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A Proposal To Strengthen Knowledge Management Practice Through Literate Culture

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ABSTRACT

In response to a rapidly changing business environment, organizations are turning to Knowledge Management. However, designing and implementing KM systems presents challenges, for instance limited documentation time, inadequate repositories, and a perceived lack of incentives and recognition for KM engagement, particularly in terms of career progression. A qualitative research approach was employed, the 5-Step KM Process and PPT frameworks were used to assess the current KM practices. Identified challenges were analyzed using a fishbone diagram to uncover root causes. Subsequently, a gap analysis was conducted to compare current practices against the KM needs of the Company. The findings indicate several areas of opportunity in documentation of tacit knowledge particularly field-based insights is often constrained by limited time, insufficient incentives, and the structured nature of the existing system. It also found the need for more adaptable and user-friendly tools, especially mobile-accessible platforms that support the capture of experience-based knowledge in a practical manner and the certain limited recognition for KM contributions and a perceived misalignment between KM participation and professional development pathways. A KM solution was developed using the Six Sigma DMADV methodology, resulting in the design of digital KM platform dedicated to narrative writing and knowledge sharing which offers structured writing guidance, competency-based categorization of knowledge assets, and an intuitive user interface to increase usability and engagement. This research contributes to the broader KM literature by introducing a novel approach that integrates narrative approach specifically in the form of success stories and competency mapping to enhance knowledge capture and dissemination.

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

INTRODUCTION

To survive in a rapidly changing industry environment, a company must enhance its performance, improve efficiency, foster innovation, and effectively leverage available opportunities. Knowledge Management (KM) plays a significant role in addressing these challenges, some studies suggests that a knowledge-friendly organizational culture is positively associated with enhanced organizational capacity (Liu, 2021), while effective knowledge sharing contributes to the improvement of business processes across the enterprise (Navimipour, 2016). However, the design and implementation of KM tools and systems have proven to be challenging. Surveys conducted in 2000 identified several obstacles in KM implementation, including information overload, lack of time for knowledge sharing, ineffective use of technology for knowledge dissemination, difficulties in capturing tacit

knowledge, and the recurring issue of "reinventing the wheel" (Grant, 2013). At the other hand, studies have identified significant benefits from KM such as efficiency and cost saving, enhanced decision making, operational excellence once the gap between the theoretical frameworks of KM proposed by researchers and the practical application of KM in Oil & Gas projects by industry practitioners have been effectively bridged (Rong et al., 2024).

Emil Hajric said that the Knowledge Management (KM) is essentially about getting the right knowledge to the right person at the right time (Hajric, 2018). He defines Explicit Knowledge, the type of knowledge which is formalized and codified and is sometimes referred to as know-what and easy to be managed. He also defines Tacit Knowledge, which is refers to intuitive, hard to define knowledge that is largely experienced based, hard to communicate and deeply rooted in action, commitment, and involvement. However, Tacit Knowledge is regarded as being the most valuable source of knowledge, most likely to lead to breakthroughs in the organization. The knowledge creation and transfer usually follow the SECI Model: Socialization, Tacit to Tacit; Externalization, Tacit to Explicit; Combination, Explicit to Explicit; Internalization, Explicit to Tacit.

Knowledge Management can be understood as a systematic approach to managing organizational knowledge with the aim of creating value and achieving competitive excellence (Tjakraatmaja & Kristinawati, 2017). APO introduced Five-Step Knowledge Management process. This Five-Step KM process is concerned with five key steps: Identifying knowledge; Creating knowledge; Storing knowledge; Sharing knowledge; and Applying knowledge which is become one of the cores of APO KM Framework. The outcomes of KM efforts must be able to demonstrate enhancement of learning and innovation that build individual, team, organizational, and societal capabilities, and ultimately lead to improvements in quality of products and services, productivity, profitability, and growth. Furthermore, APO suggest various KM Tools that could be utilized for each step of KM Process (APO, 2020). To be successfully implement KM, one of the keys to the success is to keep the people, process, and technology components of the KM program in balance, don't allow one element to dominate the other two. It could be then providing people, processes, and technology (PPT) to help knowledge flow so that people can act more efficiently, effectively, and creatively. Furthermore. (Garfield, 2007).

The Company has been introducing KM initiative since late 2000. However, there are still found typical challenges in implementing KM by the Company's Retail Business Sector. For instance, due to the regular job rotation cycle of every 2–3 years, sales personnel often do not have sufficient time to document their knowledge. This is further compounded by the fact that the value creation resulting from certain sales activities often cannot be directly quantified. As a result, such knowledge does not meet the requirements for submission to the formal Company's knowledge repositories portal, leading to a limited repository of knowledge related to sales force business processes within the portal. This situation is exacerbated by the perceived minimal impact that engagement in KM has on employees' career progression. In contrast, success stories from senior staff—which are rarely captured in formal training—play a significant role in developing employees' capabilities to effectively handle assignments and responsibilities. To overcome that, the study conducted to evaluate the gaps between current KM practices and the operational knowledge needs of the sales force in the Retail Business Sector.

RESEARCH METHOD

The conceptual framework illustrated in Figure 1 begins with the business issues identified in the research introduction, specifically the challenges faced by the Sales Force of the Company's Retail Business Sector. Subsequently, an assessment of current KM practices

at the Company is conducted using the 5-Step KM Process framework and the People-Process-Technology (PPT) model. After that, identified challenges plot in fish bone diagram to map the root cause of said challenges. Once the root causes have been determined, a gap analysis is conducted to compare the current KM implementation with the KM business needs, in order to identify areas for improvement. Based on this analysis, a proposed solution is developed using the Six Sigma DMADV methodology to ensure the KM solution aligns with the specific needs of the Retail Business Sector team. The main objective of this research is to propose complementary platform which support the KM practice in the Company.

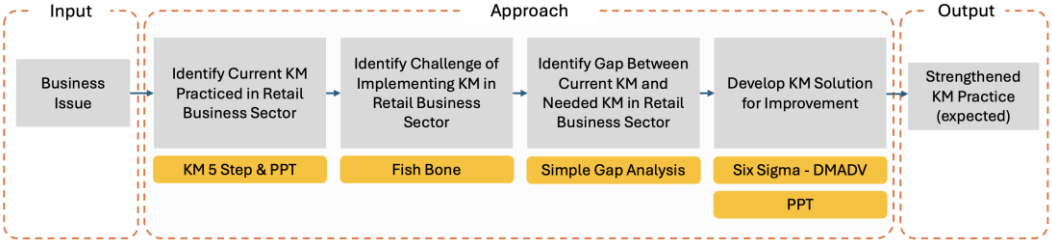


Figure 1. Conceptual Framework

This study will use a qualitative approach for the research method to have a deeper understanding of the issue faced in implementing KM by Sales Force in Retail Business Sector. The data required for this research consists of both primary and secondary data with collection Method shown in Table 1. Primary data were collected through semi-structured interviews with selected informants. Secondary data were obtained from the company's official publications, internal reports, government regulations and policies, as well as relevant academic journals and industry reports. A larger number of respondents was selected in order to capture diverse and comprehensive perspectives, ranging from senior leaders at the head office to individuals leading the smallest organizational units (Sales Areas). The table illustrate the relationship between the research topic, data needed, data collection methods, potential data sources, and the rationale (if any) for selecting a particular source for data collection.

Table 1. Topic, Data Needed and Collection Method

Topic	Data Needed	Collection Method	Reason of Selection
How is Knowledge Management currently implemented in the Company Retail Business Sector	- KM Process: Identify, Create, Store, Share, Apply in current KM - PPT: People Component, Process Component, Technology Component in current KM	Mrs. Ds; Interview Date: 21/10/2024	- Quality Management Team - More than 10 years' work experience in Quality Management including QM Auditor and CIP award Judge Panel - Expert Panel for Knowledge Management
		Mr. Dd; Interview Date: 18/09/2024	- Current Senior Leader - Person in charge for Company Organization Capability Development & Improvement - Could make policy which would be implemented to Employee
		Mr. Ar; Interview Date: 02/10/2024	- Current Regional Leader - More than 8 years as Company Middle Leader
		Mr. Dn; Interview Date: 03/10/2024	- Current Regional Top Management - Experience in writing and publishing a book.
		Mr. Sr; Interview Date: 21/10/2024	- Current Regional Middle Management - Platinum Awardee in Continuous Improvement Program

Topic	Data Needed	Collection Method	Reason of Selection
What challenges are perceived in implementing KM practices within the Company Retail Business Sector	Root Cause consist of Challenges in Implementing KM in Retail Business Sector	Data Analysis; Brainstorming	
To what extend does the current KM practice address the identified challenges and needs of the Company Retail Business Sector	- Gap between 9185urrent KM and Business needed KM - Elements could be improved	Data Analysis; Brainstorming	
What solutions can be proposed to strengthen KM practices in Company Retail Business Sector?	KM Inititatives: Storytelling in Leadership Behaviour Development & Assessment	Mr. AF; Interview Date: 19/09/2024	- Former CEO of Company's Subsidiaries More than 12 years' experience as Holding Company Senior Leader
	- Define: Project Charter - Measure: Critical to Quality Components - Analize: Critical to Quality Target Score - Design: Early Prototype of complementary KM Platform - Validate: Validation Form	Data Analysis; Brainstorming	

To analyze the data, the research employs the thematic analysis method following stages: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and finally, writing the report (Braun & Clarke, 2006). 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. The stages of searching for themes and reviewing themes are conducted by tabulating and categorizing the available codes into particular theme and/or subtheme. The stages of defining and naming themes, as well as writing the report, are completed by presenting the results of the data analysis shown in next chapter, with selected respondent statements quoted to provide a clearer narrative of their intended meanings.

RESULT AND DISCUSSION

Current KM practiced in The Company's Retail Business Sector

The Company generally has implemented Knowledge Management System through various activities and tools which completed the 5 Steps of KM Process. The KMS practically done following Company's four pillar of Quality Management: Continuous Improvement

Program, Standardization Management, Knowledge Management, and Quality Management Assessment.

In the Identify step, the Company has established a knowledge taxonomy, an Expert Panel, and a Community of Practice. The Company has also conducted a knowledge asset inventory by creating a dedicated formal repository Portal, containing knowledge derived from successfully implemented Continuous Improvement Programs (CIP). One of the respondents also emphasized the importance of the knowledge identification stage, due to the high employee turnover among the Sales Force, making the management of past knowledge particularly valuable.

"We have a taxonomy of knowledge assets. It is not only related to knowledge sharing, but also includes features such as "Ask the Expert," where questions are directed to a panel of subject matter experts (SMEs), as well as Communities of Practice." Said Mrs. Ds.

In the Create step, in addition to encouraging the CIP initiative, the Company has begun the externalization of tacit knowledge from selected employees considered to possess critical expertise—such as by authoring books based on knowledge from employees approaching retirement. Knowledge creation is also driven by experiential learning from specific incidents, referred to as Learning from Event, including those considered unfortunate occurrences. Additionally, a Management of Changes mechanism has been implemented, in which outgoing employees leave records of pending matters, enabling their successors to take action based on that accumulated knowledge.

"Thirdly, within our operations, there is an initiative known as Learning from Event, which is also part of knowledge management. It captures incidents that occur at one gas station or distribution agency and turns them into lessons learned that can be shared across regions—even nationally—as a form of anticipation and prevention. This practice has become a visible part of our organizational culture." Said Mr. Dn.

For the Store step, knowledge repositories are hosted on the Formal repository Portal, organized into directories according to business process classifications, fields of competency, and specific organizational units. Looking ahead, there are plans to develop a Book of Knowledge compiling the best CIPs, presented in a journal-like format.

"This, in fact, reflects the strength of Knowledge Management: how it can establish a strong and valuable repository." Said Mr. Dd.

In the Share step, the Company has demonstrated commendable efforts by organizing numerous knowledge-sharing forums such as CIP forums, webinars, podcasts, seminars, HSSE Talks, and even competitions for Learning from Event, encouraging employees to present not only their success stories but also failed lessons learned, in order to prevent recurrence. In addition to these formal settings, knowledge sharing is also facilitated through informal sessions held in communal office discussion spaces.

"The culture of Knowledge Management can take both formal and informal forms. On the formal side, we're fortunate that in Retail Business, there are often scheduled sharing sessions—either facilitated by the HC team or initiated by the internal function teams themselves." Said Mr. Ar.

In the final Apply step, the Company encourages employees to identify the knowledge necessary for task execution or problem-solving. Existing knowledge is also utilized to improve business processes, thereby adding value to the organization. Such improvements are then standardized through the development of documented procedures under the Standardization Management initiative, which is an integral component of Company's Quality Management system. Furthermore, knowledge management serves as a motivational driver, with the expectation that employees will gain confidence in their tasks, knowing that proven practices have already been successfully implemented by their peers in other regions.

Challenges in Implementing KM

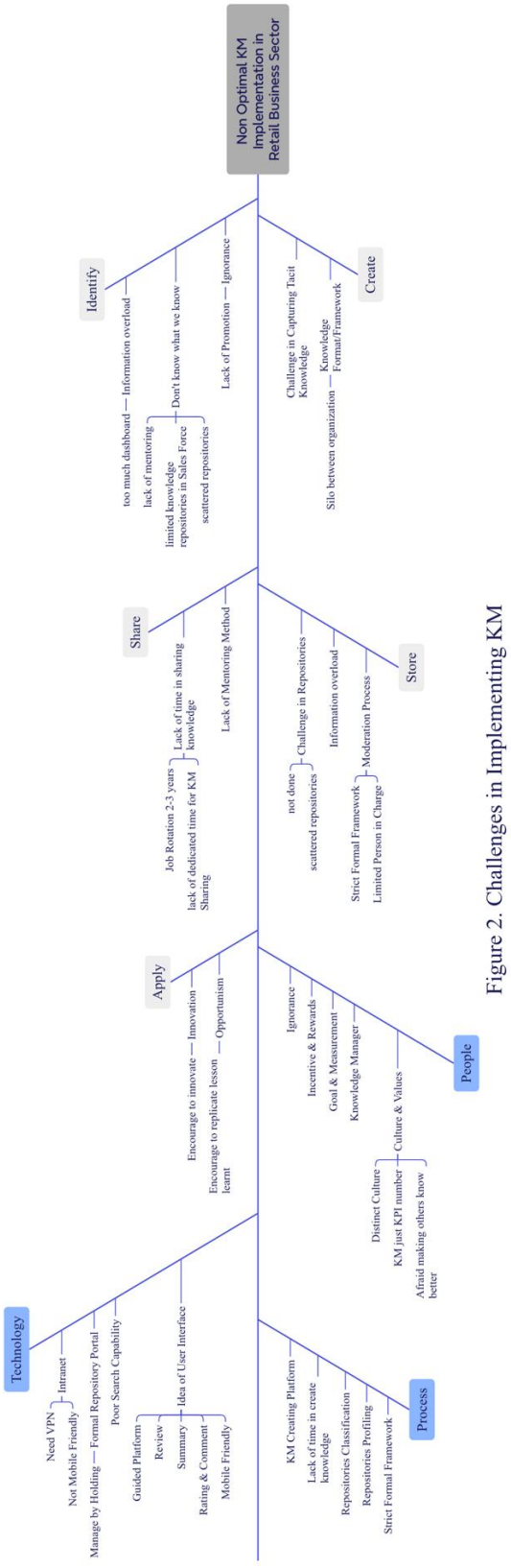


Figure 2. Challenges in Implementing KM

Several common barriers typically arise when an organization seeks to implement Knowledge Management. Grant (2013) identified challenges such as information overload, lack of time for knowledge sharing, ineffective utilization of technology for knowledge dissemination, difficulties in capturing tacit knowledge, and the recurring issue of "reinventing the wheel." Similarly, Garfield (2007) highlighted obstacles including poor decision-making, limited search capabilities, repetition of past mistakes, lack of awareness regarding existing knowledge, organizational ignorance, insufficient standards, and shortages of expertise. Another study (Sumbal et al., 2017), focusing on knowledge retention and the aging workforce within the oil and gas industry, found that accelerated knowledge loss in oil and gas companies by putting a stop on KM activities; COPs and mentoring seem to be the best way of knowledge retention; oil and gas companies need to perform knowledge assessment of the departing employees and break down their skill sets according to the jobs they have performed over the years; and the knowledge retention issue due to the aging workforce in upstream sector is suffering the most.

Challenges were also experienced by the Retail Business Sector team in implementing KM. To analyze these challenges, a fishbone diagram was constructed, as presented in Figure 2. The root causes were identified through findings from semi-structured interviews.

From the perspective of the Identify step, challenges were identified in the form of information overload, due to the large number of websites and dashboards frequently accessed by employees. It was also found that difficulties arose in understanding what had been previously done by other employees, as a result of the limited availability of knowledge assets within the Sales Force, the scattered nature of knowledge documentation, and the lack of effective mentoring from senior to junior officers.

"How to make this (KM) top of mind—that's what really needs to be built. Right now, we have so many dashboards and standalone websites, each with its own purpose. There's a concern that KM could become side-lined or overlooked in the midst of all that." Said Mr. Dd.

From the perspective of the Create step, a challenge was identified in the form of differing frameworks for knowledge documentation, which emerged due to organizational silos—despite the fact that the inputs and outputs were relatively uniform across functions. Another significant challenge involved the difficulty experienced by certain employees in converting their tacit knowledge into explicit knowledge in the form of documented knowledge assets.
"What's been happening so far is that things are still operating in silos—everyone's working in their own lane. Take BTP, for instance. It's essentially aimed at innovation too, but the format or "outfit" of the report is different. Even though the inputs and outputs are basically the same—starting from ideas or opportunities, ending with value creation—each uses a different structure. And the issue is, no one's really willing to sit down together and align." Said Mrs. Ds.

From the perspective of the Store step, challenges were identified in the form of a moderation process that must occur before a knowledge asset can be registered in the Formal repository portal. This process is hindered by a limited number of personnel available to conduct reviews, as well as the strict standard formatting requirements that must be met before a knowledge asset is accepted into the portal. At the same time, challenges also encountered in the use of independent knowledge repositories, as these repositories are scattered across different Sales Area, or in some cases, knowledge has not yet been stored in any repository. Furthermore, difficulties in locating appropriate knowledge within repositories were also observed due to a lack of clear tagging on many stored knowledge assets. Moreover, the need for moderation process is understandable, as it is intended to ensure that only knowledge assets which represent proven innovations with value creation are registered. However, this has led to ambiguity as to whether a knowledge asset must always constitute an innovation that demonstrates value creation. If this requirement is indeed the case, then a significant number of knowledge assets at the Sales Area level—typically consisting of know-how with limited value creation—may be excluded from the formal repository.
"The main issue is that repository Portal requires a review phase before any content can be published, but the expert panels often don't have the time to carry out these reviews." Said Mrs. Ds.

From the perspective of the Share step, challenges were identified in the form of a lack of time for knowledge sharing, primarily caused by the rapid pace of job rotation within the Sales Force and a general lack of commitment to participating in KM sharing activities. Furthermore, it was observed that mentoring from senior officers to junior officers was not consistently carried out, resulting in a failure to transfer critical knowledge. This issue is particularly significant for the company, where a noticeable generational gap exists, making effective knowledge transfer increasingly essential.
"Because nowadays, people tend to move between positions much more frequently than before, the key challenge is how to ensure that knowledge can be easily transferred to the next person." Said Mr. Dd.

From the perspective of the Apply step, a key challenge was identified regarding KM can effectively foster innovation and optimism among the Sales Force. By utilizing existing knowledge assets, it is expected that the Sales Force will be able to develop creative ideas to improve business processes and generate added value for the company. These existing knowledge assets may also serve as motivation in task execution, as problem currently faced by one employee may have already been addressed by another in a different region.
"That way, the team can feel encouraged—knowing that if something has been documented (in KM) before, we can reuse it. This makes things much easier and gives us a reference when developing programs or planning timelines. It also reminds the team that there are actually tools available to help." Said Mr. Dn.

From the perspective of the People component, the study identified challenges related to organizational culture and values. It was found that employees often participate in KM activities merely to fulfill Key Performance Indicators (KPI) related to KM within their respective units. Ideally, KM should be embedded as a cultural practice, carried out naturally and continuously. Another significant finding is the perceived lack of correlation between active participation in KM activities and the recognition or rewards received. In particular, there appears to be no clear link between engagement in KM initiatives and career advancement or promotion opportunities. Additionally, the study revealed the absence of a designated person in charge of managing the current KM framework at the Company, as a result, the specific needs of the Retail Business Sector are not adequately accommodated within the current KM framework, it is needed to be first proposed to Company's Holding.

"[about KPIs related to knowledge assets] Yes, currently it's still very much quantity-oriented, unfortunately—even in terms of participation." Said Mrs. Ds.

"STAR—situation, task, analysis (or action), result—now that, in itself, can actually serve as a value-adding element, a comparison point between person during an evaluation. It helps determine which person truly excels. Because if we only rely on KPIs, those tend to be more collegial in nature, which opens the door for potential free riders." Said Mr. Dd.

From the Process component, a challenge was identified in the form of limited time for knowledge creation. The Sales Force has been overwhelmed by their operational responsibilities, making it difficult to allocate dedicated time for KM activities. Therefore, a knowledge creation platform that facilitates and simplifies the process is needed. Regarding repositories, the idea emerged to incorporate profiling features for each knowledge asset, such as user ratings and threaded comments, to enable easier communication between the reader and the author.

"If we wait too long, it often ends up being forgotten—it doesn't get written down, and that raises concerns that the knowledge won't be properly passed on to the next person in the role, or even used to enrich overall experience." Said Mr. Sr.

From the Technology component, it was found that the current formal repository—which requires intranet access—poses a significant barrier to the implementation of KM activities within the Sales Force, due to the inherently mobile nature of their work. At the same time, several ideas were proposed to improve the KM portal interface. These include a guided platform for KM documentation, supervisor-led knowledge asset reviews, knowledge asset profiling that demonstrated employee's competencies, a knowledge asset summary displayed on the homepage, rating and comment features, and the suggestion to develop the platform to be mobile-friendly.

"[about formal repository Portal] Yes, it requires VPN." Said Mrs. Ds.

"It would also be helpful, particularly in the context of conducting reviews—whether it's a supervisor or team review—if the platform included a feature that allows for a quick summary or preview. This could serve as a practical tool to facilitate review processes." Said Mr. Dn.

Identified Gap between current KM and expected KM

Based on the findings presented above, a comparison can be made between the current KM practices and the KM requirements of the Sales Force within the Retail Business Sector. Based on the conducted gap analysis, the most significant challenges perceived include:

- The absence of a repository platform that can be independently managed by Retail Business Sector team, which is designed to be mobile-friendly and accessible via the internet without requiring VPN access.
- A dynamic and flexible framework or format for knowledge assets that aligns with the specific needs of the Retail Sector Business, which primarily deals with tacit, know-how knowledge, thus facilitating the externalization process.

- A KM platform that offers greater incentives and rewards, particularly in relation to career progression and promotion opportunities.
- A knowledge asset submission process that does not require moderation but allows for supervisory review, especially for assets that reflect the development of employee competencies.
- Profiling features for each knowledge asset, such as loglines, user ratings, and threaded comments to facilitate more effective communication between readers and authors.
- Intuitive user interface features that simplify navigation and support users in conducting KM activities on the platform

Considering the most significant challenges identified above, it can be concluded that the proposed business solution is the development of a complementary KM Platform that is owned and managed independently by the Retail Business Sector Team.

KM Solution for Improvement

One of the challenges in implementing KM pertains to how participation in KM activities can contribute to greater incentives and rewards given, particularly in relation to career path progression and job promotion. It was also identified that there is a need for a feature that can reflect employee competencies within the knowledge assets they create. It is also mentioned about the STAR framework as "differentiator", a commonly used approach within Company to describe individual employee achievements. Since the STAR framework can be utilized to narrate accomplishments or success stories, it is interesting to further explore the STAR framework from the perspective of leadership behavior, by interviewing a former top-level executive at the Company. This was undertaken in the hope of uncovering the relationship between employee success stories and career path progression.

It is found that to attain meaningful career path progression an employee must demonstrate strong leadership behaviour. This leadership behaviour is cultivated from the early stages of a person's career, particularly when serving as a junior manager, through various activities and assignments. To evaluate the level of leadership behaviour, a leadership behavior assessment is conducted. Ideally, this assessment is performed by the employee's immediate supervisor, and at certain managerial levels, it is calibrated through an external assessment institution which include some activities such as in-tray exercise, interviews, role-playing, and business plan development.

"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. Typically, competency assessments should be conducted by Employee's supervisor. However, to ensure fairness, they are usually complemented by external assessments." Said Mr. Af.

The purpose of this assessment is to verify whether specific competencies have been developed in the employee. The Company's top-level management has defined a set of competencies that leaders are expected to possess at various leadership levels. However, a key challenge has been identified, it is often difficult to find employees who meet the required competency thresholds during these assessments. To be successful in assessment, given the limited time available during assessments, employees must adopt a structured framework to effectively articulate their success stories. The recommended framework is the STAR framework.

"For strategic leaders, who are prepared to assume top-level leadership roles, certain requirements must be met. One of these requirements is the attainment of a minimum average passing grade of 3 across the 15 predetermined competencies. 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 Mr Af.

The STAR framework consists of Situation, Target/Task, Action, and Result. The Action component is further elaborated through the POAC model: Planning, Organizing, Acting, and Controlling. The Situation describes the background and conditions surrounding the task. The Target/Task outlines the objectives to be achieved. The Action, supported by POAC, provides a concise description of what the employee did, from planning, organizing resources, executing the plan, to controlling and adjusting when outcomes did not meet expectations. The Result section presents the tangible outcomes and value delivered to the company as a result of these actions. Using the STAR framework during leadership behaviour assessments is believed to enable evaluators to fully recognize an employee's competencies, as success stories are presented in a clear and structured manner.

Nevertheless, in order to recount a success story, an employee must first possess one. Therefore, the practice of documenting success stories should be instilled early, starting at the junior level, by consistently writing and reflecting on their achievements as part of their developmental journey, hence, doing KM activity in creating knowledge. It could also benefit for organization KM culture, leaders who have grown through sharing and learning are more likely to champion KM initiatives and mentor others in doing so, this creates a virtuous cycle, where leadership and KM culture reinforce one another across all levels of the organization.
"This business plan is a common case study, most individuals with a master's degree should be able to explain it. However, what needs to be prepared is the success story. If you don't have a success story, what will you tell?" said Mr. Af.

Complementary Platform Development

It has been suggested that a complementary platform is necessary to support the implementation of. Table 2 presents the basic concept of the complementary platform to be developed in response to the identified key challenges. Furthermore, to ensure that the proposed solution aligns with the specific needs of the Retail Business Sector team, the development of the business solution will be carried out using the Six Sigma DMADV framework. The DMADV methodology is applied when a client requires improvements, modifications, or the creation of a completely new product or service. The objective of applying this methodology is to develop a high-quality solution that incorporates customer requirements at every stage. The ultimate outcome is a product or service that is fully aligned with customer needs, desires, and expectations (Selvi, 2014).

Tabel 2. Complementary KM Platform basic idea generation (by author)

Key Challenge	Idea To Develop
The absence of a repository platform that can be independently managed by Company's Retail Business Sector team	The platform would be kind of a repository Web Apps. The platform would be developed and managed in-house within the Retail Business Sector, allowing for independent enhancements and further development based on user suggestions. The practice of in-house management has previously been implemented in other functions that have developed similar KM systems for specific purposes, such as HSSE activity reporting.
Intuitive user interface features that simplify navigation and support users in conducting KM activities on the platform.	Make the platform user friendly to encourage simple KM Creation & Sharing
A dynamic and flexible framework or format for knowledge assets that aligns with the specific needs of the Retail Business Sector	The platform would not be constrained by a specific writing format, nor would it require a mandatory staged evaluation. It could simply consist of insight-based

Key Challenge	Idea To Develop
	writing to explain the understanding of specific data and information.
Profiling features for each knowledge asset, such as loglines, user ratings, and threaded comments to facilitate more effective communication between readers and authors.	Interactive knowledge asset repositories and profiling, including loglines, user ratings, share, threaded comments.
A knowledge asset submission process that does not require moderation but allows for supervisory review, especially for assets that reflect the development of employee competencies.	The platform will provide a feature for the competency review process by the employee's direct supervisor. This feature will be useful for monitoring competency development while also validating the competencies that have emerged based on the lessons learned from the employee's writings.
A KM platform that offers greater incentives and rewards, particularly in relation to career progression and promotion opportunities	The platform will be built around the STAR Framework, supplemented with additional features to encourage employees to create and share knowledge writings. Employee could prepared Leadership Behaviour Development within the platform

The complementary KM platform development follows the Six SIGMA for Design, utilizing the DMADV framework: Define, Measure, Analyze, Design, Validate. Project Charter was developed with the typical Company's format, consist of several main sections as shown in Figure 2. The format is utilized to give simple yet wholistic view about the idea to develop such as project background, objectives, deliverable, relation with KPI, before & after condition, to the impact and potential risk about the project.

Program Name: Web Based Narrative Writing for Knowledge Sharing

Business related : Retail Sales — **Directorate: Retail Directorate**

Project information

Background
- There would be future nationwide Project to be accomplished
- There is a challenge in existing Knowledge Management System (KMS)
- With the current trend of Employee rotation & promotion, it is encouraged to have complementary platform for existing KMS

Objectives
- To Design suitable complementary KMS platform
- To Develop complementary KMS platform
- To Roll Out the complementary KMS platform across the Company

KPI's by end of 2025

KPI description	Target
Learning & Growth	Development Commitment Project & Community Involvement

Deliverables by end of project

End results/outputs of the project
- Decent User Requirements for the Apps Development are available
- A web application is available for Narrative Writing & Knowledge Sharing as a complementary KMS platform
- The Apps user manual are available
- Roll Out to Sales Division as Early Adopter

Before & After Condition (Estimated)

Before	After
Low Knowledge Creation in the Company per capita Low to Medium Knowledge Sharing in the Company per capita Low to Medium Knowledge Repository in the Company Difficulty to understand Employee competencies and capability	Medium to High Knowledge Creation Medium to High Knowledge Sharing High Knowledge Repository Convenience to understand and track Employee competencies and capability across the Company Foundation for Learning Organizational in the Company

Milestones by end of 2025

Steps and milestones	Deadline
Project Proposal & Approval	Jan 2025
Requirement Gathering	Feb 2025
Developer Procurement	Mar 2025
Project Developing	Jun 2025
Project Minimum Viable Product	Jun 2025
SAT & UAT & Pilot Project	Jul 2025
Project Roll Out	Aug 2025

Required resources

Items	Amount
Project PM Project Developer Project Test User Domain for Hosting in App Pertamina Environment Agent of Change to Roll Out	Estimated Budget for Development around Rp 500 million

Impact on Pertamina
- Improve Knowledge Creation & Knowledge Sharing Culture
- Improve Knowledge Repository especially in Retail Sales Business
- Improve Leadership Behavior in general
- Improve Talent Pool Readiness

Potential Risk

Risk Identified	Risk Mitigation
Product not developed as per User Require	Detail & close monitoring in Development Phase
Knowledge Repository breached to internet	Applying Pen-Test prior Roll Out User Login Management using Pertamina Standard

Team members
- Manager Organization Development
- Sr Officer Development
- Officer Digitalization
- Officer Quality Management

Size of impacts* (financial and non-financial)
Low ☑ Medium ☐ High ☐

Time to impact
<1 yr ☐ 1-3 yrs ☑ 3-5 yrs ☐

Risk assessment
Low ☑ Medium ☐ High ☐

Top management support needed
- Project Approval
- Organizational Culture Change Management
- Talent Pool Change Management

Approval

Project Owner	Project Leader	Project Sponsor
VP Retail Sales VP Human Capital	Manager Organization Development	Retail Business Director

Figure 2. Project Charter

User Requirement developed based on findings especially to further explore basic idea in Table 2 into KM Platform concept to be developed as shown in Figure 3. The User Requirement could be categories as follows:

- 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.

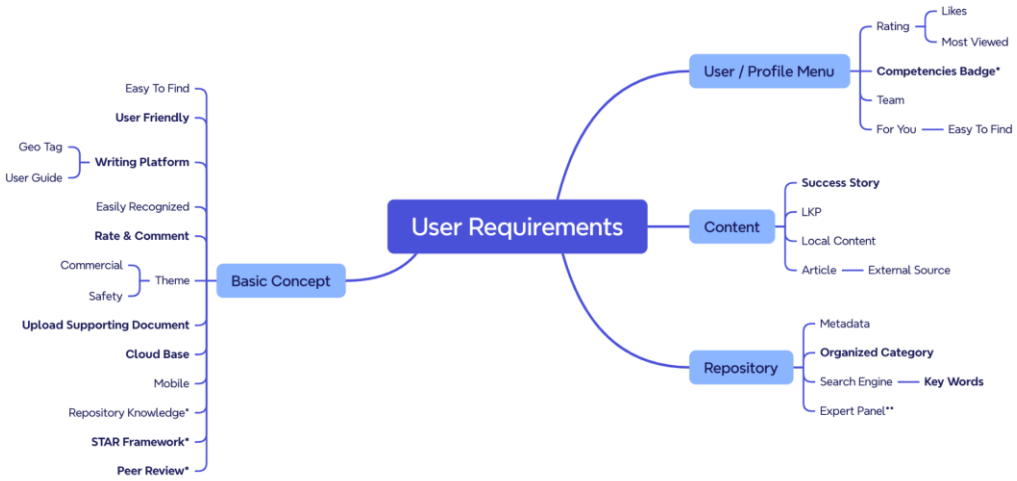


Figure 3. User Requirements

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 4.

Table 4. 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**

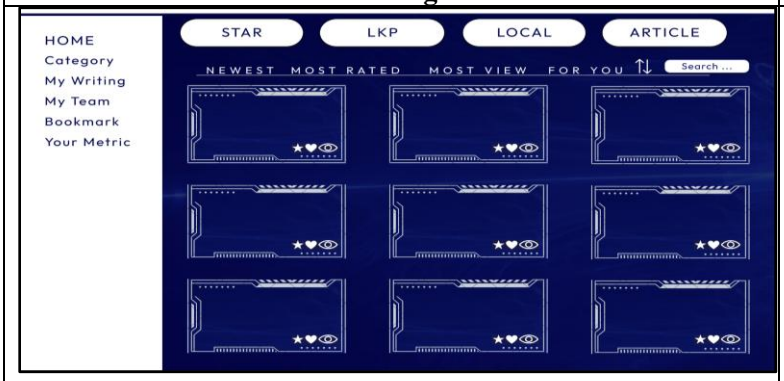
Critical To Quality	Functionality	UI / UX Score Target
	Citation Mechanism	**7**
	Flagging Mechanism	**6**
Competencies Badge	Competencies Library	**8**
	Competencies Tag & Flag	**7**
	Competencies Review	**6**
Success Story	Success Story Library	**8**
	Success Story Reading View	**6**
	Hyperlink to 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 5 shows the user interface design and simple explanation of STARJOE.

Tabel 5. Example of STARJOE UI Early Design

UI Design	Remarks
	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 *Newest*, *Most Rated*, *Most Viewed*, and *For You*, enhancing the browsing experience.

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.

**Log Lines* *is a brief (usually one-sentence) summary of television program, film, or book that state the central conflict of the story, often providing both a synopsis of the story plot's plot, and an emotional "hook" to stimulate interest*

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 for a specific competency by clicking the *GO* button.

CONCLUSION

The Company is undergoing a period of significant transformation. Effective

knowledge management (KM) is crucial to ensuring the company's sustainability and competitiveness. The study found that the Company has regularly implemented KM practices using established framework of four pillars of Quality Management: CIP, SM, KM, and QMA where the KM become the core of the KM system.

However, challenges were experienced by the Retail Business Sector team in implementing KM, as follows:

- Identify step: challenges were identified in the form of information overload, limited availibility of Knowledge assets within sales force business process, the scattered nature of knowledge documentation, and the lack of effective mentoring from senior to junior officers.
- Create step: differing frameworks for knowledge documentation and difficulty experienced by certain employees in converting their tacit knowledge into explicit knowledge in the form of documented knowledge assets.
- Store step: moderation process that must occur before a knowledge asset can be registered in the formal KM Portal, the use of independent knowledge repositories, as these repositories are scattered across different Sales Area, or in some cases, knowledge has not yet been stored in any repository, and difficulties in locating appropriate knowledge within repositories.
- Share step: lack of time for knowledge sharing and mentoring from senior officers to junior officers was not consistently carried out.
- Apply step: Challenge in how KM can effectively foster innovation and optimism among the Sales Force.
- People component: organizational culture and values, challenge in how KM should be embedded as a cultural practice, carried out naturally and continuously, and perceived lack of correlation between active participation in KM activities and the recognition or rewards received, also the absence of a designated person in charge of managing the current KM framework at the Company's Retail Business Sector.
- Process component: limited time for knowledge creation, idea to incorporate profiling features for each knowledge asset (such as user ratings and threaded comments), and the issue of a rigid formal framework previously stated in Store step.
- Technology component: intranet access for formal KM Portal, Management of Portal by Company's Holding, and the idea of improved KM Portal interface.

Based on Gap Analysis conducted, there are found that the most significant challenge in implementing KM in Retail Business Sector as follows:

- The absence of a repository platform that can be independently managed by Retail Business Sector internal team.
- A dynamic and flexible framework or format for knowledge assets that aligns with the specific needs of the Retail Business Sector.
- A KM platform that offers greater incentives and rewards, particularly in relation to career progression and promotion opportunities.
- A knowledge asset submission process that does not require moderation but allows for supervisory review.
- Profiling features for each knowledge asset to facilitate more effective communication between readers and authors.
- Intuitive user interface features that simplify navigation and support on the platform

Based on the business issue analyzed in the study, a potential business solution that could be proposed is the development of a complementary KM platform, owned and managed independently by Retail Business Sector team. This KM platform would be known as STARJOE, a web-based narrative writing and knowledge sharing platform designed as a repository for numerous success stories and lessons learned gathered by the Sales Force

utilizing a STAR framework that is not rigid but structured. By implementing STARJOE, it is expected that KM practices within the Retail Business Sector will be enhanced, thereby supporting the sustainability of the Company's business.

Furthermore, integrating KM with leadership development is a relatively new approach. It would be worthwhile to explore the correlation between narrative knowledge writing and sharing with the assessment of leadership behavior following the implementation of these new initiatives in the Company. The focus could be on the improvement of average leadership assessment scores, particularly in PLAS and OLAS, as well as the ease of managing the talent pool for employee rotation and promotion processes.

REFERENCES

Asian Productivity Organization (2020). *Knowledge Management: Tools and Techniques Manual*. APO. Tokyo. ISBN: 978-92-833-2490-4

Berg Bruce L. (2012). Qualitative Research Methods For The Social Sciences 4th Edition. A Pearson Education Company. ISBN 0-205-31847-9. MA USA

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Chouhan, V. S., & Srivastava, S. (2014). *Understanding competencies and competency modeling—A literature survey*. IOSR Journal of Business and management, *16*(1), 14-22. https://doi.org/10.9790/487X-16111422

Garfield, S. (2007). *Implementing a Successful KM Program*. Ark Group.

Grant, Robert M. (2013). *The Development of Knowledge Management in Oil and Gas Industry.* Universia Business Review. Portal Universia S.A., Madrid, Spain.

Hajric, E. (2018). *Knowledge Management System and Practices. A Theoretical and Practical Guide for Knowledge Management in Your Organization*. Helpjuice, FL, USA.

Interaction Design Foundation - IxDF. (2016, May 25). *What is Design Thinking (DT)?*. Interaction Design Foundation - IxDF. https://www.interactiondesign.org/literature/topics/design-thinking

Kim Sora, Ji Yingru. (2018). *Gap Analysis*. The International Encyclopedia of Strategic Communication. DOI: 10.1002/9781119010722.iesc0079

Liu G., Tsui E., Kianto A. (2021). *Knowledge-friendly organisational culture and performance: A meta-analysis*, Journal of Business Research, Volume 134, Pages 738-753, ISSN 0148-2963, https://doi.org/10.1016/j.jbusres.2021.05.048

Mahto Dalgobind, Kumar Anjani. (2008). *Application of Root Cause Analysis in Improvement of Product Quality and Productivity*. JIEM. ISSN 2013-0953. doi:10.3926/jiem.2008.v1n2.p16-53

Muhammad Saleem Sumbal, Eric Tsui, Eric See-to, Andrew Barendrecht, (2017) "Knowledge retention and aging workforce in the oil and gas industry: a multi perspective study", Journal of Knowledge Management, Vol. 21 Issue: 4, pp.907-924, https://doi.org/10.1108/JKM-07-2016-0281

Navimipour N. J., Charband Y. (2016). *Knowledge sharing mechanisms and techniques in project teams: Literature review, classification, and current trends*. Computers in Human Behavior, Volume 62, Pages 730-742, ISSN 0747-5632, https://doi.org/10.1016/j.chb.2016.05.003

Pyzdek T., Keller P.A. (2010). *Six Sigma Handbook " A Complete Guide for Green Belts, Black Belts, and Managers at All Levels* (3rd ed.). Mc Graw Hill. ISBN: 978-0-07-162337-7

Reed B. N., Klutts A. M., Mattingly T. J. (2019*). A Systematic Review of Leadership Definitions, Competencies, and Assessment Methods in Pharmacy Education*, American Journal of Pharmaceutical Education, Volume 83, Issue 9, 7520. ISSN 0002-9459. https://doi.org/10.5688/ajpe7520.

Richard D'Souza R. (2021). *What characterises creativity in narrative writing, and how do we assess it? Research findings from a systematic literature search*. Thinking Skills and Creativity, Volume 42, 100949. ISSN 1871-1871. https://doi.org/10.1016/j.tsc.2021.100949.

Rong Wei, Timshard Somhatai, Liu Jiaxing, Khamaksorn Achara. (2024). *Applicatian of Knowledge Management in Oil and Gas Projects: A Systematic Literature Review*. The 9th International Conference of DAMT and 7th ECTI NCON.

Selvi K., Majumdar Rana. (2014). *Six Sigma – Overview of DMAIC and DMADV*. International Journal of Innovation Science and Modern Engineering. ISSN: 2319-6386. Vol. 2 Issue 5.

Tjakraatmaja, J. H. & Kristinawati, D. (2017). *Strategi Implementasi Knowledge Management*. Bandung. Penerbit ITB.

Wu D.A, Parks R. W. (2023). Leadership and working in teams, Surgery (Oxford), Volume 41, Issue 8, Pages 528-534. ISSN 0263-9319. https://doi.org/10.1016/j.mpsur.2023.05.009