of the causes of failure in South Africa's capital projects. The lack of effective project team integration between clients, the supplier and the supply chain is one of the common causes of project failure. Poor site administration and management, unpredictable ground conditions, and slow decision-making by all project teams have been cited as the critical cause of delays in construction projects in Hong Kong (Adugna, 2015).

Lack of corporation from the governance committee is one of the contributing factors to the failure of most capital projects. The study conducted on the South African energy mega projects concluded that slow client decision-making and shortage of skilled labour were ranked as the number one factors that cause schedule overrun (Tshidavhu & Khatleli, 2020). According to Li, Akintoye and Holt (2017), project governance delivers a structure for setting project objectives and decision-making. The most dominant challenges in South Africa regarding projects are unstable management structures, lack of experience, and poor organisational structures (Tshidavhu & Khatleli, 2020). The United Kingdom National Audit Office (NAO) evidence shows that a lack of effective engagement with stakeholders is also a significant reason capital projects failure (Jenner, 2015). Poorly managed project business relationships lack active stakeholder management. The findings from the Price WaterhouseCoopers (PWC) analyst indicate that 92% of occurrences of project failure that were brought to the attention of the board were because of governance issues rather than technical aspects (PWC, 2015).

Furthermore, governance structures and processes contribute to the unsuccessful completion of capital projects. When Moody's Investors Service and Standard and Poor's cut the utility's rating to non-investment grade in November 2014 and March 2015,

respectively, one of the key reasons behind the downgrade was governance failure (Kassides, 2020). The governance process, which includes slow decision-making, delays in approvals and conflicts in the contracts, was cited as the primary cause of delays in the study conducted on construction projects in South Africa (Tshidavhu & Khatleli, 2020). Another challenge is that most of the energy SOEs' capital projects are funded by the governments and private capital investment banks; hence, the decision-making process is slow and negatively impacts the projects' progress (Ashkanani & Franzoi, 2022).

Thus far, the discussion shows that capital projects are unsuccessful in SOEs in the energy sector. This indicates that this research is salient, and the researchers embarked on this study so that they may contribute positively to the predictors of project success body of knowledge. In the next section, the problem statement is elucidated.

There are predictors of capital projects not being successful in the energy SOEs as literature suggests (Ashkanani, & Franzoi, 2022; Tshidavhu & Khatleli, 2020). The literature has established that only 2.5% of the capital projects in South Africa are completed on time (Ramdaloo, 2020). Before this study at the business unit in the energy SOE, no study was conducted to identify the predictors of project success. Thus, this study was conducted to address this gap. The energy SOE had developed a capital project governance framework, yet the 2020 and 2021 annual reports showed that only 70% of the capital projects were not successful or delivered on time. However, it was unclear from the annual report which variable predicted the 30% project success. The research question: which predictor predicts project success at the South African selected SOE?

2. Theoretical Framework and Hypotheses

Project success is about completing the project within an agreed timeline, cost and quality (Ohi & Choi, 2020). This study is situated with the Project Management Body of Knowledge (PMBOK, 2017) framework, which has set standards on how the project should be conducted. The PMBOK standards are a framework or guidelines that should be used by the organisation, including SOEs, to succeed in implementing the projects. In addition, PMBOK states the roles of the governance committee, project manager, governance structure and team to

predict the role in project success. An SOE is an organisation owned by the state with ownership of the private sector (Mnisi, 2022).

2.1 Governance Committee and Project Success

The governance committee's role is to scope and monitor the projects through meetings at agreed intervals (Willis, 2018). Smit (2018) argued that the governance committee comprise the project sponsor, a programme manager and the project manager. The project sponsor is the senior manager in the organisation who can either be a member of the executive or is given the mandate by the board to implement capital projects in the energy SOE. Their role is to provide the programme with manager/s (i.e. manage the different capital projects) with a mandate to manage the projects. In addition, the programme sponsor's role is to provide leadership and support to the programme managers (Ramdaloo, 2020). It argued that when the governance committee has strategic, technical and operational competencies, they can oversee the SOEs' capital projects so a successful completion (PWC, 2014).

The study's first hypothesis is as follows:

H₁: The governance committee positively and significantly affects a capital project's success at the SOE.

2.2 Project Manager and Project Success

The PMBOK (2017) states that a project manager is a leader who is responsible for managing, leading and controlling the project resources. In addition, they are responsible for the project's success (i.e. cost, schedule and quality). A project manager is accountable for keeping the costs within the budget agreed upon at the beginning of the project. The project manager is responsible for delivering the project on time, using software like Microsoft Project. In the software, the project manager allocates tasks and monitors whether the project team members deliver as agreed. In terms of quality, a project manager is accountable for delivering the capital project according to the customers' expectations and specifications (Haq, Liang, Gu, Du & Zhao, 2018). Cost, scheduling and quality are technical competencies (PMBOK, 2017), and they are essential for a project manager to complete the energy capital project in

SOEs. Research revealed that, on average, capital projects in energy SOEs and organisations overrun by 25% (PriceWatersCooper, 2014).

It also needs to be emphasised that soft competencies are critical for the project manager working on an energy capital project to possess. A project manager who can successfully map internal and external stakeholders has a propensity to successfully deliver a capital project in the energy sector (Khan, Waris, Ismail, Sajid, Ullah & Usman, 2018). They can map stakeholders using the stakeholder categories matrix (Eresia-Eke, 2020). In addition, a project manager with excellent leadership competencies such as inspiration, charisma, support, trustworthiness and integrity (Horváth, 2019; Lokhande & Vaidh, 2018; Ramdaloo, 2020) has completed capital projects in the SOE sector.

Hence in this study, the second hypothesis is:

H₂: Governance structure positively and significantly affects a capital project's success at the SOE.

2.3 Governance Structure and Project Success

According to Muller (2019), a governance structure is established so that the project team is given a blueprint or framework for delivering the project. The blueprint also assists the capital project team on which policies to follow. Dunović (2010) adds that the purpose of the governance structure is to define the capital project objectives or aims, the procedures to achieve them and the policies put in place to achieve them. When adequately following guidelines, projects are delivered or handed to the customer/s as agreed (Vanderwaldt, 2008). In addition, agility is another critical factor to project success. Agility is about flexibility and not being rigid, and it is about not following one method (State of Illinois Interoperability Project, 2013) to deliver the capital project in the SOEs successfully.

The third hypothesis is as follows:

H₃: Governance structure positively and significantly affects a capital project's success at the SOE.

2.4 Team Structure and Project Success

Oh and Choi (2020) state that a project team structure comprises the project manager, project leader, team members, and engineers and reports

to the programme manager. A capital project team that works harmoniously and has less conflict is most likely to complete a project within schedule and on time (Radujkovića & Sjekavicab, 2017). In addition, a capital project team with appropriate technical skills has a propensity to succeed. The project team succeed if it adheres to the client's specifications and the client does not alter the scope often during the capital project. Changing the project score is known as scope creep (Taherdoost & Keshavarzsaleh, 2015). In an energy SOE, where the working culture is based on respect, adhering to deadlines and is not bellicose or hostile, capital projects are completed on time, within budget with good quality according to the client's expectations (Radujkovića & Sjekavicab, 2017).

Based on this discussion, the fourth hypothesis is:

H₄: Team structure positively and significantly affects a capital project's success at the SOE.

Mathematically the theoretical framework of the study is written as follows:

$$Y'_{\text{Project success}} = \beta_1 (\text{Governance committee}) + \beta_2 (\text{Project manager}) + \beta_3 (\text{Governance structure}) + \beta_4 (\text{Team structure})$$

3. Methodology

This section discusses the research design, sample distribution, data collection and analysis and ethical clearance.

3.1 Research Design and Sample Distribution

The research design of this study was cross-sectional and predictive. It was cross-sectional because the study was on a single interval (Leedy & Ormrod, 2015). The same authors opined that predictive research uses regression analysis to predict the target variable. In this study, the target or dependent variable is project success. Since this study used regression as a statistical algorithm, it was influenced by the positivism paradigm. This paradigm states, or its epistemological position, that testing hypotheses is used to create knowledge. In addition, it states that researchers must be objective or not focus on respondents' subject beliefs or subjective views when analysing the data (Saunders, Briston, Lewis & Thornhill, 2019). Since the population was less than 500, as suggested by Leedy and Ormrod (2015), a census was used. The population was 130, and only 82 respondents participated in this study. The response rate was 63.07%. The sample distribution is shown in Table 1. The majority (65.9%) of

Table 1: Sample Distribution

Variable	Frequencies	Percentages
Gender	54 (Male)	65.9 %
	28 (Female)	34.1 %
Age	15 (25 to 35)	18.3 %
	44 (36 to 45 years)	53.7 %
	15 (46 to 55 years)	18.3 %
	7 (56 years or more)	8.5%
Employee occupation	11 (Programme Manager)	13.4%
	22 (Project Manager)	26.8%
	32 (Project Engineer/Project Technician)	39.0%
	7 (Project Planner)	1.2%
	10 (Other)	12.19%
Experience	3 (3 to 5 years)	3.7%
	21 (6 to 10 years)	25.6%
	43 (11 to 20 years)	52.4%
	15 (21 years or above)	18.3%

Source: Authors

the respondents were males. The majority (53.7%) were in this age category: 36 to 45 years. Project engineers and technicians were also in the majority (39.0%), and the majority (52.4%) were employees with experience ranging from 11 to 20 years.

3.2 Data Collection

The data were collected via a questionnaire comprising close-ended questions since this study was quantitative. The biographical section of the questionnaire measured these variables discussed in the research design and sample distribution section: gender, age, education and position. The target variable (i.e. project success) 11 items were adapted from Joslin and Muller's (2016) questionnaire. Some items were, "The capital projects are always completed in time" and "The capital projects are always completed within planned cost." The predictors (i.e. project manager, project team, governance structure and process and governance Committee) 35 items were adapted from the questionnaire developed by Li *et al.* (2017). Some of the items were, "The project manager has the necessary skills to execute all capital projects", "The project manager applies the relevant processes during the project life cycle", "There is smooth communication between team members", "Team members complete their tasks within the allocated duration", and "The company has a well-structured governance process", "The company applies the Project life cycle Model (PLCM) process to execute projects" and "The committee makes reasonable decisions for the success of the project." The target and predictor items were measured on a 5-point Likert-scale ranging (1 strongly disagree and 5 strongly agree).

3.3 Data Analysis

Frequencies and descriptive and inferential statistics were used to analyse the data. Frequencies and descriptive statistics were used to summarise the data (Zikmund, Babin, Carr & Griffin, 2009). The frequencies are discussed in the research design and sample distribution section. Descriptive statistics entailed the means and standard deviation. The former was used to determine the averages, and the latter was used to determine the spread of the data around the mean (Pallant, 2016). To test whether the data were normally distributed, Kurtosis and Skewness were calculated. The former is about the pointiness of the distribution, and skewness is the measure of the asymmetry of the distribution (Field,

2018). As suggested by George and Mallery (2010), the range -2 and +2 was used to determine whether the data were normally distributed or not.

Since the data were within the Skewness and Kurtosis range, Pearson correlation was used to determine the relationship between the predictors and the target variable. Cohen's (1988) criteria to assess the strength of the association were as follows:

- 0.10 to 0.29 means a small correlation.
- 0.30 to 0.49 means a medium correlation.
- 0.50 to 1.0 means a significant correlation.

Regression analysis was calculated to establish the highest predictor of the target variable (Skiena, 2017). In the Pearson correlation and regression analysis, the significance level was set at 0.05 or 5%, as suggested by Pallant (2016). EFA used in this study is called Principal Factor Analysis (PCA). The researchers were interested in identifying how the predictors and target variables accounted for the variance in the data (Field, 2018). The researchers also took Field's (2018) advice and included the variables or factors with an eigenvalue of 1 and above.

3.4 Ethical Clearance

The researchers were given ethical clearance by the Tshwane University of Technology (TUT) (FCRE2021/FR/01/002-MS: 2). The questionnaire uploaded in the Survey Monkey had an introduction section which informed the respondents about the purpose of the study. It was mentioned that their participation was voluntary, and to ensure that their identity was kept confidential and anonymous, respondents were informed that their information would be kept on a server to which the SOE's management did not have access. In addition, the ethical committee at TUT ensured that the questionnaire did not have language derogatory or demeaning to the respondents.

4. Results

Before conducting descriptive and inferential statistical algorithms, PCA was conducted to reduce the number of items into factors. As can be observed in Table 2, the KMO of 0.82 and was above the 0.60 threshold suggested by Glen (2016), and Bartlett's Test of Sphericity was significant ($p < 0.01$).

Table 2: EFA

Items or Variables	Governance Committee	Project Manager	Governance Structures	Project Team	Project Success
Governance committee members have adequate skills for decision-making and strategy setting	0.87				
The committees make reasonable decisions for the success of the project	0.86				
Governance committees act in the best interest of the project	0.89				
The governance committee understands the impact of project success/failure	0.82				
The governance committees understand the mandate given to them	0.75				
There is consistency in decision-making	0.72				
Decision-making is always objective	0.63				
The governance committees manage conflict of interest well	0.61				
All company projects are managed using the same methodology	0.389				
The project manager applies the relevant processes during the project life cycle.		0.80			
The project manager achieves the project results expected by applying relevant tools and techniques.		0.78			
The project manager applies the relevant knowledge areas during the project life cycle.		0.77			
The project manager applies the relevant tools and techniques during the project life cycle.		0.72			
The project manager achieves the project results expected by applying relevant knowledge areas.		0.65			
There is a specified clear change process.		0.52			
In terms of a delay in a process, there is always a catch-up plan to avoid further delays.		0.44			
Lessons learned are documented and applied to future projects.		0.43			
There is an explicit maximum limit of possible deviation in the process of PM.		0.41			
The company has a well-structured governance process.			0.83		
The project governance structures contribute to the success of the project.			0.79		
There is a correlation between corporate governance and project governance.			0.73		
The project governance structures support teamwork.			0.64		
The company applies the Project Life Cycle Model (PLCM) process to execute projects.			0.49		
Project management processes are standardised and subject to improvements.			0.48		
Projects are completed according to specifications.			0.36		
There is smooth communication between team members.				0.74	
Team members understand the project scope of work.				0.62	

Table 2 Continued: EFA

Items or Variables	Governance Committee	Project Manager	Governance Structures	Project Team	Project Success
There is a smooth flow of communication between the project manager and the project team.				0.57	
Capital projects are always completed with good quality.				0.45	
The projects always meet the client's requirements.				0.40	
Capital projects are always completed on time.					0.83
Capital projects are always completed within the estimated costs.					0.73
Project timelines are always adhered to.					0.54
The project manager completes all projects within the specified duration, the budgeted amount and with expected quality.					0.51
Team members complete their tasks within the allocated duration.					0.46
All challenges faced by the project are resolved in a timeous manner.					0.42
Variances	34.83%	9.69%	7.40%	5.60%	3.84%
Cronbach's alphas	0.80	0.70	0.83	0.79	0.78
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.82.					
Bartlett's Test of Sphericity = $p = 0.00$					

Source: Authors

As suggested by Field (2018), the cut-off to include the factor loadings were 0.3 Factor 1; labelled governance committee had 9 items with factor loadings ranging from 0.40 to 0.87. It had a variance of 34.83% and Cronbach's alpha of 0.87. Factor 2, labelled project manager, had 9 items ranging from 0.41 to 0.80. Its variance was 9.69%, and Cronbach's alpha was 0.70. Factor 3, labelled governance structures and processes, had 7-factor loadings ranging from 0.36 to 0.83. Its variance was 7.40%, and its Cronbach's alpha was 0.83. Factor 4, labelled project team, had 5-factor loadings ranging from 0.40 and 0.74. It had a variance of 5.60% and Cronbach's alpha of 0.79. Factor 5, labelled project success, had 6-factor loadings ranging from 0.42 to 0.83. It had a variance of 3.84% and Cronbach's alpha of 0.78.

The descriptive statistics data are presented in Table 3. The data were normally distributed because Kurtosis and Skewness are within the -2 and +2 range (George & Mallery, 2010). Except for project success, all the mean scores were above 3, suggesting that the respondents rated the items positively. All the standard deviation scores were less than 1, suggesting that the respondents did not vary in how they rated the items.

The data of Pearson correlation are shown in Table 4. All the predictors related positively to the project's success. The strength of the relationship between governance structure and project success was moderate and significant ($r = 0.47, p < 0.01$). The relationship between the project manager and project success was enormous and significant ($r = 0.66, p < 0.01$). The relationship between governance structure and project success was small and significant ($r = 0.36, p < 0.01$). The relationship between the project team and project success was enormous and significant ($r = 0.68, p < 0.01$). Since none of the relationships between the predictors was above 0.80 and above, the study did not have multicollinearity issues (Field, 2018).

The regression results are shown in Table 5 on the next page. The ANOVA of model 1 results were significant ($p < 0.01$), showing an overall model fit. The r^2 was 0.56. The four predictors explained 56% of the variance in project success. Only two predictors (i.e. project manager and project team) were significant predictors of the project's success. The highest predictor of project success was the project team ($\beta = 0.59, t = 4.79, p < 0.01$), and the second highest predictor was the project

manager ($\beta = 0.53$, $t=3.94$, $p<0.01$). Model 2 only shows the significant predictors of project success (i.e. project manager and project team). The ANOVA results were significant ($p<0.01$), showing an overall model fit. It had an r^2 of 0.58. The four

predictors explain 58% of the variance in project success. The highest predictor of project success was the project team ($\beta = 0.62$, $t=5.15$, $p<0.01$), and the second highest predictor was the project manager ($\beta = 0.58$, $t=4.70$, $p<0.01$).

Table 3: Descriptive Statistics

Factors	Mean	Standard Deviation	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
Governance committee	3.57	0.80	-0.45	0.27	-.025	0.53
Project manager	3.60	0.68	-0.29	0.27	-.041	0.53
Governance structures and processes	3.95	0.71	-1.10	0.27	2.02	0.53
Project team	3.67	0.69	-0.22	0.27	-0.004	0.53
Project success	2.94	0.95	1.31	0.27	1.831	0.53

Source: Authors

Table 4: Pearson Correlation

Factors	Governance Committee	Project Manager	Governance Structures	Project Team	Project Success
Governance Committee	1				
Project manager	0.52**	1			
Governance structures	0.54**	0.41**	1		
Project team	0.43**	0.56**	0.38**	1	
Project success	0.47**	0.66**	0.36**	0.68**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Authors

Table 5: Regression

Model 1				Model 2			
Predictor	Coef.	t-stats	Sig	Predictor	Coef.	t-stats	Sig
(Constant)	-1.48	-3.07	0.00	(Constant)	-1.41	-3.33	0.00
Governance committee	0.11	0.99	0.32	Project manager	0.58	4.70	0.00
Project manager	0.53	3.94	0.00	Project team	0.62	5.15	0.00
Governance structures and processes	-0.02	-0.15	0.88	$(r^2) = 0.58$ ANOVA results $F = 54.64$ $Sig. = 0.00^b$			
Project team	0.59	4.79	0.00				
$(r^2) = 0.56$ ANOVA results $F = 27.25$ $Sig. = 0.00^b$							

Source: Authors

5. Discussion

The study aimed to identify which predictor predicted project success the highest at the selected South African Energy SOE. This study contributes to the project's success body of knowledge by sharing insights from an under-researched sample. The data showed that the majority of the respondents were males. This distribution is consistent with the literature that shows that the project environment, which comprises mainly engineers, project, project technicians and planners, is primarily dominated by males (Haq *et al.*, 2018).

The data showed a positive relationship between the predictors and project success. This is consistent with the previous research (Khan *et al.*, 2018; PWC, 2014). The results can be interpreted that when a competent project manager, a project team, there are agile governance structures and processes, and the governance committee comprising is monitoring the projects effectively, there is a high likelihood that the project would be successful. By doing this, the energy SOE can improve its success rate, which according to the 2020/2021 annual report, was 30%. This means that 70% of the capital projects were not completed on time, within budget and quality (Ohi & Choi, 2020) and thus hampering meeting the electricity demand by customers and municipalities.

In addition, Model 2 showed that only two variables were significant predictors of the project's success. The R-squared was 58% suggesting that both predictors accounted for the variance of project success. The team was the highest predictor of the project's success. The second highest predictor of project success was the project manager. The implication is that the SOE should foster strategies that reduce conflict and enhance harmonious working togetherness to enhance project success (Radujkovića & Sjekavicab, 2017). It has been found that project managers with technical and soft competencies implemented the capital projects successfully (Lokhande & Vaidh, 2018; PMBOK, 2017).

5.1 Limitations and Recommendations

Even though this study created insights from an under-researched sample, it had limitations. It was conducted within a business unit, and it cannot be generalised to the entire SOE. Using a cross-sectional research design is very limiting, as it gives

a once-once picture of predictors of project success. The limitations suggest that future research should be conducted in other business units and different energy SOEs. A follow-up study should be conducted to determine if the model will still predict team and project managers as the highest predictors of project success. The following is recommended for managers:

- A teamwork relationship-building intervention should be held to solidify the team spirit.
- The project processes and structures should be agile to meet the changes during the project lifecycle.
- A governance committee should be empowered with competencies to manage the projects effectively.
- Incentive schemes should be implemented to reward the project manager and teams after meeting the project targets.

5.2 Conclusion

The literature showed many predictors of project success, and for this study, the focus was on the governance committee, governance structure and process, project manager and team. Based on the study results, it can be concluded that there is a positive and significant relationship between predictors and project success. The project team is the highest predictor of project success, and the second highest predictor of project success is the project manager.

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