# REDUCING PROJECT BOTTLENECK BY TRANSFORMING ORGANISATIONAL CULTURE IN PT TRANSTEL UNIVERSAL USING KNOWLEDGE MANAGEMENT MODEL

e-ISSN: 2774-7042 p-ISSN: 2302-8025

# Harry Fajar Surya, Achmad Fajar Hendarman

Institut Teknologi Bandung harry\_surya@sbm-itb.ac.id<sup>1</sup>, achmad.fajar@sbm-itb.ac.id<sup>2</sup>

#### Abstract

The research was conducted to determine whether transforming the company culture would have a positive impact in the organisation in PT Transtel Universal. The implementation of new method by the new management will slightly carried the positive trendline leading the company into the efficiency. The implementation of knowledge management would bring the efficiency in all aspect especially in operation while handling the project. The operation previously only based on the basic business now after the new method, the company will grow and keep up with the business ecosystem. Before the transformation, the company only have four division, Finance-Human Resource Division, Logistic Division, Sales Division and Technic Division. That's one of the concerns that the new appointed vice president comes in mind to open the new division and tackle all the challenges to finish and bring the best solution to the customers. The method will be used in the research is qualitative method by conducting the interviews of the managers. The result showed: (1) Transforming the organisational culture is significantly influenced by the leadership system to resolve the bottleneck. (2) The transformation derives from the leadership method influenced by the knowledge simple management method that is used in PT Transtel Universal. (3) Organisational Culture massively influences the process of transferring knowledge management among the employees in PT Transtel Universal.

**Keywords:** leadership; transformation; knowledge management; organisational culture.

### Pendahuluan

Organisations and systems require the ability to change to maintain growth, increase efficiency and adapt to new circumstances (Ahmed & Ali, 2004). Enacting changes in a group setting, such as a work environment, requires strong leadership and effective management. Guiding others through changes can involve multiple steps, factors and strategies to ensure everyone understands and implements the necessary changes.

We all know that all the industry is changing from time to time due to the massive and disruptive technology in the 21<sup>st</sup> century. This condition has done to all aspects of business in general, the changes included the basic automation and digitalization from paperless documentation, to the tools system that was implemented in the organisation to speed-up the progress of the document circulation. In the business activity, productivity is the key to surviving and utilising all the inputs to become the effective

outputs. The productivity is measured by comparing the outputs with the efficient amounts of inputs.

The disruptive changes in technology brings technological advancement that are expected to increase company productivity. Organisational change and transformation are the collection of several acts that result in a shift in directions or procedures that influence the way organisations work previously (Pereira & Romero, 2017). When organisational management is dissatisfied with the present state, the demand for organisational transformation arises. PT Transtel Universal also has to adapt with this kind of condition in order to increase productivity. The productivity is also considered as the effect that can minimise the cost and maximise the output for the company. Hence, the technology is changing and affecting the style of leadership, management, and employees to become a benefit for the company.

PT Transtel Universal also facilitates change via leadership actions and approaches refers to the process of developing, expressing, and executing new ideas as a team leader. Leadership and change management ideas and methods seek to equip leaders with tangible steps to encourage and inspire people to achieve new goals or embrace new ideals. Professionals in management, executive, or leadership roles can use their leadership qualities to effectively drive organisational transformation.

Changing Leadership in the rapidly changing times and technology provide a good ground to build on in order to take into consideration the distributed nature of leadership (Crevani, Uhl-Bien, Clegg, & By, 2021). Thus, leadership may be studied in terms of complexity, resilience, and adaptability, as well as communal, processual, distributive, and servant leadership.

Transtel Universal has one purpose in which "We Bring Solution". Transtel also embraces the power of change especially in telecommunication world where innovation is highly faster than the wind. Transtel core value is focused on our clients, people and communities. Coming from the purpose, as a Telecommunication company in specialty with system integrator, Transtel's vision is to be able to serve the telco era with deliverable product and solution on the technology by their advance product from the principal and the professionals. As stated on the PT Transtel Universal's website, Communication is a crucial factor nowadays. Transtel understands that all the customer needs a fast, firm, and reliable communication link to support your business. Transtel Universal has been experienced for more than 20 years in serving and giving solutions on the communication issue for Indonesian foremost companies and organisations.

In the end of 2014 until early of 2015, PT Transtel Universal broke the new contract. The company was given the opportunity by one of the big telco industry players in Indonesia to build the system to migrate the carrier system in the old satellite Palapa C-2 to the existing Palapa D. PT Transtel Universal needs to configure all the ground segment that uplink to Palapa C-2 to Palapa D. The contract duration was six months from January to July 2015. It was the biggest project that PT Transtel Universal experienced so far. The Customer also has several requirements when the company

wants to execute the project. They needed to have a specific project team member and NOC (network Operation Center) to do this project.

During the planning and implementation of the project, the newly built project team and NOC were divided into two different teams. The project team is under the sales division and the NOC team member consists of selected technicians from the technical division. They need to blend into one team to execute all the migration system projects to complete the project timeline. As the result, the project was delayed and the total completion of the project was one year. That was approximately six months delayed from the target. PT Transtel Universal had to pay several amounts of the penalty because the delay of the RFS (ready for service) target missed.

Before the project was completed, the CEO and the commissioner appointed new Vice Presidents at the end of 2015. They appointed a new VP of finance from the finance manager and a new VP operation pro hire from the other company. The vice presidents have a task to change the operation process. The CEO expected significant changes in the organisation. The Vice President's primary goal is to cut costs and efficiency without laying off the people. The vice presidents need to change and improve the productivity of the employees. They have a large amount of responsibility and will be evaluated at the end of the year. That is the responsibility to take.

There are several studies regarding my research, according to (Alkaf, Yusliza, Saputra, Muhammad, & Bon, 2021), when an effective system is created in an organisation or company, it will improve organisational performance. Also, company managers' behaviour will affect employee job satisfaction. The new VPs are trying to achieve this goal through their methods. The goals are to find the factors that can affect employees' work effectiveness or organisations are the company's information system's quality. It means all information provided by the company to support the work will encourage the company's effectiveness and efficiency so that it will form a perception that the company's service quality from customers will be good.

Leadership has an important role in determining knowledge management. Leaders within the company will direct, motivate, shape a culture of sharing knowledge and build infrastructure that supports employees to share knowledge so that the knowledge management process can run smoothly (Pringgabayu & Ramdlany, 2017). The implementation of KM through the leadership is going to have the fastest result. According to (Donate & de Pablo, 2015), knowledge management is the way organisations manage their employees, identify the knowledge they have, store and share it with the team, and improve the quality and value of that knowledge to produce knowledge-based innovations.

In the previous study by (Calvo-Mora, Navarro-García, & Periañez-Cristobal, 2015), they found that Knowledge Management is the key to improving business. The leadership on other hand is the driver that KM can be passed from the concept to implementation. The leader has a central role in order to deliver the KM process to the employees. They conducted the research in PT Pelindo III (Persero) to determine whether leadership has a positive and significant impact on knowledge management.

The other research was also conducted in PT Jasa Raharja in West Sumatera branch by (Bagga, Gera, & Haque, 2023). They want to reveal the effect of transformational leadership on organisational culture in the company. The result was Transformational leadership significantly influenced the implementation of knowledge management at PT Jasa Raharja Branch West Sumatera. The interesting point is that organisational culture also significantly influences the implementation of knowledge management at PT Jasa Raharja Branch West Sumatera.

Transtel Universal's prior company culture was not established long ago in the Telco Industry. The company was founded in 1997 as a system integrator and initially exclusively sold telecom equipment. The project is being expanded in response to the constantly changing telecommunications business in the twenty-first century. The culture of Transtel is appealing to be examined as part of the operational basis until the disruptive changes in the workplace. In order to compete and grow, the adjustment seems to be needed in order to sustain in the business.

To determine the level of adaptability to changing work situations. The telecom business customer has pushed us to prioritise service and technology enhancements in their business goals. The telecom industry will design the transtel's future strategy and work to achieve the objective in the future by continually focusing on customer happiness and offering the finest possible solutions and technologies available.

#### Metode

For the collection method, the author will use the interview and will collect the data of the project report to show the efficiency in the Transtel Universal. These data collection methods were already discussed with the CEO. Author granted permission to use the data only for research and education purposes.

The interview from all 8 division managers (Finance, Project, Engineer, Technique, Sales, Business Development, HR, and Logistics) will be conducted to show how the Knowledge Management is implemented and drives the innovation and productivity in Transtel Universal. The result of interviewing all the managers in each division is to seek how the leadership and culture can change the operation in PT Transtel Universal. The data is also expected to reveal the problem solving in executing all the projects that are outstanding with the knowledge management as a new method that was implemented in PT Transtel Universal. The interview is more like a wider point of view of the employees to see all the transformation in PT Transtel Universal as an organisation and also the leadership can significantly influence the organisational culture in the company.

The project report data is expected to strengthen the data collection to see the exact effect in numbers of how the efficiency in operation works in the result of the project report from 2015 until 2021. The collection of this data is also strictly guided and guarded only for educational purposes. The data that will be shown is limited based on the author's needs.

This research is based on a qualitative method also backed by the previous journal and case with a slightly similar approach because there is no new knowledge, we have to find the similar research and also the books that match with the authors theme of research. This method also reflects on the author's approach and to thoroughly explain the choices the author made in collecting and analysing the data.

## **Data Analysis Method**

The data that was used in this research is qualitative. Qualitative research is research that aims to find out a description of the situation that occurs based on facts to then be processed or analysed to find the conclusion. This analysis method is implemented because the author wants to know how the business issue in the company can be tackled by the influence between leadership and organisational culture on knowledge management practice that will result in efficiency in operation.

This method is also expected to show how personal knowledge can be increased by implementing knowledge management. Before the new method was implemented, the work habit basically only tried to redeem the outstanding problem. When the new project appeared, the outstanding will be an obstacle that needed to be carefully handled. With the new leadership, we believe that the newly appointed VP Operation can be the drivers of the solution that we urgently needed. We only can bring the solution perfectly if there is no more problem in our body. That's the concern that Transtel Universal's tries to overcome in the past 7 years.

The interview that the author will use is the unstructured interview. The respondent is the manager level so the author needs to seek deeper information about how the leadership is becoming the drivers from top down and how the method is fully applicable in the company. The interview also needs to seek advice on what implementation needs to be improved and how to improve the implementation and become the ideal path to the company.

#### **Result and Discussion**

After conducting the interview, it is important to carefully analyse and interpret the results of an unstructured interview with managers to understand how effective knowledge management is being implemented in the company. Author tries to look for common themes or patterns that emerge from the interviews. These might include the importance of sharing knowledge, the use of specific knowledge management tools or techniques, or the challenges that managers face in implementing knowledge management.

(Raj Adhikari, 2010). believe Knowledge management is a strategic approach to creating, sharing, deploying, and managing knowledge inside an organisation. It strives to increase efficiency by ensuring that the proper knowledge is available to the right people at the right time and is used effectively to support business goals. In the same way that Knowledge management is defined as a combination of procedures,

infrastructures, technological and managerial tools focused on developing, sharing, and utilising information and knowledge within and outside of businesses (Singh, 2008).

After conducting the interview and FGD with the managers, the author found that leadership is the key and as a driver in PT Transtel Universal to change and transform and compete in the business until today. There are several ways in which knowledge management is made and effectively implemented in the PT Transtel Universal organisation.

According to (Tjakraatmadja & Kristinawati, 2017), Knowledge Management is critical for employees to be capable of adapting to an era of growth. There is several pieces of evidence that indicate that when people or organisations are unable to adapt to rapidly changing times, they will fall behind or may even go bankrupt. KM is a management tool to build organisational capabilities to be able to be agile and smart in innovating and/or improving organisational performance and maximise return. This research is conducted to see how the leadership changes and usage of knowledge management can transform the organisation in PT Transtel Universal.

According to the Focus Group Discussion that was held on 10<sup>th</sup> January 2023. The group discussed how the bottleneck in a project around a year can be solved through the KM process. The VP awards that they implement the KM program to enhance productivity and they realised that it is important for a company especially for the mid-size company because it helps to ensure that valuable information and expertise is shared and utilised effectively across the organisation. This can lead to improved decision-making, increased efficiency, and a more skilled and capable workforce. Additionally, a strong knowledge management strategy can help a company to stay competitive by keeping it up-to-date with industry developments and trends.

As important as knowledge management is for people (personal knowledge management), it becomes exponentially more important in companies because many people collaborate to work with massively greater amounts of data for information. In PT Transtel Universal, the data collection in each division was separated. They have their own database to collect the material and data for their own matters. After the implementation and transformation using knowledge management, the VPs always ensure we have transparency in our company so the data is open between employees in order to speed up the project progress and closing as soon as possible. The company built the data storage and servers as a data bank. The data bank consists of all the data from each division gathered in one server. When the project wants to gather data about some projects for example, the team can easily download or gather the information about the contracts, sales agreement, procurement progress, amount of resource needed, and the budget for each project. we don't need to gather the data from each division because they already put the data in the data bank. Document management system as data bank employees are usually called is very important for speed-up the project progress. They support knowledge management sharing by allowing quick and easy access, retrieval, and sharing of documents. The author found that solution extremely successful to resolve the bottleneck in the project.

According to Mr. As a manager in the project division, the CEO had a clear vision and high hopes when he appointed new VPs in the company. PT Transtel as a mid-sized company needs to grow and survive in the business. The environment also creates PT Transtel Universal transformation. The company needs to adapt in this case, the manager of the project division, who has nearly 20 years experience in the company, explained that the turning point was the biggest project that the company got in that year. The project shaped us to transform and adapt for a better future. The leadership also has a strong point to be the driver in the transformation. He added, the employees also felt more organised, the project management was executed better than before, and we had more focus on our work, not busy resolving the management. So, the positive trend is set for the company's future. This shows that in 2019, the only remaining project of 2018 only one outstanding project.

Mrs. SHY as a HR staff also explained that the program such as monthly town hall, weekly meeting, and annual assessment also helps the company to have data about the employee. Previously, PT Transtel Universal didn't have an accurate measurement about the salary, bonus, and the benefit for the employee. After the VP arranges the program the HR team is established and they have a measurement and calculation for the employee performance. The HR team works to give the fair benefit for the employees and also for the company, she added that the underperformed staff and performing staff now is different. Before the VP Finance works for the company, the benefits, bonuses, and the salary of all the employees are also the same (if the level is the same).

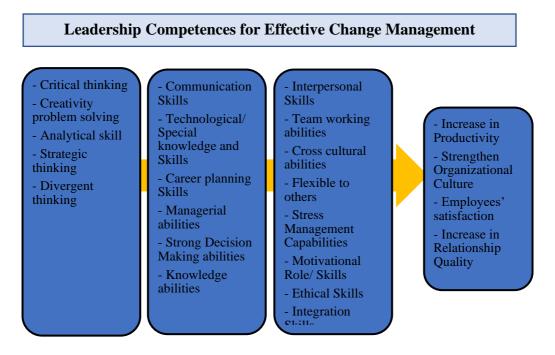


Figure IV. Leadership Competency Model for Effective Change Management (Pagon, Banutai, & Bizjak, 2008).

Leadership has a significant role for resolving bottlenecks and transforming organisational culture in PT Transtel Universal. Knowledge plays a prominent role as a cognitive, functional, and social tool to make an impact for increasing productivity and strengthening organisational culture. The role of leadership by the VPs also increases employee's satisfaction level and relationship quality between bottom to top management.

The interview that the author conducted was to seek all the methods that were implemented in the company. The VPs was given the task to boost the effectiveness and transform the company to be related with the business environment. The VP also has a method according to the Project Division Manager to boost from top to bottom. It is the manager's responsibility to establish an environment in which workers feel comfortable discussing their thoughts and concerns. This may aid in identifying areas where the company's culture needs to improve, as well as encouraging trust and collaboration.

The Jann Model "House of Knowledge Management" the framework provides a complete and holistic approach to knowledge management, The Jann model framework also may be useful for medium-sized companies like PT Transtel Universal. In the House of KM, there are four components that the model is suitable for the organisation that will be explained more in the implantation plan and justification chapter.

# **External Analysis**

The Author tries to explain the external analysis using PESTLE to see the macroenvironment in PT Transtel Universal's business operations. Considering each of these factors, businesses can better understand the opportunities and challenges they may face, and can make more informed decisions about their strategies and operations. PESTLE analysis is particularly useful in this case for businesses that operate in a rapidly changing environment, as it helps them to anticipate and respond to changes in the external environment.

Political	The Regulation from Regulator in this case the ministry of
Economic	The need for telecommunication resources increase for the past decades. This
Social	Telecommunication has become a vastly important aspect of
Techonologic al	Telco industries products become the basic needs This need
Legal	The telecommunication industry is often impacted by
Environment al	Customers demand and telecom companies are expected to

The results of a PESTLE analysis can vary depending on the business and the specific factors that are being considered. From the analysis above, we know that PT Transtel Universal has some opportunities and also challenges in the global market to keep the pace in the business. The technologies that become the basic needs of the customer is an opportunity to see all the factors in the business that make the company grow. The technological advancement brings technology closer and the market is there, so there is more to come for the telco company like PT Transtel Universal.

By considering all of these factors above, PT Transtel Universal businesses operation can identify their key strengths and weaknesses, and can develop strategies to take advantage of opportunities and mitigate threats. From Analysis above we all know that PT Transtel Universal has huge potential in the niche market but needs to enhance the operation by maximising the resources and making it more efficient.

The problem occurred when we see the threats on analysis above, the obsolete system. the traditional system would not fit into the business that was growing rapidly. How can PT Transtel Universal always bring the newest and the latest solution into the customer but cannot help the company itself. The author also found the possible challenge from the competitor if they have better adaptation to the system faster than Transtel.

### **Business Solution**

Knowledge sharing is an activity in which individuals in a corporation participate in knowledge exchange, a topic that has lately attracted the interest of authors. Furthermore, understanding and distinguishing between multiple types of knowledge is

a key step in KM, and it is visible in businesses as job-related documents, organisational standards, working procedures, and personal experience. (Jabar, Sidi, & Selamat, 2010).

The leadership changes in PT Transtel Universal brings the new method to be implemented by the company. The task was clear to boost the quality and efficiency in PT Transtel Universal. There are several ways that will be implemented to become transformational changes in the company. The VP has a task to resolve all the problems. The first job is to restructure the organisation. Organisational structure is the framework of relationships between roles, systems, operational processes, people, and groups that work to accomplish goals. An organisational structure is a set of ways for dividing and coordinating tasks (Zheng, Yang, & McLean, 2010). The leader as a driver of transformation is aware that the structure must be number one to be transformed into the most applicable way in the company.

The first transformation of the organisational structure was the separation and each division to enhance the potential of the division. In the previous chapter, the author already explained the background of the transformation in the organisational structure. PT Transtel Universal previously only had four divisions, The CEO managed all the 4 managers and consisted of, Finance and HR Division, Technic Division, Sales and Marketing Division, and Logistic Division. After the transformation, the company changes and transform into eight divisions, from the Commerce Division, Project Division, Finance Division, Engineer Division, Technic Division, Human Resource Division, Business Development Division, and Logistic Division. All the division is reporting to the Division Managers. The HR and Finance manager have to report to VP Finance and the rest have to report to VP Operation.

The core business that PT Transtel Universal's prominent is the b2b solution on satcom technologies. This solution needs highly trained engineers and technicians to execute and give the best solution and also the best implemented technology to customers. After the organisational structure changed the next step would be enhancing the potential and skill of the employees.

The next goal is to create sustainability in the business as PT Transtel Universal has proven sustain in two different monetary crises in Indonesia. The VP awards that to build sustainability in the system they have to make the knowledge management throughout the company to compete and survive with the business environment, that's why the solution was PT Transtel Universal needs to achieve high quality manpower/resources. The process begin with making the regular training throughout employees. All the division have to involve in this program to create and transform the company from traditional to slightly forward to keep up the pace with the business environment.

The most crucial and must-have training is for the technical division and the engineer division. We have about 30 technicians and 10 engineers in the company. Most engineers are qualified with the more training hours and overseas training, some only by locals and knowledge sharing basis, but for technicians, they have limited time and knowledge to access the facility. The learning process has to be the engineers training

the technician so the transfer knowledge can be more fluid and the personal tacit knowledge becomes organisational knowledge.

PT Transtel Universal has been implementing knowledge management in the early phase for the development of its people. People are not the only concern but the product and solution itself is the concern. Nowadays, people also become concerned because solutions come from brilliant people and brilliant people are made by knowledge. However, what is lacking is that PT Transtel Universal's only emphasises the development of the knowledge of its product in the beginning, but not focused on the big data development that has been made by the employees. They primarily execute knowledge sharing of capabilities and soft skills for personnel, but they only have a limited storage of project data implementation. Furthermore, knowledge storage is often limited to departments concerned rather than all personnel. As a result, the author would suggest the company develop and preserve every project's outcome and procedure for future asset KM.

## Implementation Plan & Justification

Creating KM Implementation Plan for PT Transtel Universal

As the author already mentioned above, PT Transtel Universal is still medium-sized company and in a way, there are plenty of room that the company can grow. Telco in general and the satcom industry is one of the biggest industries in this century, leading the pack in the business world, so many giant tech savvy companies achieved their success in the industry. With a room that can grow bigger, PT Transtel Universal's KM must be implemented correctly and always innovating to be the most suitable for the company. All employees are the part of the agent of change to move forward and serving the company into brighter future. There are several programs also can be implemented as follows according to Jann Model.

- 1. Make a specific roles and job descriptions for KM, Project KM, and Knowledge drivers:
  - a. KM Leader as a driver is the VP in this area of research, Managers will take as a lead in implementing the knowledge management culture, supervise, and create the policies to maintain the implementation throughout all the stakeholders including employees. That's why the CEO appointed new VPs to make Managers lead the division align with the company's vision, this processes the author will determined as a Knowledge Creation;
  - b. Project Leaders have to be the project managers who implement and supervise the application of Knowledge Management throughout every aspect during the projects. These processes will determine as knowledge storage and retrieval because the tas is focuses on the systems and technologies that are used to store and retrieve knowledge, such as databases, document management systems;
  - c. Knowledge Assistant are the HR Department, who will create and provide the platform and assist the implementation of knowledge management. This stage is currently under development in Transtel Universal. This process focuses on the

- processes and activities that are used to apply knowledge, such as decision-making, problem-solving, and innovation. This component the author called Knowledge application.
- d. Knowledge Protectors are all the employees in PT Transtel Universal through the knowledge system. This component focuses on the procedures and actions involved in knowledge sharing and dissemination, such as training, mentorship, and communication. This component the author determines as Knowledge Dissemination.

By addressing all of these components, the Jann Model enables PT Transtel Universal, as a medium-sized organisation in general, to effectively and efficiently produce, store, exchange, and use knowledge. Furthermore, the model encourages a culture of knowledge sharing and continuous learning, which is especially important for medium-sized businesses, which frequently have limited resources and a diverse workforce and must make the most of the knowledge and expertise already present within the organisation.

- Compose the right quantity of team in program staff:
   Lead by the HR Department for the program applicator, process runs by all employees and stakeholders;
- Objectives and schedules for conference evaluation meetings:
   Scheduled conference evaluation meetings are needed to build the culture of knowledge sharing throughout the employees and department;
- 4. Process for developing and renewing the plan of record, as well as implementation, new release, and reporting schedules:
  - Create a platform as a portal to share updated relevant information that can be accessed with all employees in each department;
- 5. Process for decision making:
  Integrated system of the information needed for a decision making, so that will act as a guideline when the similar problem occur and take less time to decide the problem solving for the rest of the teamng for the rest of the team

# Conclusion

For multiple reasons, knowledge management is essential for medium-sized businesses. PT Transtel Universal as a medium-sized company typically has limited resources, it is important to maximise the knowledge and skills that already exist inside the organisation. Medium-sized companies may guarantee that important information is shared and utilised efficiently across the company by implementing knowledge management practices.

PT Transtel Universal as medium-sized companies typically operate in a competitive market, and a solid knowledge management strategy may help them remain ahead of the competition by keeping them updated about industry advances and trends. With the help of knowledge management, medium-sized companies can reduce duplication of effort, lower costs and improve the decision-making process.

As a medium-sized company, PT Transtel UNiversal often has a diverse workforce with limited resources, with people scattered across several locations, divisions, and functions. Knowledge management tools and practices may be used to break down bottlenecks, stimulate collaboration, and cultivate a culture of knowledge sharing, resulting in a more connected and knowledgeable workforce.

PT Transtel Universal is still pursuing to complete KM 3.0, while knowledge management 3.0 seeks to empower employees, enhance decision-making, and make the organisation more agile and adaptive. Organisations may attain a new level of performance and creativity, generate new possibilities, and solve difficult challenges more efficiently by harnessing sophisticated technology and developing a culture that encourages knowledge sharing.

KM can also help to reduce the bottleneck innPT Transtel Universal By providing an integrated and holistic approach to knowledge management, Knowledge Management (KM) can assist in reducing bottlenecks in projects. Organisations may guarantee that they are creating, storing, sharing, and using knowledge in an effective and efficient manner by addressing all of the model's components. The house of KM through the Knowledge Creation, Knowledge storage, Knowledge dissemination, and knowledge application applying all the all four models in Jann House of KM can reduce the bottleneck in the project and improve project and employee performance.

### **DAFTAR PUSTAKA**

- Ahmed, Shafiul Azam, & Ali, Mansoor. (2004). Partnerships for solid waste management in developing countries: linking theories to realities. *Habitat International*, 28(3), 467–479.
- Alkaf, Abdurachman, Yusliza, Mohd Yusoff, Saputra, Jumadil, Muhammad, Zikri, & Bon, Abdul Talib. (2021). A Review of Work Effectiveness and Efficiency, Service Quality and Organisational Performance Literature: A Mini-Review Approach. 11th Annual International Conference on Industrial Engineering and Operations Management, Singapore, 7–11.
- Bagga, Simranjeet Kaur, Gera, Shikha, & Haque, Syed Nadimul. (2023). The mediating role of organizational culture: Transformational leadership and change management in virtual teams. *Asia Pacific Management Review*, 28(2), 120–131.
- Calvo-Mora, Arturo, Navarro-García, Antonio, & Periañez-Cristobal, Rafael. (2015). Project to improve knowledge management and key business results through the EFQM excellence model. *International Journal of Project Management*, 33(8), 1638–1651.
- Crevani, Lucia, Uhl-Bien, Mary, Clegg, Stewart, & By, Rune Todnem. (2021). Changing leadership in changing times II. *Journal of Change Management*, Vol. 21, pp. 133–143. Taylor & Francis.
- Donate, Mario J., & de Pablo, Jesús D. Sánchez. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68(2), 360–370.
- Jabar, Marzanah A., Sidi, Fatimah, & Selamat, Mohd H. (2010). Tacit knowledge codification. *Journal of Computer Science*, 6(10), 1170.
- Pagon, Milan, Banutai, Emanuel, & Bizjak, Uroš. (2008). Leadership competencies for successful change management. *University of Maribor, Slovenia, EUPAN*, 1–2.
- Pereira, Ana C., & Romero, Fernando. (2017). A review of the meanings and the implications of the Industry 4.0 concept. *Procedia Manufacturing*, 13, 1206–1214.
- Pringgabayu, Dematria, & Ramdlany, Dany Muhammad Athory. (2017). Creating knowledge management with the role of leadership and organizational culture. *Journal of Entrepreneurship, Business and Economics*, 5(2), 147–171.
- Raj Adhikari, Dev. (2010). Knowledge management in academic institutions. *International Journal of Educational Management*, 24(2), 94–104.
- Singh, Sanjay Kumar. (2008). Role of leadership in knowledge management: a study. *Journal of Knowledge Management*, 12(4), 3–15.

- Tjakraatmadja, J. H., & Kristinawati, Didin. (2017). Strategi implementasi knowledge management. *Penerbit ITB, Bandung*.
- Zheng, Wei, Yang, Baiyin, & McLean, Gary N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63(7), 763–771.