

## **Project Managers' Leadership Styles and Their Effects on Project Management Performance**

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### **ABSTRACT**

PLTU-XYZ construction project is a part of the accelerated development of a 10,000-MW power-generation program first-phase which is being launched by the Indonesian government. To handle large projects that have a high level of complexity requires a leader or a project manager who has expertise in the field of power plant construction, has good leadership skills, and who is expected to be able to overcome the difficulties faced during the process of the project. This research was conducted using a qualitative method to analyze the leadership style of the project managers who had led the PLTU-XYZ project and also to investigate their leadership influence on the project management's team performance. Data were collected by using in-depth interviews, which were then analyzed by using thematic-data analysis. The study discovered that the first project manager had an 'affiliative' leadership style, the second had a 'pacesetting' leadership style while the third had a 'democratic' leadership style. The affiliative leadership style and democratic leadership style brought positive effects to the project management team's performance while the pacesetting leadership style brought negative effects to the project management team's performance. This research also found that the leadership style of the project manager was not a factor that could cause delays in the project.

*Keywords:* Leadership style, PLTU XYZ 2x30MW project, project management

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### **INTRODUCTION**

To meet the needs of electrical energy in a particular city in the island of Sumatra, PT Perusahaan Listrik Negara (PLN-Persero) planned to build, own and operate a steam power plant with a maximum capacity of 2x30MW, which was then

known as a PLTU-XYZ 2x30MW project. The project was one of the accelerated developments of phase one of a 10,000-MW power-generation program. It was launched by the Indonesian-government in 2007. Many foreign and Indonesian contractors competed to participate in the program.

To work on the PLTU-XYZ 2x30MW project, PT.PLN (Persero) appointed a partnership between PT.ABC from Indonesia with PT.DEF from China as the prime-contractor or 'Engineering Procurement Construction (EPC) Contractor'. Similar to other power plant construction programs that were included in the accelerated development of phase one of the 10,000-MW power generation program, the construction of PLTU-XYZ project was also delayed. At the time of writing in 2016, the process of the PLTU-XYZ project had reached 98.25% and was delayed for four years.

As with any other project, the PLTU-XYZ construction project was led by a project manager who was appointed as the head of the project management team. The project manager had a duty to oversee the project implementation so that it would be in line with the project plan. The project manager also had a duty to direct his team members and to communicate with all parties involved in the project implementation. This is in line with Barata's (2016) statement that the followers need examples and guidance from the leader as inspirational and behavioural standards so they could identify the aspect of their tasks that need improvement.

According to Melton and Smith (2009), the main target to be achieved by a project manager is to deliver the project as planned, taking into account the current environment - both internally within the project and externally within the business.

Every project manager has his/her own leadership style that they apply to their team members when running a project. Besides that, the project manager should develop relationships with various stakeholders, including clients, suppliers, team members, corporate management, and others. Therefore, a suitable leadership style that fits into a particular situation is absolutely important. The suitable leadership style is also crucial when the project manager faces the myriad uncertainties that usually happen when leading a project.

The PLTU-XYZ construction project faced many non-technical obstacles that caused project delays, that included the intervention of the Board of Directors to the project management team, the application of wrong policies from EPC contractor, high rainfalls, and other factors.

To make up for the project delays, PT. ABC intended to improve the performance of project management by appointing a new project manager in order to finish the project sooner. Until this study was conducted, PT. ABC had changed the project manager three times, even though there was no valid evidence that the performance of the project management team was one of the causes of project delays since there were too many factors affecting the delay of the project.

Any project should be run by the project manager in accordance with the target time, cost and quality that had been planned previously. Failure to achieve these targets will affect all team members involved in project management. Based on the discussion above, it can be concluded that the problems that were faced by PT. ABC included:

- (i) Dissatisfaction from the management and other departments of PT. ABC towards the performance of the project management team who were in charge of PLTU-XYZ Project.
- (ii) The changing of the project manager three times may indicate that the leadership style of the project manager influenced the project management team's performance, considering that each project manager had a different leadership style.
- (iii) There might be a relationship between the project management team's performances and the delay of PLTU-XYZ Project.

Therefore, the research question of this study was "What is the effect of the leadership style of the first, second, and third project manager on the project management team's performance in PLTU-XYZ?" This study aimed to identify and analyse the leadership style of the first, second, and third project manager, to analyse the effect of each project manager's leadership style on the project management team's performance, and to find out whether the

project management team's performance was one of the causes of the project delay. The main contributions of this study are:

- (i) To provide recommendations for PLTU-XYZ on the most appropriate leadership style/s to accomplish the project.
- (ii) To provide a reference for companies to choose project managers when they have a project which has a high degree of complexity.
- (iii) To provide a reference for companies to reduce the risk of losses when they are working on a project.

## Literature Review

**Project Management.** Project management is an activity which combines the technical and human aspects of a project systematically. It is used to perform control functions and supervision of all activities within a project so that it can be run successfully and be completed on time. A project is successful if it can be completed on time, meeting the expected quality standards and in accordance with the planned budget. According to 'A Guide to the Project Management Body of Knowledge' (PMBOK-Guide) (2004), project management is an application of knowledge, skills, tools, and techniques in an overall project with the aim to meet the requirements of the project. Wysocki (2007), described project management as a method or a set of techniques which was applied based on management principles that were used to perform the functions of planning, forecasting, and controlling all

work activities to achieve the desired results in a timely manner.

**Project Manager.** Every project must have a project manager. A project manager is a person who is in charge to lead the project and the project management team and is responsible for ensuring that the project is completed on time within the budget. This statement is in line with Wysocki's (2007) definition above. Meanwhile, according to Walsh (2008) "the wise project manager knows that the specification contains errors, ambiguities, and misdirection. Depending on the complexity of the project, the specifications will change many times before the project is completed, and probably will increase frequency as the deadline draws closer". Therefore, it is crucial for a project manager to have leadership skills as good as their management skills (Lewis, 2007). In general, a project manager is selected when a company obtains a project and the project will be implemented soon. Since the roles and responsibilities of the project manager are so important, his or her selection should be general management's responsibility (Kerzner as cited in Wysocky, 2007).

**Leadership.** One of the definitions of leadership is expressed by Armstrong (2009), "leadership is the process of getting people to do their best to achieve the desired result". Armstrong also conveys the opinions of some experts on leadership, such as Goleman (2000) who mentioned that a leader's singular job was to get results. Moreover, Robbins and Judge (2015)

defined leadership as the ability to influence a group toward the achievement of a vision or set of goals. Besides that, McShane and Von Glinov (2015) stated that leadership included motivating and enabling others to contribute toward the effectiveness and success of the organization of which they were members. From the definitions above, it can be concluded that leadership involves interaction in a group, involves more than one person, and has a target to be achieved.

**Leadership Style.** In doing his/her job, a leader will apply a variety of leadership styles to achieve the desired targets, so it is difficult to determine which leadership style is the best to apply in a particular situation. Based on the research conducted by Hay-McBer Consulting in Goleman (2000), there are six leadership styles which consist of:

- (i) *Coercive*: A leadership style that centralizes all decisions, regulations, measures, and policies on the leader.
- (ii) *Authoritative*: A leadership style where the leader makes his/her subordinates achieve the vision of the company.
- (iii) *Affiliative*: the leader tries to create a harmonious atmosphere and build an emotional bond with his/her subordinates.
- (iv) *Democratic*: A leadership style where the leader gives a high degree of authority to his/her subordinates in doing their jobs. The leader likes to involve others in making decisions, listen to their opinions,

and provide directions to solve problems.

- (v) *Pace-setting*: A leadership style where the leader demands perfection from his/her subordinates, sets high standards and provides examples to subordinates.
- (vi) *Coaching*: A leadership style where the leader develops his/her subordinates because, with the advancement of their abilities, they will greatly assist him/her in developing the organization.

The leadership styles proposed by Hay-McBer Consulting above was chosen to be applied in this research since it provides more comprehensive leadership styles (six leadership styles) compared to other leadership styles that proposed by other authors/theories such as by Armstrong (2009), and Path-Goal Leadership Theory by House (1971) that proposed only four leadership styles as can be seen in Figure 1.

**MATERIALS AND METHODS**

The qualitative/inductive approach was used in this research since this research intends to confirm knowledge and to gain cognition on the project managers' leadership styles and their effects on project management performance. The inductive approach begins with a special observation for generalization and a comprehensive theory (Trochim, 2006).

**Research Design**

The research design of this study is shown in Figure 2.

**Research Method**

**Data Sampling Technique.** This study applied the purposive-sampling method, which is a method of data sampling which selects participants who meet the criteria so that they can provide information that is required and the results can be used to answer the research questions.

Armstrong	Path – Goal	Hay McBer
Charismatic / Non Charismatic	Achievement - Oriented	Coersive
Autocratic / Non Autocratic	Directive	Authoritative
Enabler / Controller	Participative	Affiliative
Transactional / Transformational	Supportive	Democratic
		Pacesetting
		Coaching

Figure 1. A comparison of leadership styles (Armstrong, 2009; House, 1971; Goleman, 2000)

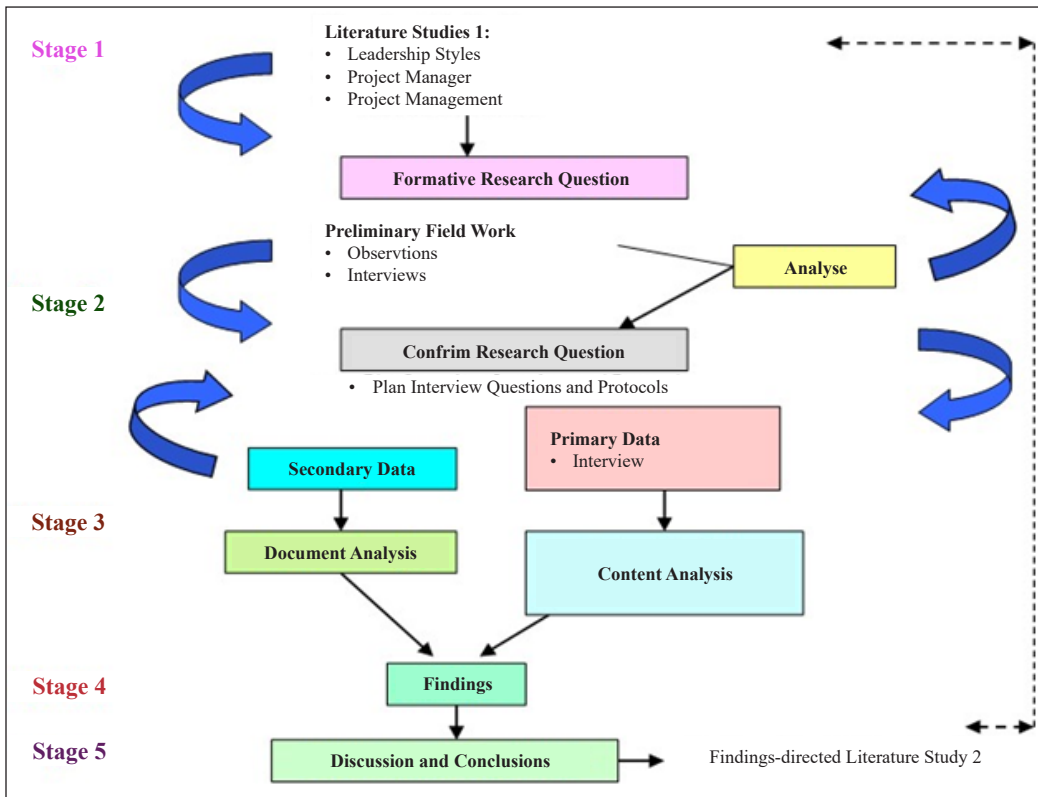


Figure 2. Research design process (Modified from Thoha (2006))

**Data Collection and Analysis Techniques.**

The preliminary data collection was conducted by interviewing three respondents that include one respondent each from the managerial, supervisor, and staff levels to assess their understanding of the interview questions list. The results were used to adjust the questions list that finally was used for the actual data collection.

In the actual data collection process, observation and in-depth interviews were conducted to investigate employees’ perception of the leadership style of the first, second, and third project manager on the project management team’s performance in PLTU-XYZ. The purpose of doing the interviews was to obtain relevant

information with a fairly high degree of accuracy. While the secondary data was obtained through the literature and the company’s documents.

The interviews in this study were conducted with three levels of respondents that included all managers (3-people), all supervisors (7-people), and all officers (3-people) in PLTU-XYZ. The aim was to investigate the opinions from different levels of respondents in order to know the opinion of the respondents from different levels. This method was conducted for ‘triangulation purposes’. According to Mathison in Wahyuni (2012), triangulation in qualitative approaches is conducted to control bias and establish valid propositions.

The interviews were conducted three times with each respondent in order to get in-depth information on the first, second, and third project managers' leadership style. Therefore, in this study 39 interviews were conducted and all of them were recorded, which were then transcribed into 198 pages.

**Data Analysis.** The transcript data of the actual interviews were sorted, coded, and analyzed utilizing thematic analysis. Various

nodes that were developed were based on the respondents' words or terms. These nodes were then grouped to determine sub-categories. Several sub-categories were grouped to develop categories and later on to develop super-categories. The categories that were developed were compared and contrasted to confirm the leadership theories/concepts. The coding results are shown in Figure 3.

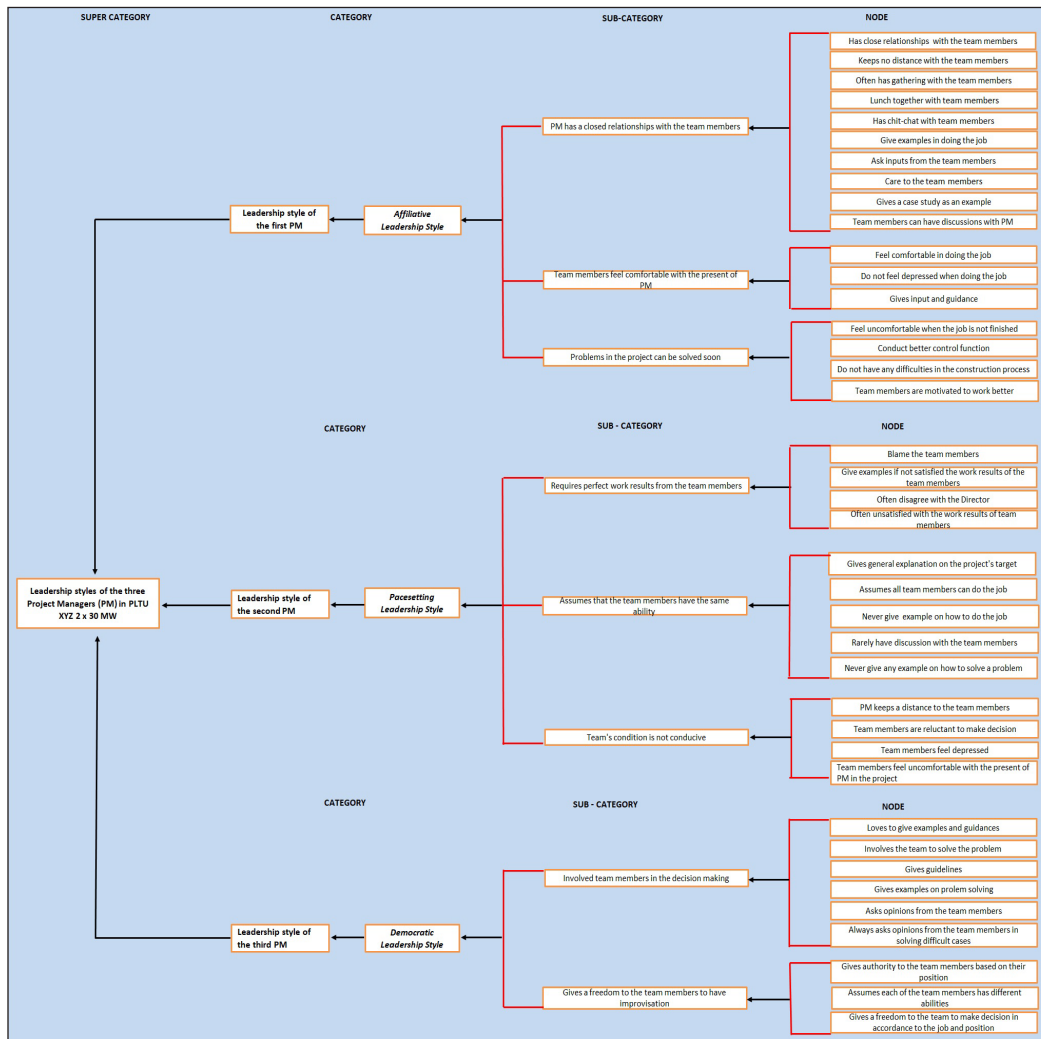


Figure 3. Coding and categorizing of project managers' leadership styles in PLTU XYZ



## RESULTS AND DISCUSSIONS

The primary data that were obtained through observations at PLTU-XYZ 2x30MW project site, and the interviews in the form of direct interviews either by phone or face to face were able to be used to confirm the leadership style of each project manager while they were leading at PLTU-XYZ 2x30MW project and to identify their influence on the project management team's performance.

### Project Manager's Leadership Style

Figure 3 presents the coding mapping results from the interview transcript data on the leadership style of the first, second, and third project managers. It consists of category, sub-category, and node from each category. Figure 3 shows that each project manager who led PLTU-XYZ 2x30MW project had their own leadership style (affiliative, pace-setting, and democratic leadership styles) when dealing with the project, team members, and other stakeholders.

**Leadership Style of the First Project Manager: Affiliative.** The first project manager who led PLTU-XYZ project had an affiliative leadership style. The characteristics of this leadership style are such that the leader tried to create a harmonious atmosphere and build an emotional bond with his subordinates as stated by Garrick (2006): "Affiliative Style - Primary Objective: Creating harmony among employees and between the manager and employees".

These characteristics are consistent with the three sub-categories of the first project manager's leadership style as the project manager had close relationships with the team members; team members felt comfortable with the presence of the project manager, and problems in the project could be solved quickly. Meanwhile, these three sub-categories were developed from the 17 nodes that were taken from the respondents' words/terms. For example:

- (i) Managers' statements: "This project manager always paid attention to the team members and often invited his team members for gatherings outside of working hours"
- (ii) Supervisor's statements: "I felt quite comfortable when the project manager was at the construction site."
- (iii) Officer's statements: "Yes, I felt very comfortable when the project manager was at the construction site."

**Leadership Style of the Second Project Manager: Pacesetting.** The second project manager who handled PLTU-XYZ project had a pacesetting leadership style. The characteristic of this leadership style is the leader demands perfection from his/her subordinates, sets high standards, and provides examples to subordinates as confirmed by Garrick (2006): "Pacesetting Style - Primary Objective: Accomplishing tasks to high standards of excellence".

These characteristics are in-line with the three sub-categories of the second



project manager's leadership style that included: requiring perfect work results from the team members, assuming that the team members have the same ability, and the team's condition was not conducive. These three sub-categories were developed from the 13-nodes that were taken from the respondents' words/terms. For example:

- (i) Managers' statements: "This project manager always assumed that his team members could do the job so he did not give a detailed explanation regarding the job."
- (ii) Supervisors' statements: "He always considered that the team members had the same ability/skills as he does; he didn't give any explanations."
- (iii) Officers' statements: "The project manager would be upset and give instructions on how to complete a job."

**Leadership Style of the Third Project Manager: Democratic.** The third project manager who managed the PLTU-XYZ project when this research was conducted had a democratic leadership style. This style of leadership gives high authority to his/her subordinates. This type of leader is very pleased to involve others in decision-making, listen to their opinions, and provide solutions to problems. Garrick (2006) referred to this leadership style as a style that had the primary objective of building commitment among employees and generating new ideas.

These characteristics are consistent with the two sub-categories of the third project manager's leadership style that included: involving the team members in decision making and giving freedom to the team members to make improvisations in doing their job. These two sub-categories were developed from the nine nodes that were taken from the respondents' words/terms. For example:

- (i) Managers' statements: "Usually for complicated things, the project manager would ask the team's opinion."
- (ii) Supervisors' statements: "I think yes, the project manager gave high authority to team members according to their position."
- (iii) Officers' statements: "Yes, always being involved in problem-solving and also its solutions."

### **Project Management Team's Performance**

Figure 4 shows that the project manager's leadership style has an influence on the project management's team performance. The influences of the leadership style can be positive or negative that ultimately might simplify or complicate the construction process at PLTU-XYZ 2x30MW project site.

**Project Management Team's Performance Under the First Project Manager.** The affiliative leadership style that was applied by the first project manager brought a positive impact on the project management

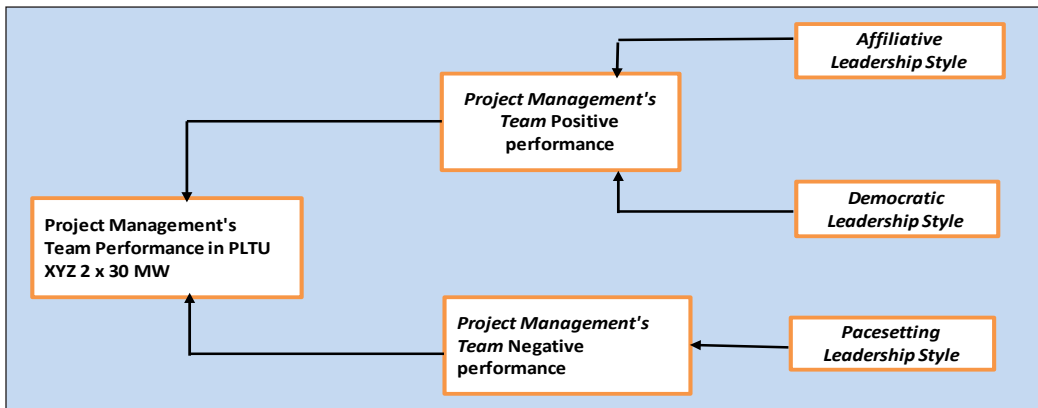


Figure 4. The effects of project managers' leadership style on the project management team's performance

team's performance. This is supported by the evidence that the team members were motivated to work better, compelled to perform better functions on planning and control of the project, and felt a comfortable working environment. This was supported by the interview results below:

- (i) Managers' statements: "For me, I think with this leadership style, we felt safe and comfortable, thus we completed our jobs better."
- (ii) Supervisors' statements: "The Board of Directors always intervened in the work arrangement at the construction project site, but however, the project manager always strived to reject any forms of intervention."
- (iii) Officers' statements: "I did not feel any pressure but instead felt comfortable."

**Project Management's Team Performance Under the Second Project Manager.**

The second project manager applied a pacesetting leadership style that brought

negative effects on the project management team's performance, for example working conditions became uncondusive, and the team members were scared to make decisions because they were afraid to be blamed by the project manager. Therefore, the team members were not motivated to work better. This can be inferred from the interview results as follows:

- (i) Managers' statements: "... I felt upset and wanted to just quickly go back home."
- (ii) Supervisors' statements: "Yes, because a lot of our colleagues felt horrified to make decisions due to the fear to be blamed or scolded by the boss."
- (iii) Officers' statements: "Not at all, because for being creative, we were scared to be blamed by the project manager if it was not what he wanted."

**Project Management Team's Performance under the Third Project Manager.**

The third project manager's leadership style,

which was democratic, brought positive effects to the project management team's performance; for example, supporting the construction process, creating a comfortable working environment for the team, encouraging the team to work harder or better, and the team members were not hesitant to make decisions because they were being given high authority.

- (i) Managers' statements: "We did not feel any pressure but instead felt comfortable."
- (ii) Supervisors' statements: "Yes sir, because the project manager was very detailed about the construction progress."
- (iii) Officers' statements: "Never felt any difficulties but instead felt peaceful in doing the work."

#### **Delay on PLTU-XYZ Project**

The project manager's leadership style was not one of the factors that caused the delay of the project; this can be inferred from the interview results as follows:

- (i) "In my opinion, the delay of the project was not because of the leadership style; there are a lot of other things to be considered such as land tillage, engineering, and the procurement side."
- (ii) "No, delay on the Babel project happened because there are few factors for example weather factors, the involvement of the Board of Director, lack of preparedness of operators, and other factors."

- (iii) "Babel project experience delay because of weather factors, infrastructure, less reliable electricity network system, Board of Directors' wrong policy and other factors. There is no relationship between the delayed project with Project Manager's leadership styles."

#### **CONCLUSIONS**

The purposes of this research were to identify and analyse the leadership style of the first, second, and third project managers, to analyse the effect of each project manager's leadership style on the project management's team performance, and to find out whether the project management team's performance is one of the causes of the project delay.

The first project manager applied an affiliative leadership style that had positive impacts on the project management team's performance. Meanwhile, the second project manager had a pacesetter leadership style that brought a negative impact on the project management team's performance, and the third project manager had a democratic leadership style that had a positive impact on the project management team's performance.

Based on these findings, it can be seen that the leadership style can bring negative effects as well as positive effects on the project management team's performance. However, the delay of the PLTU-XYZ project was not caused by the leadership style of project managers.

The best project manager is a project manager who possesses a minimum of four or more leadership styles as suggested by Hay-McBer. However, if a company is having trouble finding project manager candidates who possess several leadership styles, then a leader who has a democratic leadership style is relevant to be considered as the project manager to handle projects that have high levels of complexity. Since in the democratic leadership style the leader involves the team members in the decision-making process and gives freedom to the team members to make improvisations in doing their job which is very needed to run the project that has a high level of complexity. This is also in line with these research findings.

Each leadership style has its own strengths and weaknesses, in the sense that there is no best leadership style that can be applied in all situations. It depends on the situation faced by the project and the strength of the project manager's team members. A good project manager must be able to choose the best leadership style according to the problems faced in a particular situation.

Intervention from the company's Board of Directors regarding the project's decision-making sometimes unconsciously played a role in the delay of the project. The project manager must have the courage to reject the decisions made by the Board of Directors if such decisions would cause problems so that the project can be run in accordance with the objectives and within the period set.

### **Implications and Recommendations**

Based on the findings explained above, this section discusses the implications of the findings and provide several suggestions or recommendations.

**Selection of Project Manager.** The project manager's leadership style has an influence on the project management team's performance, however, each of these leadership styles has advantages and disadvantages depending on the situation encountered.

In selecting a project manager to handle a project that has a high level of complexity, companies might consider choosing a project manager who has an affiliative or democratic leadership style because these leaders are capable of achieving positive performance in project management. Even though for this particular project the affiliative and democratic leadership styles can bring positive results for the project management team, it does not mean that leaders who apply other leadership styles are not suitable to lead a project.

The best project manager is the project manager who possesses four or more leadership styles as proposed by Hay-McBer theory because each of these leadership styles has its own unique style in facing a particular situation or problem. This is in line with the statement of Goleman (2000), "Leaders who have mastered four or more - especially the authoritative, democratic, affiliative, and coaching styles have the very best climate and performance. The

most effective leaders are also able to switch flexibly among the leadership styles as needed.”

**Cause of Delays on PLTU XYZ Project**

The PLTU-XYZ project was delayed for four years. The delay was caused by several factors that were consistent with the categories of delays that were proposed by Kraiem and Diekmann (1987):

- Delays that are eligible for compensation (compensatory delays).  
At PLTU-XYZ’s project, this delay was caused by the project’s owner lateness to acquire the land, access road problems, lack of preparation on the operator side, and by unreliable electricity networks.
- Delays that are not eligible for

compensation (non-excusable delays).

At the PLTU-XYZ project, this delay was caused by the intervention of the Board of Directors to the project management team and the application of wrong policies from EPC contractor that were determined by the Board of Directors and influenced the construction process.

- Delays that were not caused by the project’s owner or contractor (excusable delays). At PLTU-XYZ project this delay happened due to high rainfall and a lack of appropriate local infrastructure to support a large capacity project.

To sum up, the delay of PLTU-XYZ project was not caused by the leadership

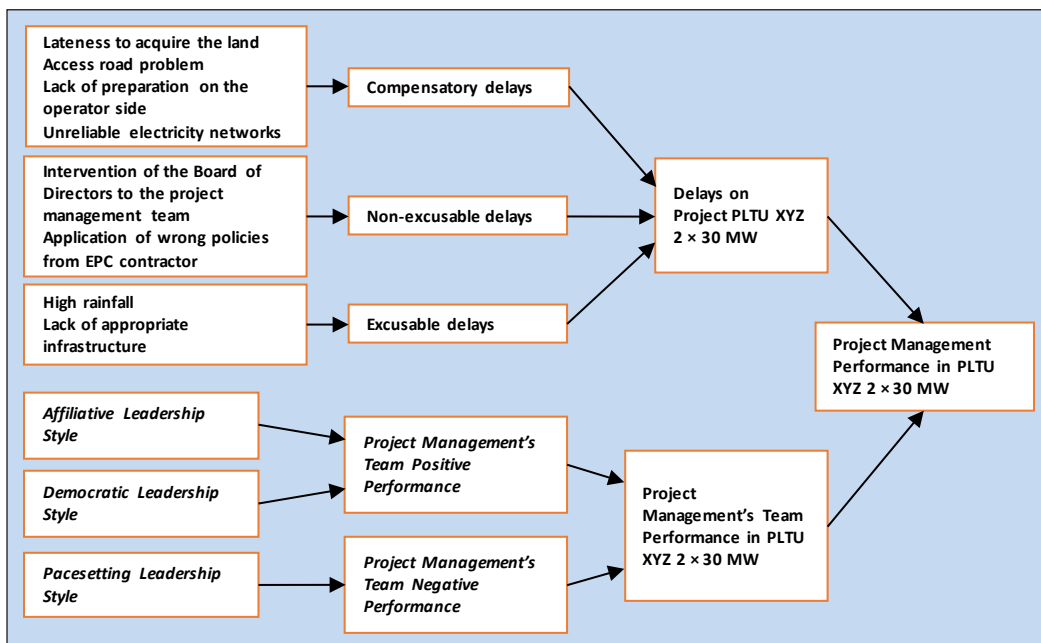


Figure 5. Factors that Influence Project Management Performance on PLTU XYZ 2x30 MW

style of the project managers, but by the owner of the project, the force majeure circumstances, and by other causes as can be seen from Figure 5 that include the factors in compensatory, non-excusable, and excusable delays. Therefore, PT. PLN (Persero) provided an extended time of contract - called the Extension of Time - to the consortium of PT. ABC and PT-DEF as the main contractor for the construction of the PLTU-XYZ project.

This research has a contribution to the body of knowledge in terms of providing the evidence on the applicability of the six leadership styles that were proposed by Hay-McBer in analyzing the leadership styles of the project managers' leadership styles in a power generation project in Indonesia that has never been conducted before.

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