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Risk Management Maturity Quality Performance of Building Contractors Dki Jakarta Provincial Government Building

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ABSTRACT

In this highly competitive era of globalization, organizations need to produce high-quality performance in order to achieve success. Similarly, in project management, project managers need to learn to apply the best practices to the strategic plan so that satisfactory results can be achieved. This research methodology discusses the researcher's strategy of the research process, identification of variables, research instruments used for the type of data collected, data collection techniques, data processing techniques. The results of the analysis discussed during this study obtained 3 risks related to quality performance that have the highest impact and frequency during the construction work of the DKI Jakarta Provincial Government building which is the result of the implementation of the Contractor. Based on the results of the analysis that has been done, several things can be concluded, including the Literature Review showing variables for quality performance and Enterprise Risk Management (ERM), namely the risk of quality performance as many as 42 variables. Enterprise Risk Management (ERM) has 63 criteria. After verification, clarification and validation from 3 experts obtained variables given to 20 respondents of Work Owners (DCKTRP DKI Jakarta Province), Contractors and Supervisory Consultants to find out the dominant risk, which details the variables, namely Quality Performance Risk as many as 35 variables. Contractor to assess the Risk Management Maturity of the Contractor in carrying out Building Construction, with a total of 63 Enterprise Risk Management (ERM) criteria.

INTRODUCTION

Jakarta as a metropolitan city is a barometer of development for other cities in Indonesia, the high acceleration of development in Jakarta in supporting economic growth and infrastructure fulfillment is a means of economic and social support for the community, marked by the allocation of the DKI Jakarta Regional Budget which is quite large in recent years in development, especially the construction of buildings in the scope of creation, for the 2022 fiscal year DKI Jakarta APBD worth Rp. 82.47 trillion and fiscal year 2023 worth Rp. 83.7 trillion. The use of the budget allocated for the DKI Jakarta Provincial Government building construction project is an integral part as a project to provide supporting facilities for the activities of DKI Jakarta Provincial Government employees in providing services to the people of the city of Jakarta. The reliability of the DKI Jakarta Government building is a top priority so that services to the community are more optimal. Some of the construction of DKI Jakarta Provincial Government buildings carried out by contractors experience problems in the implementation of construction which are influenced by: implementation that does not meet technical specifications as agreed in the contract, competence and professionalism of the contractor. Construction norms and work steps that need to be understood by the Contractor in achieving 4 project objectives (Husen A., 2009), namely: economic costs, quality is met, time is not exceeded and work safety is met. The weakness of construction

contractors in DKI Jakarta Provincial Government buildings has an impact on the quality of construction so that the utilization of buildings is less than optimal is felt at the stage of building utilization in the form of imperfect installation of architectural, construction and Mechanical Electrical elements which have an impact on disrupting employee performance when the building is used and hampering employee performance in carrying out daily official duties.

In this highly competitive era of globalization, organizations need to produce high-quality performance in order to achieve success. Similarly, in project management, project managers need to learn to apply the best practices to the strategic plan so that satisfactory results can be achieved (Kerzner, 2002). A strategic plan for project management means the development of a standard project management methodology that has been adapted to the environment of each organization (M. A. P. Mangkunegara & Hasibuan, 2009) (A. P. Mangkunegara & Prabu, 2005) (A. A. A. P. Mangkunegara, 2011). As part of the strategic plan for project management, the maturity model identifies the steps that need to be taken, the type of work that needs to be completed, and the sequence of activities that need to be carried out and have meaningful and measurable results. Basically, the purpose of this model is to provide a framework for improving the business outcomes of the organization by assessing the strengths and weaknesses of the project management organization, comparing it with similar organizations and measuring the correlation between the level of project management and also the reality of project performance.

If the detection of construction failure is late, this will result in additional costs for repair work amounting to 6-12% of construction costs and 5% of maintenance costs. Almost 20-40% of construction failures occur in the implementation process stage and 54% of these failures are caused by unskilled labor and the remaining 12% are due to material quality (Akinci et al., 2006).

To get a good construction product in terms of quality, many things must be considered by the Contractor in risk management maturity (Al-Bahar & Crandall, 1990) (Duffield & Trigunarsyah, 1999). Assessing the level of maturity of the Contractor in managing risks needs to be known and reviewed so that his understanding and ability can be improved in overcoming risks during construction. This risk management maturity is carried out to anticipate the increasingly complex risks in construction projects. Construction projects are one type of work that has a relatively high potential risk compared to non-construction work (Oe, 2012). This is because project characteristics are unique, project teams with varying expertise and have a degree of uncertainty (Tserng et al. 2009). Construction projects are influenced by many variables and unforeseen factors that require many different skills, materials, tools, and resources (Burtonshaw-Gunn, 2009). Managing these factors is not an easy thing, especially in the implementation of the project there are many changes, for that it is necessary to have a process of identifying and analyzing project risks. It aims to maximize the positive effects of opportunities and minimize the consequences of negative effects commonly called project risk management (Rose, 2013) (Akinci et al., 2006).

In the DKI Jakarta Provincial Government Building construction project carried out from 2021 to 2022, some still experience problems in quality, this occurs due to the lack of risk handling related to quality performance in construction service provider companies (contractors). A total of 118 building construction projects of the DKI Jakarta Provincial Government are 95% carried out by contractors with medium and small business qualifications. Contractors are required to be aware and pay attention to potential risks and help achieve goals. The ability to carry out good and effective risk management governance will provide information and indications of possible risks that will occur in the company. The contractor as the executor of the work must be able to meet the technical specifications according to the contract agreement. To be able to minimize the risks that occur, it is necessary to identify and mitigate the possible risks that will occur. Risk management is an important strategy that needs to be carried out by organizations (Araujo et al., 2017). This is because the implementation of risk management can be a preventive measure so that companies have the opportunity to avoid and minimize existing risks (Dalimunthe, 2020). Even though risk management has been implemented, the maturity level of risk management implementation also needs to be measured so that it can be an evaluation material for the organization. According to Bhosale et al. (2018) risk maturity can be a very appropriate method for evaluating risk management practices. The detailed work does not only refer to the technical specifications and plan drawings that have been set, but there are also construction norms and work steps that need to be understood by the Contractor in achieving the 4 project objectives (Husen, 2009), namely: economical costs, quality met, time not exceeded and work safety met (Husen, 2009). If one of the project objectives is not met, it can be interpreted that the project has failed. Construction failure or building failure is a long process of a process of carrying out work.

This section is an attempt to explicitly state what research questions need to be answered or find ways to solve the problem. Problem formulation is an elaboration of problem identification, problem significance and problem formulation. In other words, this problem formulation is a complete and detailed question about the scope of the problem to be studied based on problem identification and problem limitations. A good problem formulation means having answered half the question or of the problem. Well-formulated problems, not only help to concentrate the mind, but also direct our way of thinking.

Problems that are often faced in the DKI Jakarta Provincial Government Local Government Building project are in the detailed work of structure, architecture, mechanical electronics and infrastructure. These jobs often have damage or errors in the work. The damage is for example damage to plumbing and electrical installations that result in rework on wall or ceiling finishing work. In addition to damage, there are also errors from the work process, for example, the wrong direction of floor tiles so that water does not lead to the floordrain or errors that cause the aesthetics of the building to decrease, for example, the installation of a list plank with grc material that is not straight (wavy) or the presence of hair cracks due to too fast cleaning after plaster work. This work rework illustrates the poor quality performance of project implementation implemented by the contractor. Many aspects of risk at the project implementation stage can cause product quality failure (non-corformance) so that it must be dismantled and reworked, some of these factors arise due to human resource aspects. There are also many other aspects that are common risk factors for quality failure at the stage of implementing building projects, namely material aspects, including non-compliance with the required quality standards, late distribution of materials. Managerial aspects at the implementation stage such as imperfect project planning and scheduling, poor distribution of data/information, slow decision making, unclear coordination between parties are also risk factors that cause product quality discrepancies.

Quality problems are often a recurring problem, so the ability to manage the risk of DKI Jakarta Provincial Government Building Contractors needs to be known and analyzed then the level of risk maturity can be determined in the implementation of building construction. The problem of quality performance will be a separate assessment of construction products at the DKI Jakarta Provincial Office of Copyright, Spatial Planning and Land as a Barometer of Construction activities in the DKI Jakarta Provincial Government.

The purpose of this study is to obtain the dominant quality performance risk variables and assessment variables of the risk management maturity level of building contractors of DKI Jakarta Provincial Government buildings. Obtain the level of risk management maturity of building contractors of DKI Jakarta Provincial Government buildings. Provide recommendations to improve the risk management maturity of DKI Jakarta Provincial Government building contractors.

The results of this study are expected to provide benefits in assessing the level of quality performance of medium and small business classification contractors in identifying risks, including theoretical benefits by knowing the assessment of the safety of the contractor's risk management. Know how to increase the maturity of the Contractor in handling the risks of building implementation. Provide benefits and references for further research. The practical benefits of the results of this study can provide recommendations (inputs) to the DKI Jakarta Provincial Office of Copyright, Spatial Planning and Land as a unit within the DKI Jakarta Provincial Government which carries out planning, supervision, monitoring and evaluation of buildings owned by the DKI Jakarta Provincial Government and guidance on technical actors of building buildings within the DKI Jakarta Province in knowing the maturity level of Contractor Risk Management towards project implementation in order to make improvements and improve the quality of the Contractor in the future so that it can contribute to producing buildings that can be utilized optimally.

METHOD

Discussion on the methodology of research and presented about the research design used to achieve the objectives. The purpose of this study is to measure the level of maturity of the Contractor in identifying the quality risks of the implementation of Building Construction so that the results of the Contractor's performance in influencing the quality of construction work are known.

This research methodology discusses the researcher's strategy of the research process, identification of variables, research instruments used for the type of data collected, data collection techniques, data processing techniques. Research is a systematic search for something (inquiry) with an emphasis that this search is carried out on problems that can be solved. The conceptual process is then outlined in qualitative research methods by conducting patterns of analysis, observation, and data collection as needed. From the results of these observations, data is obtained to be processed into information for analysis and finally the necessary conclusions are drawn

(Singarimbun, 1995). To test the results of the hypothesis, appropriate research methods are needed. There are three conditions that need to be considered in this regard, namely: the type of question asked, the extent of control the researcher has over the behavioral event to be studied and his focus on contemporary events as opposed to historical events (Robert, 2002).

In the research of contractors with medium and small business qualifications who carry out the construction of the DKI Jakarta Provincial Government Building for the 2017-2022 fiscal year with the object of quality performance risk management handled by the contractor using quality performance variables that affect the results of construction products and ERM variables Zhao et al. (2013) that affect the success of the contractor company.

RESULTS AND DISCUSSION

The results of the analysis discussed during this study obtained 3 risks related to quality performance that have the highest impact and frequency during the construction work of the DKI Jakarta Provincial Government building which is the result of the implementation of the Contractor, the risks of quality performance are:

a. Lack of communication and coordination between parties involved in the project
b. Delays from the schedule
c. Delays in material supply

The maturity measured Contractor Assessment has the characteristics that the Contractor's Risk Management has been stadardized, there are written principles along with basic training. In level 3 maturity in the Coso Monitoring Guidance, 2009 defines its maturity indicators as follows:

Table 1. Indikator Maturity Level 3 (Systematic)

Documentation	:	Comprehensive and consistent
Awarenes and Understanding	:	It has been formally communicated and training carried out
Attitude	:	Control is integrated
Control Procedures	:	Formal and standardized
Monitoring	:	Nothing yet

Source: Coso Monitoring Guidance, 2009

Meanwhile, based on the concept of measuring organizational maturity Capability Maturity Model (CMM) developed by the Software Engineering Institute, organizations that are at maturity level 3 (Level Defined), are characterized as follows:

a. System development process standards have been created and standardized;
b. There is a commitment to follow the standards of the system development process under any circumstances;
c. The quality of processes and products is still qualitative not quantitative (not measurable only approximately);
d. Not applying Activity Based Costing; and
e. Absence of a standardized feedback mechanism.

Based on the above, it can be seen the same relationship between the high risk category of building construction carried out by the DKI Jakarta Provincial Government Building Contractor with level 3 maturity which we see from the level 3 maturity indicator table, namely the problem of no monitoring of the implementation of risk management, resulting in 3 high risks of quality performance during the implementation of building construction work of the Provincial Government Jakarta.

A. Dominant Risk Factors of Quality Performance

1. Lack of communication and coordination between parties involved in the project.

Communication Management in projects aims to understand the processes carried out in communication management, understand the benefits of doing communication management, understand what documents are needed in project communication management and how to make these documents. The purpose of project communication management is a competency that must be possessed by the project manager with the main objective being to ensure that all information about the project will be timely, appropriately created, collected, shared, stored and organized appropriately.

According to Goerge R. Terry in (Prabowo, 2021) which implements the main functions of management into communication management, based on stages in the management process, namely Planning, Organizing, Actuating and Controling which will be explained as follows:

1) Communication Planning

It is an activity to summarize the company's objectives and develop and advance various plans to achieve the goals of the company that have been set. Planning or planning is done in determining goals for the entire organization and is the best step to achieve these goals. The manager will evaluate different alternative plans before taking action to see if the plan is suitable for use in achieving the objectives. The benefits of the planning stage are that the implementation of tasks can be carried out precisely and each division is organized towards the same vision, other benefits can anticipate problems that will occur. And can facilitate supervision, used as a handle in carrying out an activity.

2) Organizing Communication

Organizing means determining, grouping, and structuring the various activities necessary to achieve goals, organizing people (employees) for those activities, providing physical elements corresponding to work requirements and the specifics of authority relations, delegated to everyone with respect to the expected performance of each activity. Organizing is the activity of dividing tasks among resources in a company in accordance with its capabilities. There are two activities that take place during the organizing phase, namely staffing and managing company resources. Staffing is an important activity because it allows managers to ensure that someone is in the right place to ensure the job is done. After proper distribution, leaders must coordinate all of these potential resources to ensure everything runs smoothly.

3) Communication Implementation

Implementation is the action taken to ensure that everyone in the group strives to achieve its goals in accordance with the business plan and organizational commitments. Another opinion about the implementation of implementation is the most important stage in the management process. The stage of planning and organizing is good, but still not optimal in the implementation stage, then the results of these activities will not be as expected. Another term related to direction or implementation is also called actuating or "Action Movement" is continuing activities that have been determined in planning and organizing to meet a specific goal. Therefore actuating means making people consciously cooperate in achieving the desired goal. The actuating function prioritizes activities that blend with members of the organization. Hold back good planning and organization becomes meaningless after deploying its members in carrying out tasks. All members of the company must be optimized in achieving organizational or company goals.

4) Communication Evaluation The final stage is evaluation.

The purpose of the evaluation is to measure the level of effectiveness at each stage of planning, implementation and impact on the company. Evaluation is usually done including claiming actual results. Evaluation is a method of assessing and reviewing the success or failure of communication activities carried out with the aim of improving the success achieved previously. Evaluation is done to measure the success rate of communication. Evaluation activities can be started with pre-set goals, whether implemented or not, whether the achievement is significantly high or low. The effectiveness of a communication program can only be known by evaluation.

The purpose of this risk factor is that the involvement of various stakeholders in a construction project indicates that effective and efficient coordination and communication between them is a crucial element that must be present. The lack of communication between parties and elements in the construction project will have a negative impact on the quality of work coordination. Communication and information that is not good or wrong will have a negative impact on the quality of performance, project costs become large, quality is not appropriate, delay in implementation time (Ripkianto and Winanda, 2013). Basically, various problems, both technical and non-technical, can actually be resolved with effective communication, so that conflicts that lead to disputes can be suppressed quickly. However, things that hinder communication in construction projects still arise and have a negative impact on project success. Because there are still obstacles in communication on a construction project, it is necessary to identify the causes that hinder effective communication in the DKI Jakarta Provincial Government building construction project, to determine the factors that hinder effective communication in the DKI Jakarta Provincial Government Building construction project.

2. Delay from schedule.

Control of the schedule of work implementation is the responsibility of the Contractor in achieving the work time. Field dynamics are often an obstacle in achieving a predetermined time. The dynamics of the field can be due to errors from job owners in terms of job changes or from the job executors themselves

in determining work methods and the availability of support for tools, materials, labor and finance. Kraiem and Dickman quoted from Wahyudi, (2006) stated, Causes of non-excusable delays caused by actions, omissions, or mistakes of contractors:

1) Identification, duration, and work sequence plans that are not complete and not well arranged, Identification of project activities is the initial stage of preparing a project schedule. Incomplete identification will affect the overall duration of the project and disrupt the order of work.
2) Inaccuracy of manpower planning, The amount of labor needed in each stage of project implementation varies, depending on the size and type of work. Planning that is not according to the needs in the field can cause problems because labor is a resource that is not easy to get and very expensive.
3) Poor labor quality, lack of skills and expertise of workers can result in low labor productivity so that it takes a long time to complete the project.
4) Delays in the provision of tools/materials due to contractor negligence, one of the supporting factors in the direct implementation of the project is the availability of equipment and materials to be used. Delays in providing equipment and materials in the project can be due to delays in supplier delivery, difficulties in obtaining them, and shortages of the materials themselves. The provision of tools and materials that are not in accordance with the needs and planned time, will make worker productivity decrease due to the number of idle hours, thus hampering the pace of work.
5) The type of equipment used is not in accordance with the project, equipment is one of the resources used directly in the implementation of the project. Planning the type of equipment must be adjusted to the characteristics and magnitude of the project so that the objectives of the project work can be achieved.
6) Slow resource mobilization, the mobilization referred to in this case is the movement of suppliers to the project location, between locations within the project, and from within the project site to outside the project site. This is greatly influenced by the provision of project roads and the delivery time of tools or materials.
7) Many work results must be repeated / corrected due to defects / errors, this factor is more directed to the quality or quality of work implementation, either structurally or final completion which is influenced by project drawings, project scheduling, and labor quality. Basically, all repairs/repetitions due to defects or errors require additional time.
8) Financial difficulties, the turnover of money flows, both inflows and outflows, must be well planned for their use, so as not to cause difficulties for the project itself. These financing difficulties by contractors, especially with regard to payment obligations to material suppliers and payment of labor wages. This will cause a hiccup in the support of existing resources and make the implementation of work hampered.
9) Lack of contractor experience, contractor experience influential in handling problems in work can result in project delays. Experienced contractors easily overcome problems that arise, while contractors who lack experience, will need more time.
10) Poor coordination and communication in contractor organizations, communication is the initial key to successful teamwork. In the implementation of construction projects, coordination requires good communication so that each group does not overlap.
11) Improper / incorrect construction methods / implementation techniques, errors or inaccuracies in choosing construction methods, although they may not cause structural completion failure, often have an impact on the longer completion time required.
12) Work accidents that occur to workers, lack of work safety controls in the project can cause work accidents to workers. This can have an impact on sufferers physically, loss of morale, and trauma due to accidents which can ultimately result in decreased work productivity.

3. Delays in material supply.

The things that cause delays in the supply of materials are:

1) Limited availability of materials on the market
2) Poor material quality
3) Scarcity of required materials
4) Material changes from the owner
5) Damage to materials in storage premises
6) Access to difficult project sites
7) Responses from the environment surrounding the project

8) Physical character of buildings around the project
9) Project location away from the city center
10) Material and equipment mismanagement
11) The price of materials / materials is expensive
12) Insufficient allocation of funds
13) Changeable weather
14) Riots, natural disasters
15) Workers' strike
16) Accident
17) Fuel Increase
18) Currency exchange rates

B. Level 3 Risk Management Maturtity Model

Based on the ERM analysis, the level of Risk Management Maturity of the Contractor Model in DKI Jakarta Provincial Government Buildings in building construction work is level 3, namely Medium.

Value Interval	Maturity Rate	Information
4,21 – 5,00	Level 5 - Optimal	Risk management is carried out optimally, with principles and processes that have been integrated in business processes
3,41 -4,20	Level 4 - Good	There is a system of supervision of the implementation of risk management, the principles have been implemented, accompanied by periodic improvements.
2,61 – 3,40	Level 3 - Intermediate	Risk management has been realized, there are written principles along with basic training.
1,81 – 2,60	Level 2 – Weak	Risk management has been regulated informally, but there has been no training or communication.
1,00 – 1,81	Level 1 – Very Weak	Risk management is done intuitively and there has been no attempt to formalize risk management.

Level 3 according to (Pennypacker & Grant, 2003) which means Managed process has characteristics, namely:

"All project management processes are already in place and established as organizational standards. Almost all projects use this process with minimal exceptions—management has instituted processes and standards with formal documentation existing on all processes and standards. Project management processes are usually automated and management is involved regularly in input and decision making. Each project is evaluated and managed based on other projects" (Pennypacker & Grant, 2003). The Maturity level 3 indicator that has been applied by the DKI Jakarta RI Provincial Government Building Contractor can be seen in Table 2. below.

Table 2. Maturity Level 3 and application in the Implementation of DKI Jakarta Provincial Government Building Construction based on Coso Monitoring Guidance, 2009

Variable	Indicators	Application
Documentation	Comprehensive and consistent	▪ Weekly Report ▪ Monthly Report
Awarenes and Understanding	It has been formally communicated and training carried out	▪ Risk Management Training ▪ Technical Training on Construction Implementation ▪ Contractor Company Workshop ▪ Administration Workshop ▪ Contract Implementation Preparation Meeting / PCM ▪ Evaluation Meeting ▪ Weekly Meetings
Attitude	Control is integrated	▪ Addendum ▪ Shop Drawing ▪ Time Schedule (Work and Materials)
Control Procedures	Formal and standardized	▪ Employment Contract ▪ Implementation Method ▪ Field Books ▪ Construction Implementation Handbook
Monitoring	Nothing yet	-

Source: Processed, 2023

Level 3 based on the 5 level maturity model from Crawford, J.K as a criterion to obtain all maturity level characteristics of a power plant project, the characteristics are as follows:

Level 3: organizational standards and institutionalized management: All process, standards for all projects, repeatable, conclusions and detailed information

From the above characteristics, at level 3, namely all processes, standards for all projects, repeated, conclusions and detailed information have been carried out by the Contractor in the DKI Jakarta Provincial Government Building. Having made standards for the implementation of construction, reporting the progress of construction activities has been carried out in detail as a form of maturity of the Contractor, but monitoring of the implementation of risk management from the company has not been carried out.

C. Level 3 Risk Management Maturtity Model on Dominant Risk Factors of Quality Performance

The dominant risk factors of quality performance are:

1. Risk variable: Lack of communication and coordination among parties involved in the project (Q4)
2. Risk variable Delay from Schedule (Q14)
3. Risk variable Material Supply Delay (Q15).

There are related problems, namely in Communication problems, Schedule Delays and Material Supply become constrained. The strategy of monitoring the control process by the Contractor Chairman needs to be considered to face these risks to the control of the Contractor's products in construction quality. Contractor advice from several works of concern is monitoring the control of the implementation of risk management of contractor companies, especially related to dominant risks that occur and the implementation of mitigation of the causes of communication risks, schedule delays and material supply to be more intensively carried out and monitored by the leadership of the contractor company and by carrying out HR training and placement of special monitoring personnel so that the implementation of construction is appropriate specifications and quality agreed in the contract.

Control according to R. J. Mockler as quoted (Soeharto, 2001) (Soeharto, 1995) It is a systematic effort to determine standards that are in accordance with planning objectives, design information systems, compare implementation with standards, analyze possible deviations between implementation and standards, and then take corrective actions necessary so that resources are used effectively and efficiently in order to achieve goals. The control process runs throughout the project life cycle to achieve good performance at every stage. Planning is made as a reference material for the implementation of work. The reference material will then become the standard implementation on the project concerned, including technical specifications, schedules, and budgets. So to be able to control it is necessary to have planning.

In the Risk Management Maturity Model level 3 there are several characteristics, namely the process of integrating with organizational processes and Management using data in making specific decisions, therefore each problem, to make decisions and effective steps for projects with all stakeholders. Such decisions are made in minutes of meetings, reports and in addendums.

D. Level 3 Risk Management Maturity Model

1. Risk Identification

a. Input Program

There is a discussion of the risks of the Contracting Company in PCM and periodic meetings to identify risks carried out in the form of reporting methods and communication with Information Technology Systems. The contractor identifies the risk of each problem reported to the DKI Jakarta Provincial DCKTRP with an Information Technology System.

b. Output program

Zoom Meeting. Microsoft Project. Risk tables (Works and materials), weekly reports.

2. Risk Measurement

a. Input Program

There are project work evaluation meetings and reports as well as coordination from the Contractor with stakeholders. Problems from other projects are used as recommendations on all projects Risk is measured based on the quality performance of the implementation of Local Government Building construction. DKI Jakarta Province in the construction of each project. Risk evaluation is carried out for the benefit of the DKI Jakarta Provincial Government.

b. Output program

Monitoring of Meeting Minutes. Monitoring of Contractor Reports. Work Evaluation Meeting at DCKTRP DKI Jakarta Province which was attended by all contractors, planning consultants and supervisory consultants led by the Head of Building of the DKI Jakarta Provincial Government Building. Employment Addendum. Shop Drawing Jobs. Reschedule Work Time.

3. **Risk Response Development**
   a. **Input Program**
      Risk responses are developed according to the budget and time that has been set at the DKI Jakarta Provincial Government Building.
   b. **Output program**
      Employment Addendum. Shop Drawing Jobs. Reschedule Work Time.
4. **Control Risk**
   a. **Input Program**
      Risk control is reported weekly to the Board of Directors and forwarded to the DKI Jakarta Provincial DCKTRP Regional Government Building.
   b. **Output program**
      Weekly Meeting Monitoring
5. **Risk Documentation**
   a. **Input Program**
      Documentation made in the contractor's progress reports and the Contractor's reports on each project is subsequently evaluated.
   b. **Output program**
      Final Report of the Contractor, minutes of the Joint meeting, final report of the DKI Jakarta Provincial Government Building Construction Work.

CONCLUSION

Based on the results of the analysis that has been done, several things can be concluded, including the Literature Review showing variables for quality performance and Enterprise Risk Management (ERM), namely the risk of quality performance as many as 42 variables. Enterprise Risk Management (ERM) has 63 criteria. After verification, clarification and validation from 3 experts obtained variables given to 20 respondents of Work Owners (DCKTRP DKI Jakarta Province), Contractors and Supervisory Consultants to find out the dominant risk, which details the variables, namely Quality Performance Risk as many as 35 variables. Contractor to assess the Risk Management Maturity of the Contractor in carrying out Building Construction, with a total of 63 Enterprise Risk Management (ERM) criteria.

The dominant risk factor (risk potential / risk major) based on the results of data processing using the Probability Index Matrix method in the Construction Work of the DKI Jakarta Provincial Government Building, which affects the Quality Performance of the Contractor and the level of risk based on the risk category is obtained variables with the High risk category (high risk) including: Quality risks are Risk variables Lack of communication and coordination between parties involved in the project (Q4). Risk variable Delay from Schedule (Q14). Risk variable Material Supply Delay (Q15). Based on the ERM analysis, the level of Risk Management Maturity of the DKI Jakarta Provincial Government Building Building Contractor Model in Construction Work with a Mean value of 3.11 is level 3, which means that the Contractor's Risk Management has been stadardized, there are written principles accompanied by basic training. There is a correlation between the dominant risk factor and maturity indicators at level 3, namely monitoring problems, where the dominant factors of contractor quality performance risk are due to lack of monitoring control over risk management on contractor quality performance.

The advice given by the researcher in this conclusion is to mitigate as a contractor, namely against the dominant risk factor of lack of communication and coordination in order to take preventive actions in the form of: preparing project communication management before the project is implemented, developing HR communication competencies and skills, providing integrated and good communication facilities with stakeholders, selecting good project leaders and using software for communication project and take corrective actions in the form of: communication control, managing conflicts effectively and holding effective weekly/monthly meetings with stakeholders, using email effectively in receiving data and sending reports, using templates (standard models) for project communication, developing communication infrastructure and clarifying in weekly meeting forums.

Against the risk factors of schedule delays in order to take preventive actions in the form of: Regular training of workers to improve their skills, selecting professional and competent workers in their fields, monitoring labor discipline, inventory of the types of projects carried out to prepare SOPs, preparation of work equipment planning according to the project undertaken, nventarization of labor availability according to their performance and competence, planning funding cooperation with other capital owners / banks, holding meetings

or safety talks to discuss obstacles in the field and provide direction related to the scope of work, arrangement of worker distribution areas so that they can be monitored properly, accurate site surveys before project implementation and corrective actions in the form of prioritizing productive labor and increasing working hours / overtime, increasing project implementation resources in the form of handymen, equipment and materials, Change Construction Order and make time addendum / Reschedule (Ahuja, 1980).

Against the risk factors of material supply delays in order to take preventive actions by: supplier selection is recommended to find suppliers with different payment tempos, approach and socialization with the environment around the project, accurate site surveys before project implementation, make material schedules and make material distribution tables that require order time to ensure material purchase orders (PO) and corrective actions in the form of: prepare data / evidence of late payments so that they can be resolved immediately regarding compensation both time and costs and actively remind the owner of financial matters related to the project so that the project runs smoothly, rental of transport vehicles, solving problems with the environment around the project, managing material supply management and time addendum / Reschedule.

To conduct monitoring training and implementation of monitoring of the implementation of contractor company risk management so that it can rise to the next level in the application of contractor company risk management which is an effort to increase capability with improvement process. Conducting similar research by comprehensively analyzing project risks Quality Performance, Time and Cost of Building Construction, measuring the Contractor's Level of Maturity and research on the effect of construction service business qualifications on the Maturity Level of the Contractor company so that variations of this research analysis can help continue research like this next and be useful for efforts to improve optimal DKI Jakarta Provincial Government Building Building products.

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