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Integrating Change Management and Knowledge Management to Support Changes In Business Direction and Corporate Strategy at PT Hutama Karya (Persero)

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Abstract - In a change in the direction and strategy of the company, it is necessary to involve all members of the organization who have the knowledge and competence to make changes. According to research, 70% of change programs fail to achieve their goals, and most of them are due to a lack of change management efforts. This change management effort is closely related to the knowledge management implemented by the company to develop the organization and meet changing business needs.

The purpose of this study is to find out how the integration of change management and knowledge management can support the company's efforts to implement changes in business direction and company strategy in the Company's Long-Term Plan (RJPP). The framework used is a gap analysis in the change process using the ADKAR model from Jeff Hiatt and a critical knowledge gap analysis based on the knowledge management implementation strategy from Tjakraatmadja & Kristinawati.

The authors get the results that in the change process there are still gaps in change management and critical knowledge. To integrate change management and knowledge management can be done by evaluating and creating knowledge so that critical knowledge gaps can be overcome. Furthermore, the critical knowledge is used to support the knowledge elements in ADKAR so that the other 4 elements can be increased or maintained at their level.

Keywords - change management, knowledge management, gap analysis, ADKAR model, critical knowledge, knowledge creation

I. INTRODUCTION

In June 2021, based on changes in macroeconomic, sectoral, and corporate assumptions, the impact of the Covid-19 pandemic, and directions from Shareholders, PT Hutama Karya (Persero) hereinafter referred to as HK, made changes to the Company's Long-Term Plan (RJPP) for the 2020-2024 period which has been compiled in 2020, including directions, strategies, and corporate actions. The RJPP, which was compiled in 2020, is actually relevant and continues the direction and strategy of the 2014-2018 RJPP, where the company focuses on infrastructure development and business diversification.

Although the two RJPPs were prepared during the Covid-19 pandemic, they both have fundamental differences in internal and external assumptions that affect the direction of business development and the company's main strategy. This fundamental change requires considerable change management efforts because the company has already implemented the previously planned directions and strategies. Top management must be able to communicate this change to all company employees because the company's employees are the company's capital and the driving force of the company's business activities.

Tjakraatmadja and Kristinawati [11] explain that the rapid demands for changes in the order of organizational life are mainly caused by the rapid growth and development of knowledge. Knowledge management will be the key to implementing this change management because the mindset and knowledge of employees are strongly influenced by how the company implements knowledge management. Good knowledge management will create strong and agile organizations because they have updated competencies that are always updated, which are needed to improve innovation or organizational performance.

Based on the background and business issues, this research needs to answer the following questions:

1. What is the capability and knowledge gap experienced by HK in implementing changes in business direction and company strategy?
2. How can the integration of change management and knowledge management support the implementation of changes in business direction and corporate strategy?
3. What are the recommendations for the integration of change management and knowledge management to support the company's business in the future?

This study aims to obtain a suitable integration model between change management and knowledge management to create an organization that is agile and ready to face changes in business direction and company strategy.

II. METHODOLOGY

Grimolizzi-Jensen in Tang [11] in Paulia [7] defined change management as focusing on the broader impact of change, particularly on people as individuals and teams move from the current state to the future state for achieving the lasting benefit of change. This is supported by the statement from Bain & Company, [1] in Paulia [7], that the implementation of change management requires the leaders' support and control to focus on the result, overcome barriers to change, repeatedly communicate powerful messages to subordinates, and continuously monitor progress to confirm the goal are met.

The ADKAR model as stated by Hiatt [2], reflected the necessary building blocks for individual change within organizations and is intended to be a coaching and change management tool to help organizations change. ADKAR is an abbreviation for Awareness of the need for change, Desire to support and participate in the change, Knowledge of how to change, Ability to implement change, and Reinforcement to sustain the change. These elements represent the most basic requirements for achieving and sustaining a change that cannot be skipped or reordered.

All five elements of the ADKAR model are sequential. Therefore, Mulder [5] in Paulia [7] identified that the ADKAR model helps determine the next steps to achieve the right goals. Other than that, it also identifies, with the benefit of hindsight, what changes have not been successful. This evaluation is important to help realize the change after all.

Swain & Ekionea [10] in Tjakraatmadja & Kristianawati [12] states that Knowledge Management is a management tool to create productivity, quality, profitability, and organizational innovation by combining KM with Business Strategy to achieve business goals as well as organizational performance and operational performance.

Tjakraatmadja & Kristinawati [12] underlined that the principle that KM planners must adhere to is: "KM is a management tool to achieve organizational goals more effectively". Therefore, the formulation of the KM Implementation Strategy must refer to the Organizational Strategy; or it can also be said that the KM Implementation Strategy is part of the Organizational Strategy and KM plays a role in supporting the Business Strategy.

Dr. Ann Hylton [3] in Tjakraatmadja & Kristinawati [12], explains that knowledge mapping is a process that begins with surveying, assessing, and connecting information, knowledge, competencies, and skills possessed by individuals and teams in organizations. And then Tjakraatmadja & Kristinawati [12] reinforce that knowledge maps facilitate the gap analysis process between the

knowledge needed to support business targets and the available knowledge.

Nonaka & Takeuchi [6] in Tjakraatmadja & Kristinawati [12] describes the existence of four basic patterns of knowledge creation or conversion between individual knowledge and organizational knowledge, which may occur within an organization, which is known as the SECI concept, which stands for socialization, externalization, combination, and internalization.

Zelenkov [13] stated that knowledge is the main source of organizational changes in the broad sense, including both evolutionary (incremental) and transformational (radical) processes, managerial and technological innovations, changes driven by top management and initiated at the operational level, covering both the organization as a whole and its subsystems. From this perspective, the most important factor is not only the ability of the organization to learn and develop but also the capability to realize proposed changes. Therefore, change management as a managerial discipline should be considered in conjunction with knowledge management. Knowledge Management and Change Management (CM) are complementary activities, only the joint development of these two management disciplines provides the greatest efficiency.

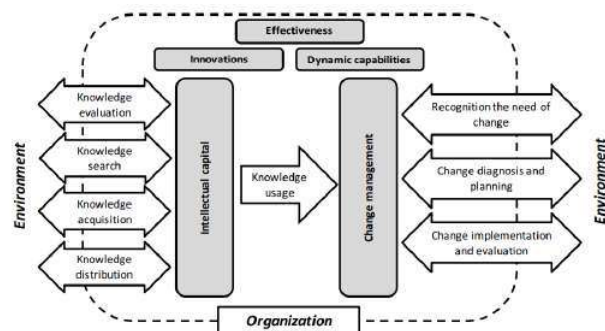


Fig. 1. Sources of organizational effectiveness (Zelenkov, 2016)

Zelenkov [13] underlined that the value of IC is realized via changes, and the most important parts of the change process are change detection, change planning, and change implementation. Both these practices, KM and CM promote dynamic capabilities, innovation, and eventually effectiveness of the organization.

This research's research methodology uses qualitative research by conducting desk research such as literature study, company data, internet data collection, observations and interviews. Observations are suitable for collecting data on the natural behaviors of the research object. After the observations, the interview will conduct as further research. Interviews are optimal for collecting data and seeing people's perspectives, experiences, and other data explanations that need to be explored.

The author will use the ADKAR model for conducting assessments on the people dimension and focus on the result of change management. In ADKAR there is the keyword "Knowledge" which relates to the knowledge management needed by employees to be able to make changes desired by the company. With a KM implementation strategy that is following the company's strategy, it is expected to support the process of change made by the company in business direction and company strategy.



Fig. 2. Conceptual Framework of Research Project

The respondents of this project will be the BOD-1 (Executive Vice President) and BOD-2 (Vice President) for assessment of the change management initiatives using the ADKAR models and critical knowledge management mapping based on knowledge management strategy from Tjakraatmadja & Kristinawati. Detail of the respondents as follows:

Table 1. Detail of Respondents

No	Remark	Position	Division	Exp
1	EVP 1	Executive Vice President	Corporate Planning (Corplan)	29 years
2	EVP 2	Executive Vice President	System, IT & Research Technology (SIT)	24 years
3	EVP 3	Executive Vice President	Human Capital (HC)	29 years
4	VP 1	Vice President of Corporate Planning	Corporate Planning (Corplan)	12 years
5	VP 2	Vice President of System Management	System, IT & Research Technology (SIT)	12 years
6	VP 3	Vice President of Building Information Modelling (BIM)	System, IT & Research Technology (SIT)	12 years
7	VP 4	Vice President of Learning & Development	Human Capital (HC)	9 years

The reason for selecting the respondents was based on the duties and responsibilities carried out by each respondent in the company's business processes. I see that all of these respondents are the people closest to top management (BoD) because they are in the head office and often interact directly in discussions and in making strategic company decisions.

The interviews are conducted with online questionnaires with confirmation using interviews. The concept of this interview is to get direct data from the user Interview Guidelines of the ADKAR Change Model [2] and critical knowledge management mapping using the KM Planning Strategy from Tjakraatmadja & Kristinawati [12].

16 questions on the ADKAR model, which is consist of 4 questions on Awareness, 3 questions on Desire, 3 questions on Knowledge, 3 questions on Ability, and 3 questions on Reinforcement. Meanwhile, questions regarding critical knowledge creation is divided into 2 levels, BOD-1 consisted of 9 questions, while BOD-2 consisted of 15 questions.

III. RESULTS

A. ADKAR Result Analysis

After the interview was conducted, further analysis was carried out to obtain key information based on the results of the interview according to the respondent's position. Based on the key information above, it can be done an analysis of the interview results based on ADKAR's elements as follows:

1. Awareness

All related EVPs and VPs are aware of changes in the business direction and company strategy in the 2020-2024 RJPP and the benefits of these changes. However, not all of them know the causes of change and the purpose of this change, so it can be concluded that their concern for change is still not deep, only at the external level, namely on the benefits of change, or only focusing on the direct impact of change.

2. Desire

Although all EVPs have different opinions regarding the purpose of changing business direction and company strategy, all EVPs and VPs have felt and imagined what they should prepare for changes in business direction and company strategy.

3. Knowledge

Knowledge problem is a serious issue because there are new core competencies that must be implemented by the

company in the future. If we look at issues from the level of awareness and desire for knowledge, this communication problem could be caused by the lack of easy access to information about changes, so that knowledge about changes is not conveyed properly.

4. Ability

The ability of EVPs and VPs to implement changes in business direction and company strategy cannot be instant (fast). They still need time and assistance to improve their skills and provide new experiences in dealing with change. Good skills and experience will help them to eliminate any potential barriers that may occur in the future.

5. Reinforcement

Despite the limited knowledge and abilities that are not optimal and the lack of support from Top Management, the EVPs and VPs have tried to provide explanations and socialization to their teams and set benchmarks (standards) for successful implementation. This is a positive side, that with some limitations they still have the awareness and desire to implement changes in business direction and company strategy.

Based on the results of ADKAR's element analysis above, it can be diagnosed that the change management capability gap in the changes in business direction and company strategy that occurred in HK is as follows:

Table 2. Analysis Results of ADKAR Model on BOD-1 and BOD-2

Elements	Low	Moderate	High
Awareness of the need for change		X	
Desire to support and participate in the change			X
Knowledge of how to change		X	
Ability to implement the change	X		
Reinforcement to sustain the change			X

From the table above, there is a change management capability gap in the change management process, namely the existence of strong Desire and Reinforcement efforts, compared to weak Ability. This weak ability condition needs to be evaluated and strengthened along with increasing Awareness and Knowledge through the integration of change management and knowledge management.

B. Critical Knowledge Analysis

After the interview was conducted, further analysis was carried out to obtain key information based on the results of the interview according to the respondent's position. Based on the knowledge evaluation, it can be concluded that HK's critical knowledge in Core Competency is as follows:

1. There is no Core Competency that HK has the most control over, but its control can be said to be balanced between Construction Core Competency and Financial Core Competency at the Moderate level. Meanwhile, the competency with the weakest mastery is Specific Segment Competency, especially in the fields of Building Information Modeling (BIM), cloud technologies, CDE & digital collaboration tools, AR/VR technologies, 3D printing, and modular construction & prefabrication.
2. Knowledge and experience are both seen as influential in mastering the 3 core competencies, it is necessary to transform tacit knowledge into explicit knowledge from experienced people so that everyone can learn the experience in the form of new knowledge.
3. Although the level of mastery is different, each of these Core Competencies has a specific area that needs to be developed, or becomes a knowledge gap, namely:

Table 3. Critical Knowledge Gap Area of Core Competency

No	Core Competency	Critical Knowledge Gap Area	Level of Gap
1	Financial Core Competency	Pre-bid & Bid Submission	Moderate
2	Construction Core Competency	Project Management	Moderate
		Commercial Management	Moderate
3	Specific Segment Competency	Knowledge & Expertise, especially in the fields of Building Information Modeling (BIM), cloud technologies, CDE & digital collaboration tools, AR/VR technologies, 3D printing, and modular construction & prefabrication.	High

IV. DISCUSSION

A. Change Management Strategy

Of the 5 elements in ADKAR, 2 elements must be maintained and 2 elements that must be improved, as well as 1 element that must be evaluated first, so that change management can run well.

1. Awareness
 - o Build Effective Communication between BOD to BOD-1 and BOD-2
 - o BOD must build Effective Sponsorship by showing specific motivation for this change
2. Desire
 - o Maintain employee's personal situation, personal values, and motivation

3. Knowledge

- o Focus group discussion between BOD, BOD-1, and BOD-2 about the context of change
- o Building knowledge with training programs in the area of core competency
- o Improve the willingness to learn the knowledge using the milestone of individual change

4. Ability

- o Identify and assess the potential resistance forces and challenges
- o Establish a Project Management Office (PMO) for each Core Competency to produce day-to-day involvement from BOD-1 and BOD-2
- o Access to Subject Matter Experts to demonstrate how the core competency can be implemented in a real-life environment
- o Adoption and Performance Monitoring to see the progress of ability improvement

5. Reinforcement

- o Celebrating success in change initiation
- o Recognizing people for their roles
- o Provide rewards to increase the spirit of change
- o Listening to opinions and asking for feedback on the ongoing change process

B. Knowledge Management Strategy

Based on the knowledge gap that has been analyzed, it is necessary to develop a knowledge creation strategy to reduce the gap. The purpose of this strategy is to increase knowledge of the core competencies of employees who are the driving force in the process of changing business direction and company strategy For Pre-bid & Bid

Table 5. Knowledge Management Strategy based on Critical Knowledge Gap

No	Knowledge Gap Area	SECI Process	Knowledge Creation Strategy
1	Pre-bid & Bid Submission	I & S	• Learn Before • Knowledge Café • Learn After
2	Project Management	E & S	• After Action Reviews (AAR) • Training • Communities of Practices (CoP)
3	Commercial Management	E & S	• After Action Reviews (AAR) • Training
4	Knowledge & Expertise	S	• Training • Storytelling • Communities of Practices • Rotation

Submissions, we recommend the Internalization process through the Learn Before strategy and Socialization through the Knowledge Café strategy. The business process with this knowledge has been carried out by the company for years, but it needs strengthening so that it minimizes errors in the tender process and the winning rate can increase.

For Project Management, we suggest an Externalization process through the After-Action Reviews (AAR) strategy and Socialization through the Knowledge Café and Training strategy. By conducting periodic reviews of project implementation, it is expected to correct errors that occur and improve project management capabilities. This is also supported by sharing session activities and formal training which are part of the socialization to strengthen employee knowledge.

For Commercial Management, we recommend an Externalization process through the After-Action Reviews (AAR) strategy and Socialization through the Training strategy. By conducting periodic evaluations of the commercialization process, it is expected to increase the commercialization capabilities of the employees. This is also supported by formal training activities so that employee knowledge increases.

For Knowledge Gap Areas that have a high level, namely Knowledge & Expertise, we suggest a Socialization process through Storytelling, Communities of Practices, and Rotation. We do this because HK is not used to managing knowledge that can generate added value for the company. In addition, the management of the internal experts in the company is also not very good and is still not evenly distributed in each work unit, so the expertise they have cannot be transmitted and documented properly. By conducting socialization, it is expected that all employees (especially the Human Capital Division) have the same understanding, mindset, and concept regarding the management of Knowledge & Expertise through the transformation of business direction and company strategy. In addition, we also recommend that Socialization be carried out with formal training and certification so that employees have the right competencies according to transformation needs.

This is supported by Tjakraatmadja & Kristinawati [12] that the socialization process is suitable to be used to equalize understanding or the formation of new norms, cultures, paradigms, mindsets, or concepts. In addition, Krogh, Ichijo, & Nonaka [4] that knowledge enabling is more effective because it focuses on facilitating the effectiveness (strengthening) of relationships and communication to support the process of sharing (socializing) knowledge between people, both internally in the organization or with external parties

C. Integrating Change Management & Knowledge Management

As stated by Zelenkov [13] that knowledge is the main source of organizational changes in the broad sense so the change process must be accompanied by knowledge management.

To link knowledge management with the change process, critical knowledge is used here based on the results of knowledge mapping and evaluation, wherein the critical knowledge some gaps must be covered, namely Pre-bid & Bid Submission, Project Management, Commercial Management, and Knowledge & Expertise.

On the other hand, to cover the knowledge gap, organizational readiness is needed which can be seen from the results of the ADKAR model analysis, where there is a change management capability gap that must be increased in Awareness, Knowledge, and Ability. The existence of these 3 elements of the capability gap, especially the Knowledge element, is a meeting point in the integration of change management and knowledge management.

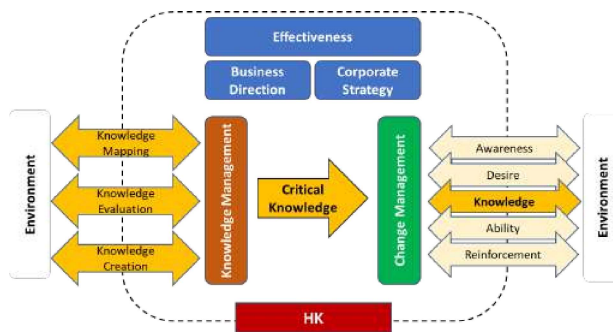


Fig. 3. The Role of Critical Knowledge in the Change Management Process

V. CONCLUSION

Based on the observation and analysis that have been performed and described in the previous chapter, this chapter will conclude the result of the research. Below is the conclusion on each research objective.

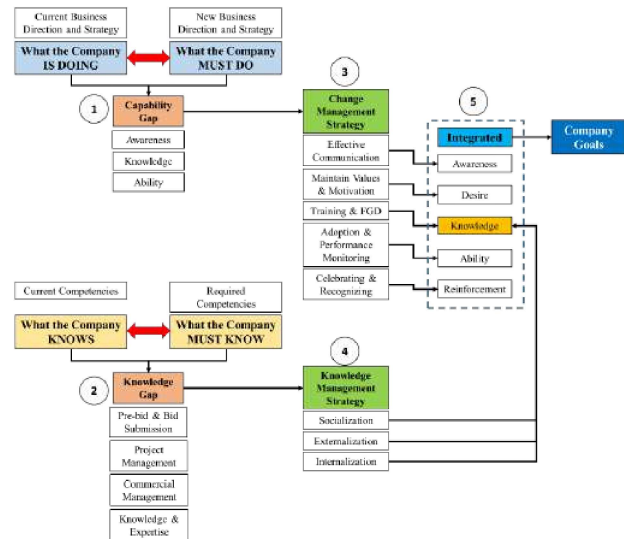


Fig. 4. Integrating Change Management and Knowledge Management to Support Changes In Business Direction and Corporate Strategy

The change management capability gap experienced by HK in implementing changes in business direction are elements of Awareness, Knowledge, and Ability. Meanwhile, the critical knowledge gap obtained from the knowledge evaluation covers 4 competency areas, namely Pre-bid & Bid Submission, Project Management, Commercial Management, and Knowledge & Expertise.

Integration of change management and knowledge management can be done by evaluating knowledge and creating knowledge so that critical knowledge is obtained. Furthermore, the critical knowledge generated is used to support the knowledge elements in change management (ADKAR elements) so that other elements can be improved or maintained. With the fulfillment of the necessary critical knowledge and the availability of solid change management capabilities, this integration will be able to support the implementation of changes in business direction and corporate strategy as stated in the RJPP of 2020-2024.

To support the company's business in the future, we must always pay attention to the condition of knowledge within the company and how that knowledge is communicated (distributed), then we need to check and ensure that all organizational components are ready to make changes with indicators of change management elements.

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