

# **Analysis of the Building Project Leadership to Create a Continuous Management Process (Case Study: School Buildings in PT.X)**

Afrilia Fidelia Karina<sup>1</sup>, Manlian Ronald A. Simanjuntak<sup>2</sup>

Graduate Program Student, Majoring in Construction Management, Pelita Harapan University, Indonesia<sup>1</sup>

Associate Professor, Majoring in Construction Management, Pelita Harapan University, Indonesia<sup>2</sup>

**ABSTRACT:** Project leadership is the essential factor for a successful construction project. Many problems happen on project activities, these problems are the aspects of quality, cost and time. Therefore, the right project leadership is really needed to create continuous management process group. It's an integrated leadership to raise the success of a project from the start of the initiating process project until the closing process project. The project leadership contains behaviours of the leader focus, to the leader should do in every situation, so that the effective leadership is develop to reach the success of the construction project. This research aimed problems that will be solved: to evaluating project leadership at PT. X, identifying factors and variables project management process groups, analyzing project leadership factors and variables from the start of the initiating project process until the closing project process. Theories that will be examined in this study are theories about project leadership during the construction process according to the book of construction project management (PMBOK V edition), theories about construction project stakeholders, school buildings project and various relevant research results in the last 10 years, then continued with the distribution of questionnaires to 5 experts and 30 respondents then obtained results research from 5 factors and 48 variables to analyze the leadership management of the construction process in PT.X. Research recommendations for improving project management leadership at PT. X, quality improvement at the construction management process group are variables: X23, X29 and X22.

**KEYWORDS:** Leadership, Management Process Group, Construction Project, School Building.

## **I. INTRODUCTION**

In order to achieve the company's goals to improve the leadership performance of the construction process at PT. X and achieve progress in competition in the construction services which are currently increasingly complex, companies inevitably have to increase competitiveness and prepare themselves to become more qualified companies.

To support the success of leadership management process in a company, of course, a leader who can carry out tasks or management functions is needed, because they have the ability to influence and mobilize other people to work towards their goals. The role of leaders in each company, no matter how small the level of leadership, is very dominant in developing and increasing company productivity.

This research aimed to evaluate project leadership at PT. X, identify project leadership factors and variables, analyze project leadership factors and variables from the start of the initiating process project until the closing process project. Construction project is series of activities that related to each other to reach the goals that have been agreed from the construction contract agreement. Construction project is also process that involve several parties, especially assignors and assignees of the construction. Every construction project is unique, that they had a different problems and challenges. In technical construction on project management, we need a leadership from the start of the initiating process project until the closing process project. Project leadership is a global system of project management that manages the course of the project to create a building or edifice according to the based plan. Project leadership contains

# International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: [www.ijirset.com](http://www.ijirset.com)

Vol. 7, Issue 10, October 2018

behaviours of a leader that focus to what leader should do in every situation to create an effective leadership to reach a successful project. PT. X is a company that handles construction field as a project owner. Continuous management process is a quality improvement at every stage of the construction projects in maintaining a quality in order to remain a predetermined standard and becomes the most important emphasis in the continuity of a construction project. Where it is expected that after the one project is done, the other project will be better and so on.

## II. RELATED WORK

### Project Management Process Group

Successful project management requires a precise set of skills, knowledge, flexibility, and creative problem-solving. Seasoned project leadership know that along with years of experience comes a greater understanding of the complex interrelationships between all parts of a project from set-up to completion. Leading effective projects requires not only strong general leadership skills, but also a methodological and responsive set of core processes and abilities. Success on one project can be duplicated in subsequent projects and may lead to more contacts and additional opportunities. While no two projects will be identical, mastering a standard set of industry-wide processes can leverage more effective project management strategies and can yield to increased professional advancement. These five essential areas or process groups are: initiating, planning, executing, monitoring and controlling, and closing.

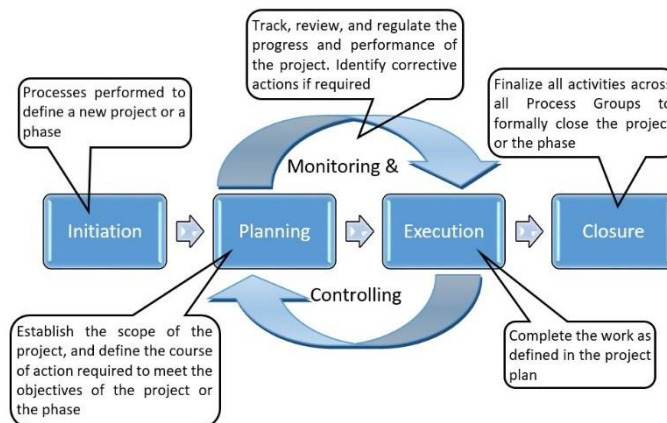


Fig1: The management process group PMBOK 5<sup>th</sup> edition

Based on figure 1, the process of initiating helps to set the vision of what is to be accomplished. This is where the project is formally authorized by the sponsor, initial scope defined, and stakeholders identified. The planning process element is establishing the total scope of the project. While it may appear as though that was accomplished in Initiating, scope (along with risks, milestones, summary and budget) was defined there at a high level. Naturally, the next thing to do after Planning is to execute, to do the work. But what's important here is that we now have a project management plan to which we can execute. It helps keep us on track. While the other process groups occur sequentially, Monitoring and Controlling hover over the whole project and so, happen throughout the project and are not linear. The lesson learned here is that assuming that you'll somehow magically stay on track just because you've planned to be is a recipe for failure. Only constant vigilance, tracking and reporting will keep the project focused towards meeting its objectives. The last process is closure, the leader should formally close the project by archiving records, holding a lessons learned session, and celebrating and releasing the team.

# International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: [www.ijirset.com](http://www.ijirset.com)

Vol. 7, Issue 10, October 2018

## Leadership Project Management

Project leadership is an overall project management system that regulates the course of the project to produce a building or building in accordance with the plan. Urgency of leadership in operationalizing the project has a very fundamental role in achieving the goals that have been formulated. Because the activities of leaders try to influence, guide and direct others to cooperate in carrying out their duties and responsibilities in the project.

The potential to lead is actually owned by everyone, even though the background, simplicity or lack of confidence and experience can create doubts. Actually, seriousness in preparing to be a leader makes someone more able to face every challenge and obstacle, as long as the preparation is made better in developing his skills and knowledge about leadership, especially those that must be more mature is an attitude of trust in yourself.

According to the fifth edition of the "A Guide to Project Management Body of Knowledge (PMBOK)", the success of a project requires strong leadership skills. Leadership is very important to go through in all life cycles or project stages. The leadership pattern studied in this study is what leaders do in each stage of the construction process to create a successful construction project.

## Research Gap

Leadership has a closely related to project management. According to Krezner (1995), "project management is a process of planning, organizing, leading and controlling resources to reach the identified goal". Project management concepts need a single person in charge (also known as a leader) as an information center related to the project, as an integrator and coordinator of a whole activities and people in accordance with interest and priority of the project (Soeharto, 2000). There is a similar main concept in every project used to lead the project until the ending step.

According to Oberlender (2000) the main concepts of project management are: [1] ensure that only the person in charge that look after the project, budget, and schedule, [2] start the project after signing the project, and ignore pressures to begin, [3] confirm the scope that has agreed, budgeted, and scheduled, [4] define the project scope before the project is started and ensure there is no changing without an agreement, [5] ensure that the project scope is being understood by every single parties including the project owner, [6] establish the budget and schedule development, [7] state that budget and schedule have a relation with project scope, [8] define the structure of job desks that divides the project into measurable and describable work units, [9] define a project organization scheme that shows responsibilities and otorities of every member in project team, [10] build project staff to an effective team that work together as an integrated unit, [11] emphasize that quality is a must, it will be worthless if we ignore the cost and time of work, [12] manage all tasks, all precious works that need compensation, [13] develop project schedule with the logic work order to complete the works, [14] define a control system that can anticipate and report the deviation happened on time, so that the corrective action can be chosen, [15] find the external problems that can be solved internally with a transparent way by everyone on the team, [16] make a document for all works for future problems and [17] prepare a formal agreement with construction news.

## PT.X

PT. X is a construction management company engaged in the construction services and maintenance of school buildings that are spread throughout Indonesia. PT. X is a private company that directly funds the project to completion they construction process. PT. X is the building construction organization that have a mission, to be a construction organization known for integrity, respect, fair dealing, quality, safety, pride, and excellence. An organization committed to satisfy customers by producing quality work with risk-managed environment and to deliver excellence in service. An organization where our people can be proud to be in the construction industry and where our people can grow, perform their best, and continually striving to produce excellence. To improve the quality in the management process of the construction phase in PT.X, the researchers conducted this study.

# International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: [www.ijirset.com](http://www.ijirset.com)

Vol. 7, Issue 10, October 2018

## III. METHODOLOGY

In the process the researcher will identify project leadership factors and variables in improving the performance of a sustainable construction process in the process of organizing school buildings in PT.X. This research involved several parties, namely the central management and construction employees working at PT. X. The employee involved in this study aims to obtain information on the extent to which the leadership process that occurred based on his experience working at PT.X. Where this information will be very helpful in improving leadership to realize a sustainable construction process. This line with the objective of this study, the survey can be classified as exploratory, with a quantitative and qualitative approach, in which this study distributes questionnaires to 5 experts and 30 respondents and will be analyzed using the SPSS program. There are 5 factors and 48 variables reviewed from the PMBOK and it will be given to the experts and respondents. The 5 factors and 48 variables of the leadership of construction process based on PMBOK 5<sup>th</sup> are:

Table 1: Factors and Variables Research

No.	X & Y VARIABLES
<b>A</b>	<b>Project Initiation Process</b>
X1	The leader defines project goals in detail
X2	The leader identifies determinants of the success of project implementation
X3	The leader can define project scope
X4	The leader can define project schedule and project resource requirements outline
X5	The leader can assume project include the project limits as a reference for making project management plan
X6	The leader gives assignments to the project manager and project team
<b>B</b>	<b>Project Planning Process</b>
X7	The leader understands the project scope
X8	The leader can define activities inside the project
X9	The leader appoints a team to make detailed project implementation schedules
X10	The leader appoints a team to make budget allocation that needed by project implementation
X11	The leader define procedure and mechanism of project control
X12	The leader define qualification, role, responsibility and number of personnel for the project implementation
X13	The leader can identify the risks of the project and define the preventions
X14	The leader appointments a team to make a communication plan during the project implementation
X15	The leader defines and approves the baseline project that can be reference to measure project performance
X16	The leader define project success criterias
X17	The leader understands the sequence of project activities
<b>C</b>	<b>Project Execution Process</b>
X18	The leader help all teams involved in construction process to make the project plan happen
X19	The leader helps coordinate project team performance
X20	The leader helps optimize project team performance

# International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: [www.ijirset.com](http://www.ijirset.com)

Vol. 7, Issue 10, October 2018

X21	The leader appoints a team to write the project implementation report
X22	The leader helps actualize every project plan changing through an agreement
<b>D</b>	<b>Project Monitoring &amp; Controlling Process</b>
X23	The leader controls the activities of a project
X24	The leader ensures that the achievement of the project objectives is already in accordance with the predetermined target
X25	The leader controls project implementation to be in accordance with the initial estimate and plan
X26	The leader carries out a project control mechanism so that there is suggestion from the project team whether the initial planning of the project needed to be updated or not
X27	The leader appoints a team to control time, scope, and quality
X28	The leader appoints a team to control the cost
X29	The leader appoints a team to write a report about the project progress
X30	The leader understands the control of plan changing and its connection to cost control
X31	The leader understands the control of plan changing and its connection to quality control
X32	The leader understands the control of plan changing and its connection to time/schedule
X33	The leader conducts regular development to the project team, such as: training, seminar, etc.
X34	The leader creates a productive synergy between the divisions inside the project
X35	The Leader listens to the concern of his subordinates and responds appropriately that has a direct impact on the success of the entire project
X36	The leader has a strong internal communication among the project teams and a external communication to decrease misscommunication in the project
X37	The leader holds regular meetings to find out the progress in a project
X38	The leader can manage and understand the whole resources in the project (man, material, machine, method, money)
X39	The leader can monitor the team performance so that the team be more productive
X40	The leader distributes important information about every project needs to his subordinates
X41	The leader control changings and recommends corrective or preventive action to anticipate possible problems
X42	The leader monitors on-going project activities to project management plan
X43	The leader limits the factors that can thwart control of change, so only approved changes can be implemented
<b>E</b>	<b>Project Closing Process</b>
X44	The leader appoints a team to perform opnam project along with defect list
X45	The leader close the project formally with all parties involved in the project
X46	The leader ends the assignment of project team members
X47	The leader appoints project manager to do the handover of the work
X48	The leader disbands the project team
<b>Y</b>	<b>In your opinion, does the performance of a sustainable construction process need to be considered in the process of implementing a building?</b>

# International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: [www.ijirset.com](http://www.ijirset.com)

Vol. 7, Issue 10, October 2018

## IV. ANALYSIS RESULTS

The results of the building project leadership analysis obtained in this study after conducting a correlation test, intercorrelation test, factor analysis and regression analysis, obtained 3 main variables to improve the performance of a sustainable construction process, there are: variable [X23] the project leader controls the activities/activities that happened in the project to realize a sustainable construction process of 60.9%, variable [X29] the project leader appointed a team to make a report on progress so that the construction process proceeded according to the prepared plan of 17.1% and variable [X22] the project leader helped realize all previously agreed upon project planning changes to realize a sustainable construction process 4.2%.

## V. CONCLUSION

The leadership context studied in this paper is the leadership pattern of the construction process from these five essential areas or process groups are: initiating, planning, executing, monitoring and controlling, and closing process. The leader plays a full role in carrying out and determining all stages of the construction process to realize a sustainable construction process. It is expected that after the one project is completed, the other project will be better and so on.

Factors and variables examined in this study are factors taken from the construction project management ledger, namely the fifth edition of PMBOK, the construction process at the project initiation, planning, executing, monitoring and controlling, and closing process. There are 5 factors and 48 leadership variables in building construction projects at PT. X to realize a sustainable construction process.

There are 3 important variables from this research, recommendations for improving project management leadership at PT. X, variables X23, X29 and X22. [X23] the project leader controls the activities/activities that happened in the project to realize a sustainable construction process of 60.9%, [X29] the project leader appointed a team to make a report on progress so that the construction process proceeded according to the prepared plan of 17.1% and [X22] the project leader helped realize all previously agreed upon project planning changes to realize a sustainable construction process 4.2%. Other variables are also very important to support the success of the leader in leading a project

## REFERENCES

- [1] Institute, P. M, Project Management Body of Knowledge (PMBOK V Edition), Newtown Square, Pennsylvania: Project Management Institute, Inc, pages 47-60, 2013.
- [2] Abdul Hakim, Anwar Hadipapo, Peran Kepemimpinan dan Budaya Organisasi Terhadap Kinerja Sumber Daya Manusia di Wawotobi, *Jurnal Ekonomi dan Bisnis* Vol. 16, No. 1, 2015.
- [3] Alberto, Agung Suprojo, Ignatius Adiwijaya, Peran Kepemimpinan dalam Memotivasi Kinerja Pegawai. *Jurnal Ilmu Sosial dan Ilmu Politik* Vol.3, No.2, 2014.
- [4] America, U. S, Project Leadership Step by Step (Part II), Nydalsveien Oslo, Norway: Svein Arne Jessen, Pages 21-34, 2010.
- [5] Bennett, F. L, The Management of Construction, Jordan Hill, Oxford: Butterworth-Heinemann, Pages 218-245, 2003.
- [6] Fence Stone, Daud O.S Hutagalung, Ferry Hermawan, Riqi Radian Khasani, Pengaruh Pola Kepemimpinan Produktivitas Konstruksi Indonesia Terhadap Daya Saing Infrastruktur. *Jurnal Karya Teknik Sipil* Vol. 6, No. 4, 201-213, 2017.
- [7] Madsen, S, The Power of Project Leadership, United States: Kogan Page Limited, Pages 68-84, 2015.
- [8] Lawalata, G. M, Prinsip-Prinsip Pembangunan Jalan Berkelanjutan. *Jurnal Transportasi* Vol. 13 No. 2, pages 115-124, 2013.
- [9] Ramli, Antonius Margono, Bambang Irawan, Peran Kepemimpinan dalam Meningkatkan Kinerja Pegawai pada Kantor Camat Samboja Kabupaten Kutai Kartanegara, *eJournal Administrative Reform*, 807-819, 2014.
- [10] Riaz Ahmed, Noor Azmib, M. Tahir Masood, Mohammad Tahira, M. Shakil Ahmada, What Does Project Leadership Really Do? *International Journal of Scientific & Engineering Research* Vol. 4, 2013.
- [11] Sudharto, Pengaruh Pola Kepemimpinan Kepala Sekolah dan Suasana Kerja Terhadap Kinerja Guru, *Jurnal Manajemen Pendidikan*, Vol.1, No. 2, 2012.