

## A PROPOSAL TO STRENGTHEN KNOWLEDGE MANAGEMENT PRACTICE THROUGH LITERATE CULTURE

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### ABSTRACT

*Given the potential gap between organizational capacity and the workload required to implement knowledge management (KM) initiatives, this study explores how literacy culture can be integrated to strengthen KM practices. The research proposes enhancing KM through literate culture, focusing on narrative success stories and competency-based categorization as effective knowledge transfer mechanisms. A qualitative approach was used, combining semi-structured interviews with key stakeholders and secondary data analysis. Design Thinking was applied to capture employee perspectives and expectations in KM, and insights were gathered from a former company top leader regarding the narrative success story framework in leadership assessment. The findings indicate a clear understanding of organizational needs and the requirements for alternative KM solutions. Based on these insights, a digital KM platform was developed using the Six Sigma DMADV framework. The platform supports narrative writing and knowledge sharing, featuring structured writing guidance, competency-based knowledge categorization, and an intuitive user interface to improve accessibility and engagement. This structured yet flexible KM environment fosters collaboration and continuous learning. The study contributes to KM research by introducing a novel approach that integrates literate culture through narrative success stories and competency-based categorization. It offers actionable recommendations for organizations aiming to enhance KM effectiveness in dynamic business environments.*

**KEYWORDS** knowledge management, literate culture, DMADV, leader competencies, STAR



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### INTRODUCTION

Energy demand in Indonesia from 2023 to 2033 is projected to grow at a rate of 3.5% to 4.6%, reaching approximately 230–250 MTOE by 2033. The primary energy mix in 2033 is expected to consist of 39% coal, 29% oil, 18% *non-renewable energy* (NRE), and 13% gas (The National Energy Council, 2023). At the same time, state budget (*APBN*) expenditures for energy subsidies have continued to increase, with a CAGR of 36.67%, reaching 176 IDR trillion in 2022. The fiscal burden on the *APBN* is further deepened by compensation payments for the disparity in selling prices of *Biosolar* and *Pertalite*, which reached 83 IDR trillion from Q1 to Q3 of 2023 (Ferdiansyah, 2024).

To ensure subsidies are distributed accurately and effectively, the government has implemented several measures. Electricity subsidies are provided to customers with 450 VA power capacity and partially to those with 900 VA capacity, with customer data cross-referenced against the Integrated Social Welfare Data (*DTKS; Data Terpadu Kementerian Sosial*) (Muliati, 2024). Fertilizer subsidies (*Pupuk Subsidi*) are managed through a digitalized system that records every subsidized purchase transaction, including recipient details and their *NIK* number ([distanbun.acehprov.go.id](http://distanbun.acehprov.go.id), 2024). For *Biosolar*, the subsidy is managed through the “*Subsidi Tepat*” program, requiring customers to register their vehicles on a specific website and present a QR code at the gas station. In the case of LPG 3 kg, the process combines digitalization at sub-dealers with the Integrated Social Welfare Data, where customers must show their *NIK* number, and the system checks eligibility (The National Energy Council, 2023).

Meanwhile, concerns have been raised about the declining *literate culture* among the global younger generation (Thomas, 2023). Indonesian students are experiencing a crisis in learning and critical thinking skills necessary for problem-solving, as reflected in the declining PISA scores across mathematics, science, and especially reading since 2000 (Napitupulu, 2023). At the organizational level, rapid changes in regulations, business operations, and structure require robust organizational capacity, planning, execution, and problem-solving skills. Traditionally, such expertise is transferred from senior to junior employees, but high job rotation and declining *literate culture* among younger generations hinder effective Knowledge Management (*KM*), which is vital for future project success.

Knowledge Management is essentially about getting the right knowledge to the right person at the right time (Hajric, 2018). Explicit knowledge is formalized and codified, sometimes referred to as know-what, and is easier to manage. Tacit knowledge, on the other hand, is intuitive, experience-based, difficult to articulate, and deeply rooted in action and involvement. Tacit knowledge is often the most valuable and likely to lead to organizational breakthroughs. The SECI Model describes knowledge creation and transfer through Socialization (tacit to tacit), Externalization (tacit to explicit), Combination (explicit to explicit), and Internalization (explicit to tacit). Studies show a positive comprehensive effect between a knowledge-friendly organizational culture and overall performance (Liu, 2021). Knowledge sharing is also crucial for maintaining organizational flexibility and competitiveness (Navimipour, 2016). There are ten principles to make KM practices more effective (Sunarti & Zebua, 2018), and various KM tools can be utilized for each step of the KM process (APO, 2020).

The relationship between KM and innovation is illustrated by the House of KM Jann Model, where innovation forms the roof, supported by KM methods and tools, with KM processes as enablers, reinforced by learning habits and change (Tjakraatmadja, 2024). The foundation of the House of KM is a Smart & Agile Organization, which also serves as the roof of the House of LO Jann Model. In the House of LO, the foundation is the Learning Habitat, supported by learning facilities, knowledge workers, and leadership, underpinned by learning organization disciplines (Tjakraatmadja, 2024). Information literacy is found to play a critical role in shaping a company’s ambidextrous innovation, with a stronger impact on exploitation than exploration (F. Ahmad et al., 2020).

Leadership is defined as the process of influencing others to enhance their contribution toward achieving a common goal, with core traits including confidence, integrity, resilience, innovation, and communication skills (Wu & Park, 2023). Competency is described as a personal trait or set of habits that lead to more effective job performance, and competency mapping identifies key competencies and attributes required for effective job classifications (Chouhan & Srivastava, 2014).

Despite advancements, sustaining KM remains challenged by high employee turnover and declining literacy rates, which hinder the seamless transfer of expertise and create gaps between organizational knowledge and its practical application. Few studies have examined how narrative techniques, such as success stories, can enhance knowledge retention and sharing, particularly as declining literacy and critical thinking skills limit employees' ability to document and communicate knowledge effectively (Thomas, 2023). This gap is especially acute in industries undergoing rapid change, where loss of tacit knowledge due to job rotation can disrupt continuity.

To address these challenges, this study introduces "STARJOE," a complementary KM platform that integrates narrative success stories and competency-based categorization. STARJOE leverages the *STAR* (Situation, Task, Action, Result) framework to structure employee experiences, making tacit knowledge more accessible and actionable. The platform also aligns KM with leadership development by mapping knowledge contributions to core competencies, a rarely explored approach. By combining Design Thinking with the Six Sigma *DMADV* methodology, this research offers a systematic, user-centric solution to KM challenges.

The primary objective is to explore how *literate culture* can strengthen KM practices and to develop a scalable digital platform for knowledge creation and sharing. The study aims to identify employee perspectives on KM, design a solution that addresses their needs, and validate the platform's effectiveness in improving knowledge retention and utilization. By focusing on narrative techniques and competency alignment, the research seeks to create a KM environment that is both structured and adaptable, supporting organizational learning and innovation.

Theoretically, this research contributes to KM literature by demonstrating the value of integrating *literate culture* and narrative frameworks into KM systems. Practically, the proposed STARJOE platform provides organizations with a tool to mitigate knowledge loss, improve employee engagement, and streamline leadership development. By fostering a culture of continuous learning and collaboration, the platform can enhance operational efficiency and innovation. Ultimately, this research offers actionable insights for organizations navigating complex business environments while empowering their workforce through effective KM practices.

## RESEARCH METHOD

This study employs a qualitative approach, combining semi-structured interviews with key stakeholders and secondary data analysis. *Design Thinking* is utilized to capture employee perspectives, ensuring that the solution is grounded in the actual needs and expectations of those involved in Knowledge Management (KM) practices.

The process begins with the *Empathize* step of the *Design Thinking* framework, which is applied to deeply understand employee perspectives and expectations regarding KM. This phase is critical for identifying the specific needs and challenges employees face in relation to KM practices.

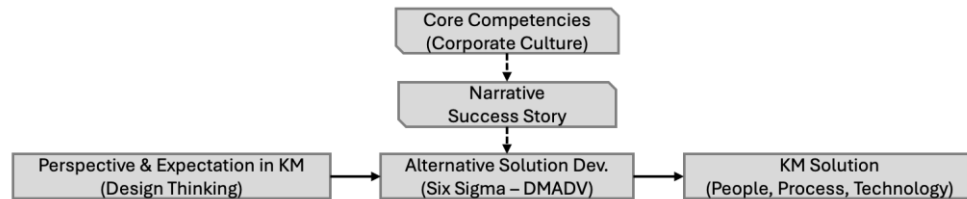
Following the identification of these needs, the development of the solution proceeds using the Six Sigma *DMADV* (Define, Measure, Analyze, Design, Verify) framework (Pyzdek & Keller, 2010). The *Define* stage is informed by the insights gathered during the *Empathize* step, ensuring that the solution directly addresses the real issues identified.

The solution development is further enriched by integrating the theory of Data-Information-Knowledge and *literate culture*, which is articulated using *narrative success stories*. This approach not only supports effective knowledge transfer but also fosters a culture of storytelling and reflection within the organization. Additionally, the solution incorporates

core competency concepts relevant to leadership development, aligning knowledge contributions with organizational growth and leadership needs.

Upon completion, the Knowledge Management solution is structured based on established literature concerning KM initiatives, particularly within the *People-Process-Technology* framework. This ensures a holistic approach, addressing human, procedural, and technological factors essential for successful KM implementation.

The primary objective of this research is to propose a complementary platform that supports and enhances KM practices within the Company, fostering a more engaged, knowledgeable, and adaptive workforce.



**Figure 1. Conceptual Framework**

The research will be conducted using a qualitative method. The primary data were gathered through semi-structured interviews with selected sources, as presented in Table 1. Meanwhile, the secondary data were obtained from the company's official publications, internal data, reports, and journals. Author conducted interviews with larger respondent for Primary Data #1 than Primary Data #2 was intended to capture a comprehensive understanding of employees' perspectives on the existing Knowledge Management practices in the Company and their expectations regarding these practices, ranging from current senior leader at the head office to those leading the smallest organizational in Regional. The Primary Data #2 seeks to identify findings regarding the Narrative Success Story. Ultimately, these findings will be consolidated into a collective result, providing a clear understanding of the needs and requirements for an alternative solution to be further developed.

**Table 1. Semi-structured Interviews Respondents**

Source of Data	Initial	Date	Reason of Selection
Primary Data #1 Perspective & Expectation in KM	DP	21 Oct 2024	- Quality Management Team - More than 10 years' work experience in Quality Management including QM Auditor and CIP award Judge Panel
	DR	18 Sep 2024	- Expert Panel for Knowledge Management - Current Senior Leader - Person in charge for Company Organization Capability Development & Improvement - Could make policy which would be implemented to Employee
	AR	2 Oct 2024	- Current Regional Leader - More than 8 years as Company Middle Leader
	DS	3 Oct 2024	- Current Regional Top Management - Experience in writing and publishing a book.
	SS	21 Oct 2024	- Current Regional Middle Management - Platinum Awardee in Continuous Improvement Program
Primary Data #2	AF	19 Sep 2024	- Former CEO of Company's Subsidiaries - More than 12 years' experience as Company Senior Leader

To analyze the data, the research employs the thematic analysis method, as it facilitates the production of insightful and reliable findings (Dawadi, 2020). Furthermore, the analysis is conducted using a deductive approach, given that the author has an initial view on the themes that are likely to emerge based on the literature review. In the writing of this research, certain terms and stages have been adjusted to align with the author's needs in presenting the data, for example, the term “theme” would be substitute by “category” and “sub theme” be a “subcategory”. Given that, the stages of familiarization and generating initial codes are carried out by carefully reread the transcripts of the semi-structured interviews and find out certain interesting phrase or sentences/paragraphs that could be coded. The stages of searching for themes and reviewing themes are conducted by tabulating and categorizing the available codes into particular category and/or subcategory. The stages of defining and naming themes, as well as writing the report, are completed by presenting the results of the data analysis as shown in next Chapter. Furthermore, selected respondent statements quoted to provide a clearer narrative of their intended meanings.

**Table 2. Semi-structure Interview Guiding Questions**

Section	About	Questions
Primary Data #1	KM in the Company	How does KM Supporting planning and executing Action Plan in the Company?
	KM Culture in the Company	What are the signals which could be a clue that the KM culture is easily visible in the Company?
	Employee Job Rotation and KM Culture	How will the existing employee job rotation affect KM culture in the Company?
	Complementary to existing KMS	How could complementary platform support existing KMS?
	Expectations of Complementary Platform	What feature you want to be implemented in complementary platform?
Primary Data #2	Leadership Behavior (LB)	What is Leadership Behavior?
	LB in the Company	How is LB in the Company compared to other Corporate?
	Core Competencies	What are core competencies needed to be present in future leader?
	Success Story	How the good narrative success story that could sign the person has significant core competencies?
	Narrative Success Story Framework	What is framework that could use to make good success story?

## RESULT AND DISCUSSION

### Perspective & Expectations in KM

The research found employees' perspectives and expectations regarding knowledge management as shown in Table 3. The respond would be categorized into 4 categories:

- Challenges in KM. Respondents indicated the existence of challenges in implementing the Knowledge Management System. Findings in this category include challenges related to KM culture and perceived inadequacy of the KM Repository.  
*“Indeed, this is not easy; the challenge lies in how we can provide encouragement and trust, as fostering a culture of sharing is not simple. There are often concerns that sharing knowledge may lead others to become more knowledgeable, which can create hesitation. Such perceptions and concerns need to be addressed, as they are counterproductive to building a culture of openness and collaboration.”* said AR.
- KM Culture & Leadership. Contains ideas about KM culture and its relationship with the leadership within the Company. Findings in this category include KM culture in seeing lesson learned as a knowledge, urgency of knowledge combination and externalization, and the idea to integrated KM creation as consideration for job promotion.



*“In my opinion, knowledge management from senior generations to younger ones is critical and very important. Similarly, the exchange between different departments should also be continuously encouraged, as it enriches both the skillset and problem-solving abilities of each employee.”* Said AR.

*“This may be due to the fact that the company has not yet implemented tools to make Knowledge Management a mandatory activity. For instance, as part of the requirements for a job transfer, it could be considered to include the obligation to produce a knowledge article.”* Said DS.

- **KM Role & Organizational Impact.** Describes the respondents' understanding of the role of KM and its impact on the organization. Findings in this category include the perspective of KM for Company Competitive Advantage, KM for improving business process, KM to Company Culture Changes, KM as distinctive value for employee, KM is very related to do action plan, KM as a guide or reference, motivation, Chance for encouraged creativity, and KM is very important especially as the employee tend to rotate across company.

*“The role of Knowledge Management (KM) in this context is to consolidate and assess the value of knowledge generated by each business unit. From there, KM identifies potential opportunities for the company, using knowledge portal as a tool to transform the corporate culture. Additionally, it aims to improve the company's business processes, with the ultimate goal of achieving financial implications.”* Said DR.

*“For example, in KPI (annual evaluation), there is the STAR framework: Situation, Task, Analysis (i.e. action), and Result. This could actually provide added value, serving as a benchmark between teams when conducting assessments. It helps in determining which team member excels more. This is because KPIs are more collegial in nature, and there may be free riders among the team members.”* Said DR.

*“In my opinion, Knowledge Management (KM) is indeed crucial, especially in sales force, where job positions rotate frequently. As a result, the knowledge gained from previous experiences must be effectively managed and transferred to the new incumbents. This ensures that the experiences acquired from past roles are accessible to the new officers, allowing them to leverage this knowledge in order to contribute to the achievement of the company's targets.”* Said SS.

- **KM Tools & Platform.** Includes ideas and requirements from the respondents regarding the features they expect to be included in typical KM platform. This category will serve as the basis for developing the proposed complementary KM platform by the author.

*“That is actually the strength of Knowledge Management (KM), how it can have a well-organized repository. Today, people frequently rotate from one job position to another in a relatively shorter time than before. Therefore, the key is how to easily transfer knowledge to the new individual. Knowledge portal contains a lot of literature, but the challenge lies in identifying which content is relevant to one's job and which is mandatory. This is something we should have, to make it easier for new employee to get a sense of how they can work effectively.”* Said DR.

*“This could also be included, the profiling of the knowledge repository. Users involve in rating the content with 5 or 3 stars, and there should be also a comment section where users have the opportunity to ask specific questions related to what they are reading.”* Said DR.

*“Thirdly, it is also necessary, if the context involves conducting a review, whether it be to a superior or to a team. A platform could be provided for review, allowing for a brief summary, thus serving as a tool for conducting the review.”* Said DS.

*“Writing does not necessarily have to be done on a laptop; it can be done on a mobile phone, allowing for quicker documentation. This can then be uploaded to the cloud and accessed by various job positions within the work area. For example, if a sales force writes*

*it, the supervisor can view it, as well as other sales force who can also access and review the article.” Said SS.*

**Table 3. Findings about Perspective & Expectation in KM**

Sub Category	Frequent	Source	Category
Challenge - Culture	2	1	Challenges in KM
Challenge - Timing	1	1	Challenges in KM
Challenge - Repository	1	1	Challenges in KM
Culture - Unique	1	1	KM Culture & Leadership
Culture - KM Parameter	2	1	KM Culture & Leadership
Knowledge Internalization	1	1	KM Culture & Leadership
Knowledge to pass	2	1	KM Culture & Leadership
Culture - Knowledge			
Externalization	6	2	KM Culture & Leadership
Culture - Urgency of			
Combination	1	1	KM Culture & Leadership
Culture - Knowledge			
Socialization	2	1	KM Culture & Leadership
Innovative Culture	1	1	KM Culture & Leadership
Leadership - Encourage			
Competition	1	1	KM Culture & Leadership
Success Story	2	1	KM Culture & Leadership
Leadership - Encourage			
Knowledge Creation	2	2	KM Culture & Leadership
KM Culture in various			
department	1	1	KM Culture & Leadership
Knowledge Sharing	2	1	KM Culture & Leadership
Leadership - Encourage			
Knowledge Creation &			
Sharing	2	2	KM Culture & Leadership
Leadership – Encourage			
Job Rotation & Promotion	1	1	KM Culture & Leadership
Knowledge to doing the			
works	3	3	KM Role & Organizational Impact
Role of KM - Fundamental	1	1	KM Role & Organizational Impact
Role of KM - Competitive			
Advantage	1	1	KM Role & Organizational Impact
Role of KM - A guidance	3	2	KM Role & Organizational Impact
Role of KM - Improving			
Business	5	2	KM Role & Organizational Impact
Role of KM - Improving			
Culture	1	1	KM Role & Organizational Impact
KM is Important	5	4	KM Role & Organizational Impact
Role of KM - Employee			
distinctive value	2	1	KM Role & Organizational Impact
Role of KM - Knowledge			
Transfer	1	1	KM Role & Organizational Impact
Complementary Platform			
is needed	3	2	KM Role & Organizational Impact
Role of KM - A			
motivation	2	1	KM Role & Organizational Impact
Knowledge from local			
content	1	1	KM Role & Organizational Impact
User Friendly	3	2	KM Tools & Platforms
Easy To Find	6	2	KM Tools & Platforms
Writing platform	1	1	KM Tools & Platforms

Easily Recognized	2	1	KM Tools & Platforms
Repository Metadata	1	1	KM Tools & Platforms
Rate & Comment	2	2	KM Tools & Platforms
User Guide	4	2	KM Tools & Platforms
Informal	1	1	KM Tools & Platforms
Create	2	1	KM Tools & Platforms
Audio Video	3	1	KM Tools & Platforms
External Source	1	1	KM Tools & Platforms
Theme - Commercial	1	1	KM Tools & Platforms
Theme	1	2	KM Tools & Platforms
Local Content	1	1	KM Tools & Platforms
Theme - Safety	1	1	KM Tools & Platforms
KMS Complementary			
Platform	1	1	KM Tools & Platforms
Repository Category	2	1	KM Tools & Platforms
Upload supporting			
document	1	1	KM Tools & Platforms
Cloud base	2	1	KM Tools & Platforms
Mobile	3	1	KM Tools & Platforms
Geo Tag	1	1	KM Tools & Platforms

### Narrative Success Story

The research found about narrative success story which related to the ideas and insights about competencies and leadership qualities that future leaders of the Company should have. These insights are categorized into several category:

- Challenge in Competencies. Respondents indicated the existence of challenges in fulfilling employee competency requirements, especially in certain job position which would not associate with competency.  
*“Global business savvy is not a competency that everyone has the opportunity to develop, except if you assigned to specific roles, and even then, the outcomes are often not particularly strong.”* Said AF.
- Competencies. This category contains ideas and insights related to the concept of competencies itself.  
*“For strategic leaders, who are prepared to assume leadership roles in State-Owned Enterprises or within the Company, certain requirements must be met. One of these requirements is the attainment of a minimum competency score of 3, with an average passing grade of 3 across the 15 predetermined competencies.”* Said AF.
- Leadership Assessment. This includes ideas and insights regarding how leadership assessments are conducted. Leadership assessment usually done by one’s supervisor and complemented by external assessment which include some activities such as in-tray exercise, interviews, role-playing, and business plan development.  
*“Typically, competency assessments should be conducted by employee’s supervisor. However, to ensure fairness, they are usually complemented by external assessments.”* Said AF.
- Leadership Behaviour. This category focuses on ideas and insights related to how leadership behavior is demonstrated and how it will evolve among employees. Leadership behaviour is evolved in ones starting from junior level until senior level, individuals who aspire to progress and understand that leadership, they will take the initiative to develop themselves.  
*“Leadership behavior is evolved by the endeavor placed on an individual from the very time they are a junior manager, with each subsequent managerial level requiring the development of specific behaviors expected of a leader.”* Said Mr. Afandi
- Narrative Framework. This category presents ideas and insights related to a framework that facilitates employees in narrating their experiences and success stories. Due to the limited



time, participants of Leadership Assessment are required to be tactical in presenting their experiences to ensure that all competencies are effectively captured by the assessors. Therefore, it is suggested to follow certain framework to structuring the success story. The framework is STAR (Situation, Task/Target, Act, Result) and combined with POAC (Plan, Organizing, Act, Controlling) at the Act step.

*“Assessment, the time is limited, but you must be able to cover everything. It needs to become a habit; some aspects require detailed explanations, while others only need to deliver the main points. We need to follow a structured pattern to ensure the assessee stay focused. Without a pattern, they might start by describing the situation and the task, but suddenly jump straight to the results. The training is designed to prepared the mindset to this structured approach.”* Said AF.

- Success Story. Essentially, this refers to positive experiences gained by employees, serving as a basis for validating the competencies they possess.

*“Create success stories start from lower management through strategic leadership.”* Said AF.

**Table 4. Findings about Narrative Writing**

Sub Category	Frequent	Source	Category
Challenge in Competencies	4	1	Challenge in Competencies
Competencies minimum score	1	1	Competencies
All competencies need to be possessed	1	1	Competencies
assessment from the superior	1	1	Leadership Assessment
assessment from external institution	1	1	Leadership Assessment
assessment from the superior and assessment from external institution	1	1	Leadership Assessment
Assessment Activities	3	1	Leadership Assessment
Gradual stages from junior to senior level	2	1	Leadership Behaviour
Initiatives to develop Leadership Behaviour	2	1	Leadership Behaviour
Urgency to have structured narrative framework	2	1	Narrative Framework
Structured Framework	3	1	Narrative Framework
Structuring a success story.	1	1	Narrative Framework
STAR + POAC	1	1	Narrative Framework
STAR Framework	1	1	Narrative Framework
The need to have Success Story	1	1	Success Story

### Competencies for Future Leader

The research found about competencies needed by future leader in the Company, it is divided into 3 level of leadership with different set of competencies:

- Performance Leader. For individuals assuming the mantle of leadership for the first time, usually to lead a small team within a specific operational unit or designated area.
- Executive Leader. For individuals with bigger responsibility, usually to lead a larger organization in certain regional or a whole business unit.
- Strategic Leader. Senior leadership typically consists of top management executives who oversee an entire division, directorate, or even the company as a whole.

**Table 5. Finding Competencies Needed by Future Leader**

No	Performance Leader	Executive Leader	Strategic Leader
1	Building Networks	Cultivating Network & Partnership	Building Strategic Partnership
2	Strategic Planning	Establishing Strategic Direction	Strategic Orientation
3	Operational Decision Making	Operational Decision Making	Driving Execution
4	Business Insights	Entrepreneurial Insights	Global Business Savvy
5	Customer Orientation	Customer Relationship	Customer Focus
6	Leading Innovation	Leading Innovation	Driving Innovation
7	Technology Savvy	Technology Savvy	Digital Leadership
8	Facilitating Changes	Change Leadership	Leading Changes
9	Building Talent	Building Organizational Talent	Developing Organizational Capabilities
10	Creating an Inclusive Environment	Optimizing Diversity	Managing Diversity
11	Influencing	Strategic Influence	Strategic Influence
12	Inspiring Others	Inspiring Excellence	Inspiring Excellence
13	Driving for Results	Leading Through Vision and Values	Energizing The Organization
14	Learning Agility	Learning Agility	Learning Agility
15	-	Business Acumen	Financial Acumen

### Complementary Platform Development

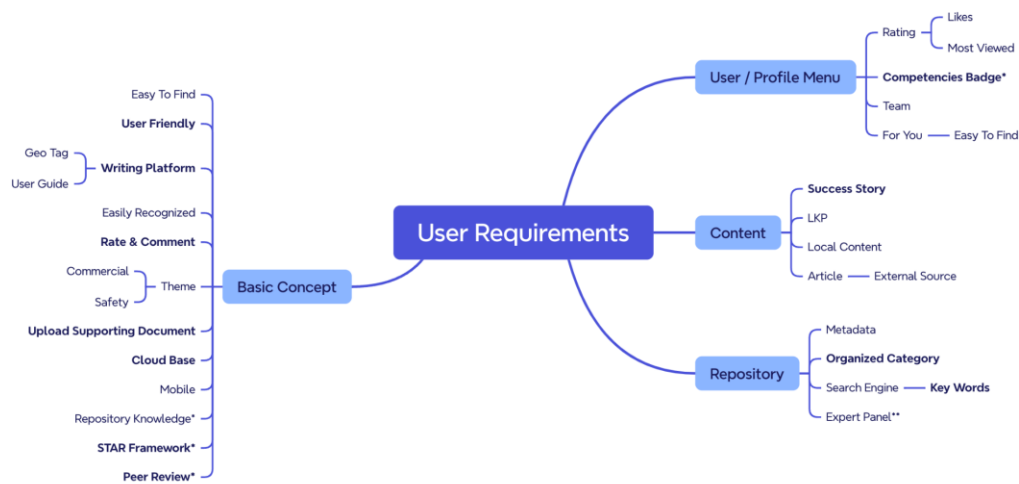
Based on the data collection and data analysis in the previous section, a proposal for a complementary platform to support KMS would be developed with Six SIGMA for Design, utilizing the DMADV framework: Define, Measure, Analyze, Design, Validate.

Program Name: Web Based Narrative Writing for Knowledge Sharing					
Business related : Retail Sales		Directorate: Retail Directorate			
Project Information		KPI's by end of 2025		Deliverables by end of project	
Background	Objectives	KPI description	Target	End results/outputs of the project	
<ul style="list-style-type: none"> <li>There would be future nationwide Project to be accomplished</li> <li>There is a challenge in existing Knowledge Management System (KMS)</li> <li>With the current trend of Employee rotation &amp; promotion, it is encouraged to have complementary platform for existing KMS</li> </ul>	<ul style="list-style-type: none"> <li>To Design suitable complementary KMS platform</li> <li>To Develop complementary KMS platform</li> <li>To Roll Out the complementary KMS platform across the Company</li> </ul>	<ul style="list-style-type: none"> <li>Learning &amp; Growth</li> </ul>	<ul style="list-style-type: none"> <li>Development Commitment</li> <li>Project &amp; Community Involvement</li> </ul>	<ul style="list-style-type: none"> <li>Decent User Requirements for the Apps Development are available</li> <li>A web application is available for Narrative Writing &amp; Knowledge Sharing as a complementary KMS platform</li> <li>The Apps user manual are available</li> <li>Roll Out to Sales Division as Early Adopter</li> </ul>	
Before & After Condition (Estimated)		Milestones by end of 2025		Required resources	
Before	After	Steps and milestones	Deadline	Items	Amount
<ul style="list-style-type: none"> <li>Low Knowledge Creation in the Company per capita</li> <li>Low to Medium Knowledge Sharing in the Company per capita</li> <li>Low to Medium Knowledge Repository in the Company</li> <li>Difficulty to understand Employee competencies and capability</li> </ul>	<ul style="list-style-type: none"> <li>Medium to High Knowledge Creation</li> <li>Medium to High Knowledge Sharing</li> <li>High Knowledge Repository</li> <li>Convenience to understand and track Employee competencies and capability across the Company</li> <li>Foundation for Learning Organizational in the Company</li> </ul>	<ul style="list-style-type: none"> <li>Project Proposal &amp; Approval</li> <li>Requirement Gathering</li> <li>Developer Procurement</li> <li>Project Developing</li> <li>Project Minimum Viable Product</li> <li>SAT &amp; UAT &amp; Pilot Project</li> <li>Project Roll Out</li> </ul>	<ul style="list-style-type: none"> <li>Jan 2025</li> <li>Feb 2025</li> <li>Mar 2025</li> <li>Jun 2025</li> <li>Jun 2025</li> <li>Jul 2025</li> <li>Aug 2025</li> </ul>	<ul style="list-style-type: none"> <li>Project PM</li> <li>Project Developer</li> <li>Project Test User</li> <li>Domain for Hosting in App Pertamina Environment</li> <li>Agent of Change to Roll Out</li> </ul>	Estimated Budget for Development around Rp 500 million
Impact on Pertamina		Potential Risk		Team members	
<ul style="list-style-type: none"> <li>Improve Knowledge Creation &amp; Knowledge Sharing Culture</li> <li>Improve Knowledge Repository especially in Retail Sales Business</li> <li>Improve Leadership Behavior in general</li> <li>Improve Talent Pool Readiness</li> </ul>		<b>Risk Identified</b> <ul style="list-style-type: none"> <li>Product not developed as per User Require</li> <li>Knowledge Repository breached to internet</li> </ul>	<b>Risk Mitigation</b> <ul style="list-style-type: none"> <li>Detail &amp; close monitoring in Development Phase</li> <li>Applying Pen-Test prior Roll Out</li> <li>User Login Management using Pertamina Standard</li> </ul>	<ul style="list-style-type: none"> <li>Manager Organization Development</li> <li>Sr Officer Development</li> <li>Officer Digitalization</li> <li>Officer Quality Management</li> </ul>	
Size of impacts* (financial and non-financial)					
Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/>					
Time to impact		Top management support needed			
<1 yr <input type="checkbox"/> 1-3 yrs <input checked="" type="checkbox"/> 3-5 yrs <input type="checkbox"/>		<ul style="list-style-type: none"> <li>Project Approval</li> <li>Organizational Culture Change Management</li> <li>Talent Pool Change Management</li> </ul>			
Risk assessment					
Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/>					
Approval					
Project Owner		Project Leader		Project Sponsor	
<ul style="list-style-type: none"> <li>VP Retail Sales</li> <li>VP Human Capital</li> </ul>		Manager Organization Development		Retail Business Director	

**Figure 2. Project Charter**

User Requirement developed based on findings in the previous chapter, subsequently categorized in several main sections as shown in Figure 3. Most of the user requirements come from Table 3 with some addition from literature:

- **Basic Concept.** It consists of the basic idea of how the Web Apps would be developed, such as the expectation of user friendly, cloud-based, mobile friendly, assisted writing platform, good repository and easiness to find articles, Peer Review, and the STAR Framework itself.
- **Content.** The main Knowledge article would be categorized by: Success Story, Learning from Event, Local Content, and Article (Various study from outside the Company)
- **Repository.** It is depth specific requirements about the repository itself, that it would has metadata, good organized, has keywords friendly search engine, and some kind of Expert Panel.
- **User / Profile Menu.** It is requirements that dedicated to the user, where they could see the metric of their activity in the platform like Rating, Competencies Badge, the Team, and personal suggested Knowledge Articles to read.



**Figure 3. User Requirements**

User Requirements with the significant contribution to the quality of the final product of the Web Apps, then categorized as Critical to Quality (CtQ). It would then be analyzed by its specific functionality and some measurements about its UI/EX. The CtQ for complementary platform shown in Table 6.

**Table 6. Critical to Quality User Requirements**

Critical To Quality	Functionality	UI / UX Score Target
User Friendly	Fast Learning Curve	7
	Good Navigation Map	6
	Simple Login & Dashboard	8
Writing Platform	Built in Writing Platform	7
	Guide & Tips	6
	Save & Submit	7
Rate & Comment	Rating Mechanism	7
	Comment Mechanism	6
	Popular Mechanism	6
Upload Supporting Document	Doc, Xlsx, Pdf, JPEG File Type	6
	Uploaded File Library	6
	Cross Reference Link	7
Cloud Base	Web App	6
	Cloud Storage	6
	Computer & Mobile Adaptability	6

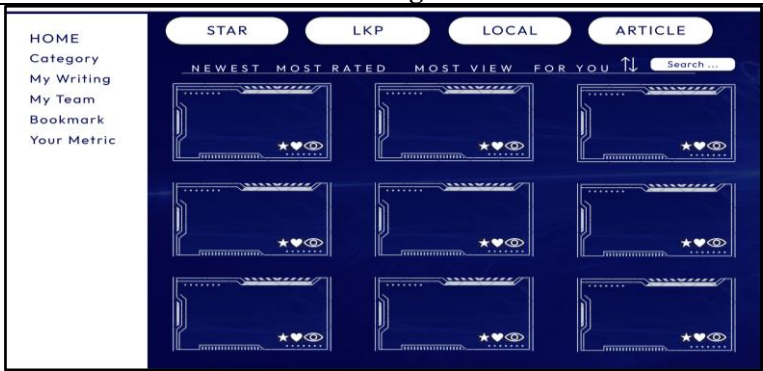
STAR Framework	STAR Guidance	7
	POAC Guidance	7
	STAR Export / API	6
Peer Review	Comment Mechanism	8
	Citation Mechanism	7
	Flagging Mechanism	6
Competencies Badge	Competencies Library	8
	Competencies Tag & Flag	7
	Competencies Review	6
Success Story	Success Story Library	8
	Success Story Reading View	6
	Hyperlink to Another Files	6
Organized Category	Categorized Knowledge Files	6
	Filter & Search	7
	Log Version History	6
Search Engine - Keywords	Key Words Enabled	7
	Multiple Keywords	6
	Repository Index	6

Score Guide:					
1	Poor UI, Poor UX	4	Decent UI, Bad UX	7	Good UI, Good UX
2	Poor UI, Bad UX	5	Decent UI, Decent UX	8	Good UI, Great UX
3	Bad UI, Bad UX	6	Decent UI, Good UX	9	Great UI, Great UX

Early Prototype was built with application collaborative design tools to test the design for web, mobile, or other digital product. For the simplicity of the writing, from now on, the proposed complementary platform to support existing KMS would be called “STARJOE”. Table 7 shows the user interface design and simple explanation of STARJOE.

**Table 7. Example of STARJOE UI Early Design**

UI Design	Remarks
	<p>After logging in, users will be directed to the dashboard page, which features several functionalities. Users can access profile settings by clicking on their username. A toolbar on the left provides quick navigation, while the main content area displays a grid view of articles available for reading. A category selection menu at the top enables users to filter content based on their preferred categories. Additionally, the page offers sorting options, including <i>Newest</i>, <i>Most Rated</i>, <i>Most Viewed</i>, and <i>For You</i>, enhancing the browsing experience.</p>

HOME

Category

My Writing

My Team

Bookmark

Your Metric

When users hover the mouse over a specific article, a pop-up will appear displaying key details, including the title, author, last updated date, log lines, rating, number of comments, and views. The pop-up will also provide options for users to read more, read abstract, leave a comment, bookmark the article, or share it.

HOME

Category

My Writing

Draft

Published

Library

My Team

Bookmark

Your Metric

Competencies

STARJOE Report

Your Metric | Competencies

Competencies Map

Performance Leader	Executive Leader	Strategic Leader
Building Networks	Cultivating Network & Partnership	Building Strategic Partnership
Strategic Planning	Establishing Strategic Direction	Strategic Orientation
Operational Decision Making	Operational Decision Making	Driving Execution
Business Insights	Entrepreneurial Insights	Global Business Savvy
Customer Orientation	Customer Relationship	Customer Focus
Leading Innovation	Leading Innovation	Driving Innovation
Technology Savvy	Technology Savvy	Digital Leadership
Facilitating Changes	Change Leadership	Leading Changes
Building Talent	Building Organizational Talent	Developing Organizational
Creating an Inclusive Environment	Optimizing Diversity	Managing Diversity
Influencing	Strategic Influence	Strategic Influence
Inspiring Others	Inspiring Excellence	Inspiring Excellence
Driving for Results	Leading Through Vision and Values	Energizing The Organization
Learning Agility	Learning Agility	Learning Agility
-	Business Acumen	Financial Acumen

Competencies Score

Level	STAR	Reviewed	% Achieve
	Primary / Secondary / Un-STAR	Primary / Secondary / Un-STAR	
Performance Leader	12 / 14 / 0	10 / 14 / 0	10 / 14 ( 71% )

Competencies Score

Level	STAR	Reviewed	% Achieve
	Primary / Secondary / Un-STAR	Primary / Secondary / Un-STAR	
Performance Leader	12 / 14 / 0	10 / 14 / 0	10 / 14 ( 71% )
Executive Leader	8 / 12 / 4	8 / 12 / 4	8 / 15 ( 53% )
Strategic Leader	7 / 10 / 4	7 / 10 / 4	7 / 15 ( 47% )

Competencies	Primary	Secondary	Achieve	See STAR <sup>?</sup>
Driving Execution	3 Star	1 Star	2 Star	GO
Digital Leadership	2 Star	1 Star	2 Star	GO
Strategic Planning	2 Star	1 Star	2 Star	GO
Learning Agility	2 Star	1 Star	1 Star	GO
Leading Innovation	1 Star	1 Star	1 Star	GO
Customer Relationship	1 Star	1 Star	0 Star	GO
Building Networks	1 Star	1 Star	0 Star	GO
Business Acumen	0 Star	1 Star	0 Star	GO

(more...)

In the *Your Metric - Competencies* section, there are two main components: *Category Map* and *Competencies Score*. The *Category Map* provides a list of competencies required for each leadership level (*Performance*, *Executive*, and *Strategic Leader*).

The *Competencies Score* displays the extent to which the user has created STAR knowledge articles to claim achievements in specific competencies. To obtain an *Achieved* score, a STAR article must first be validated by a supervisor through a review process. At the bottom, a detailed breakdown shows the number of STAR articles created for each competency. Finally, users can directly access the list of STAR articles by clicking the *GO* button.



<p>HOME</p> <p>Category</p> <p>STAR</p> <p>LKP</p> <p>LOCALE</p> <p>ARTICLE</p> <p>INDEX</p> <p>My Writing</p> <p>Draft</p> <p>Published</p> <p>Library</p> <p>My Team</p> <p>Bookmark</p> <p>Your Metric</p> <p>Competencies</p> <p>STARJOE Report</p>	Category   INDEX			<p>Search ...</p> <p>Next Page 1 / 2</p>	<p>The application will automatically index the keywords created by the user and arrange them alphabetically. A search button is available to search for specific keywords, along with navigation buttons to proceed to the next page or select a specific page. The user will be directed to the relevant content display upon clicking on a specific keyword.</p>
	accumsan	nisi	wandorum		
	aliquet	nulla hasn	warbexis		
	aptent	nunc	wardetis		
	arcu	orci	waskelum		
	auctor	ornare	wastenis xylispen argom		
	bibendum	per	watrelis		
	blandit	pharetra	weculum		
	class xorlem	placerat	wedelis		
	commodo	partitior	wefretum		
	congue	posuere	welcuris		
	consectetur	pretium	welnatum		
	consequat	proin	werbitis yocantis		
	conubia	pulvinar	werlorem		
	convallis	quam	wespendis		
	curabitur	quisque	wethoris		
	dapibus	rhoncus	whalium		
	dictum	ridiculus	whendius		
	dignissim yendorem	rutrum	whetris zylorem		
	donec	sagittis zeblorem burgum	whinterum		
	dul	sapien	whisporum		
	efficitur	scelerisque	whizentis		
	eros	semper	wibratus		
	etiam	sociosqu	wiclorem		
	fames	sollicitudin	wicturis		
	facilisis	suspendisse	widentis		
	fermentum	suscipit	wiflorum		
	fringilla	facit	wiglenfa		
	fusce	tempor	wimboris		
	gravida	tincidunt	winalis		

To support the implementation of proposed complementary platform, a KM Solution plan is developed using the People, Process, Technology framework. Initiatives are taken from table of Example of KM Initiatives (Tjakraatmadja, 2024).

**Table 8. KM Solution with People, Process, Technology**

Aspect	KM Initiatives	Relevance to STARJOE	Idea To Implement
People	Culture & Value	STARJOE would bring change in Knowledge Creation & Knowledge Sharing	STARJOE need to be endorsed by top management, implemented to all Company area
	Social Networks	<i>User Profile, Search, Collaboration, Comment &amp; Rating</i> feature in STARJOE are kind of Social Networks	To encourage the utilization of STARJOE among all users
	Communities	STARJOE has <i>Collaboration</i> Feature	To encourage Collaboration Feature in STARJOE
	Documentation	<i>Locale &amp; Article Category</i> could be kind of Documentation feat for the User	Ensure the UI/UX in Users Library is good
	Communication	Assorted knowledge article including the newest articles immediately at user's homepage	Make the newest articles as a default in the articles sorting
	Incentive & Rewards	<i>STAR</i> article heavily linked with Users competencies in certain Leadership level	Collaborate with Human Capital to supervise Users Leadership Development
Process	Creation	Users would create Knowledge articles in STARJOE	Ensure <i>My Writing</i> Feature is good
	Reuse	Knowledge article could be seen and discussed openly between Users	Ensure visibility of Knowledge Article across Users
	Lesson Learnt	<i>STAR</i> article needed to be developed from Lesson Learnt	Encourage Employee to write their STAR and submit it
	Proven Practices	User could study & replicate others <i>STAR</i>	Encourage Peer Review and Discussion
	Collaboration	STARJOE has <i>Collaboration</i> Feature	To encourage Collaboration Feature in STARJOE
	Classification	STARJOE has category and index for each Knowledge articles	Ensure easy to navigate Knowledge articles library

Technology	Storytelling	<i>STAR</i> basically is about narrative storytelling of Users Lesson Learnt	Encourage Employee to write their <i>STAR</i> and submit it
	User Interface	<i>STARJOE</i> UI/UX has been validated by Project Owner	Ensure the development phase is comply with the requirements
	Team Spaces	<i>STARJOE</i> has <i>My Team</i> feature	Encourage the utility of <i>My Team</i> to store Knowledge Articles between Team members
	Portals	<i>STARJOE</i> is kind of web Portal	Ensure the accessibility of <i>STARJOE</i> with internet
	Repositories	<i>STARJOE</i> is Knowledge Articles repositories	Ensure easy to navigate Knowledge articles library
	Bulletin Boards & Threaded Discussions	<i>STARJOE</i> has threaded comments section	Ensure the usability of comments section
	Expertise locators and ask the expert	Users could see others competencies and others articles, and also could discuss the articles in the comment section. Users could also collaborate with others.	Encourage Collaborative Knowledge Creation & Sharing
	Metadata & Tags	Articles could have several metadata like: category, timestamp, rating, competencies flag.	Ensure articles flagging could be easily visible and sortable
	Search Engines	<i>STARJOE</i> has <i>Search</i> and <i>Index</i> feature	Ensure easiness to navigate Knowledge articles library
	Wikis	Users could easily add, edit, publish or remove their Knowledge Article, including collaborative with other user	To encourage the utilization of <i>STARJOE</i> among all users
	Incentive Points Tracking	<i>STARJOE</i> has <i>Report</i> feature which could be seen by Supervisor	Held a Knowledge Management event to encourage KM culture

## CONCLUSION

The study reveals that employees recognize knowledge management (KM) as essential for enhancing organizational culture and business performance, viewing it as a source of competitive advantage, a guideline for best practices, a motivational tool, and a means to increase employee value and operational effectiveness. A notable finding is the identified need for a complementary platform to support the existing knowledge management system (KMS). In the context of leadership development, the company implements programs that emphasize leadership behaviors, with competency assessments focusing on employees' demonstrated behaviors and the articulation of success stories—encouraged through the use of the *STAR* (Situation, Task, Action, Result) Framework. The integration of literate culture and leadership behavior into KM is proposed as an innovative initiative, particularly through the collection of Lessons Learnt and Proven Practices using the *STAR* Framework. To address these needs, the *STARJOE* web-based platform has been developed, enabling employees to document and share narrative knowledge articles, especially lessons learned, in alignment with critical-to-quality (CTQ) criteria. As integrating KM with leadership development is a novel approach, future research should investigate the correlation between narrative knowledge writing and sharing and the assessment of leadership behavior, focusing on improvements in leadership assessment scores (such as PLAS and OLAS) and the effectiveness of talent pool management for rotation and promotion processes.

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