



## Proposed Knowledge Management Design to Improve Business Processes at O Mart Retail Company

Muhammad Alif Iman Aulia<sup>1</sup>, Dedy Sushandoyo<sup>2</sup>

<sup>1</sup> MBA Student, Sekolah Bisnis dan Manajemen, Institut Teknologi Bandung, Indonesia

<sup>2</sup> Professor, Sekolah Bisnis dan Manajemen, Institut Teknologi Bandung, Indonesia

**ABSTRACT:** Retail trade plays an important role both in a global context and in Indonesia itself because it drives economic growth, creates jobs and shapes consumer behavior. Understanding the importance of industry growth, dynamics of competition and knowledge management are essential for optimizing business performance and achieving sustainable success. Minimarket O Mart is one of the small retail in the form of minimarkets in Indonesia, minimarket O Mart has problems in its business, namely inefficient business because O Mart is still in its standard operating procedures, because there is still no good SOP documentation, besides that the knowledge sharing activities within the company is also limited to chatting and has not been carried out formally within the company. The aims of this study are to propose a knowledge management system that can improve business processes at O Mart and to develop an implementation plan for the suggested knowledge management system, outlining the steps and strategies required for its successful integration at O Mart. Theories that support this research are the Definition of Knowledge, Fishbone Analysis, Knowledge Management Framework, People-Process-Technology Framework, SECI Model, KM Roadmap, and Implementation Plan. The research methodology is based on a qualitative research design involving data collection through interviews with employees from various departments of O Mart Retail Company. This research uses a knowledge management framework (People, Process, Technology) and the SECI model which will then produce a Knowledge Management Roadmap and also a Knowledge management implementation plan which is expected to overcome the problem of inefficient business processes at O Mart minimarkets.

**KEYWORDS:** Business Performance, Business Processes, Competitive Advantages, Knowledge Management, Knowledge Sharing, Fishbone Analysis, Framework, KM Roadmap, Knowledge Management Roadmap, People-Process-Technology Framework, Retail Trade, SECI model, Standard Operating Procedure.

### INTRODUCTION

Retail trade plays an important role both in a global context and in Indonesia itself because it drives economic growth, creates jobs and shapes consumer behavior. Understanding the importance of industry growth, dynamics of competition and knowledge management are essential for optimizing business performance and achieving sustainable success. In terms of growth, retail has experienced tremendous expansion worldwide. Studies have shown that factors such as population growth, urbanization and increasing consumer purchasing power have contributed to the strong development of this sector (Burt, S., & Sparks, L., 2003). Especially in Indonesia, the retail industry is growing rapidly due to a growing middle class population, increased consumer spending, and favorable demographics (Handayani, A.I., Japarianto, E., & Sari, I.M., 2018).

The growing retail industry is characterized by intense competition. Market players face challenges from domestic and foreign competitors who are required to continue to innovate and differentiate their products (Deva, M., Ispurwanto, W., & Adhariani, D., 2016). Industry competition is driven by factors such as pricing strategy, product quality, customer service and effective supply chain management (Läsche et al., 2022). In this competitive environment, knowledge management plays a key role in improving business performance and maintaining competitive advantage. Effective knowledge management enables retailers to capture, store, organize, and utilize valuable information and expertise. By leveraging knowledge resources, organizations can improve decision-making processes, drive innovation, optimize operational efficiency, and provide superior customer experiences (Jennex, M.E., & Olfman, L., 2005).



The importance of emphasizing knowledge sharing and collaboration in improving retail supply chain performance. Knowledge itself can be interpreted as an important resource that creates a sustainable competitive advantage. It is defined as a collection of experiences, information and skills that are stored in the minds of individuals or organizations. This knowledge gives companies a strategic advantage to create better products and services, improve performance, and gain competitive advantage (Liao et al., 2016).

Knowledge management is perceived as the development of organizing the intangible asset of a firm. The economic and production level of a company relies more on its brainpower, human capital and invisible competences than its physical assets (Rahimli, 2012). This knowledge is key for ensuring that innovation strategies can meet evolving consumer needs in a demanding retail environment (Greg Kelly, Sajal Kohli, & Tobias Wachinger, Daniel Zipser, 2020).

By sharing knowledge, companies can increase productivity, performance, innovation and gain competitive advantage. There are several factors that can influence the effectiveness of sharing knowledge between individuals, including social, psychological and organizational factors. Social factors include interpersonal relationships, while psychological factors include attitudes, motivation, and individual perceptions about sharing knowledge (Wang, S., & Noe, R. A., 2010).

Like the retail company O Mart, whose business is engaged in the retail minimarket sector. The company plans to open a new branch because it wants to acquire a new rest area. However, O Mart faces several obstacles in implementing its business processes because it has not yet established good standard operating procedures, causing business processes to become inefficient.

## BUSINESS ISSUE

Minimarket Omart Retail faced several problems during the operation of the minimarket. Based on the results of interviews that were conducted on January 29, 2023, May 25, 2023, and June 24, 2023. The interviewees for this interview consisted of 4 people, namely the CEO of Omart, the store manager for the BSD branch, the store manager for the Cipali branch, and the store crew. Omart. It can be concluded from the results of the interview that Omart is still weak in its standard operating procedures, because there is still no documentation of what Omart employees must do, besides that knowledge sharing activities within the company are also limited to chats and have not been made formally within the company.

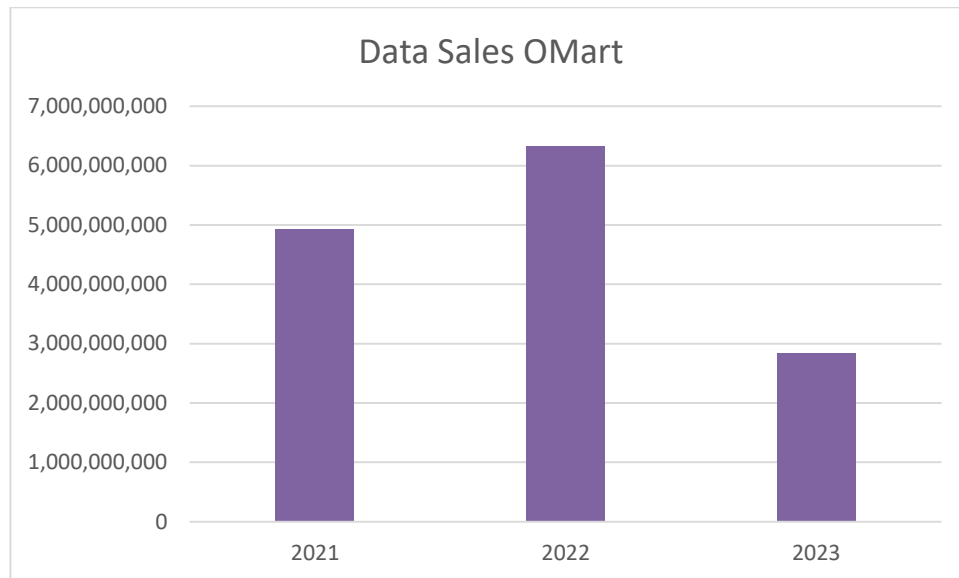
To overcome this problem, the company has planned to produce documents related to company SOPs. In addition, the company has decided to invest in employee training and development programs to increase their knowledge and skills so that business processes at Omart itself can be more efficient than before.

Knowledge Management (KM) plays an important role in improving business processes by leveraging organizational knowledge and information resources. By managing knowledge effectively, organizations can streamline operations, increase efficiency, encourage innovation, and improve overall performance. A study by Choi, Poon, and Davis (2008) "Impact of Knowledge Management Strategy on Organizational Performance: Approach Based on Complementarity Theory" This study explores the relationship between its KM strategy and organizational performance in the hospitality industry. The results show that a well-implemented KM strategy can have a positive impact on existing business processes, leading to improved operational performance and customer satisfaction (Choi, B., Poon, S. K., & Davis, J. G., 2008).

These studies show the importance of KM to improve business processes and the positive impact of KM on company performance. Collecting, sharing, and using knowledge effectively helps organizations streamline operations, encourage collaboration among employees, and drive continuous improvement.

**Table 1.** Data Sales (Source: Interview with CEO Advisor, 2023)

Data Sales		
2021	2022	2023
4.925.871.358	6.319.405.500	2.830.450.000



**Figure 1.** Data Sales Graph (Source: Interview with CEO Advisor, 2023)

The data obtained refers to Table I.1 and Figure 1.2 shows Omart's own sales level for more than two years and running until May 2023. The data here explains that from 2021 to 2022 there will be an increase even though the SOPs implemented are still not good. The data obtained is sourced from the CEO of Omart.

Based on the problems and data mentioned above, the company wants to open a new branch and is more willing to improve the company's operational governance by making documented SOPs, as well as supporting knowledge sharing activities in the company to support OMart so that it can improve business operations. The authors argue that Omart Retail needs to implement knowledge management practices, including sharing best practices, leveraging employee expertise, and managing organizational knowledge.

## LITERATURE REVIEW

Knowledge is a complex and multifaceted concept that has been extensively studied in many fields such as philosophy, psychology, sociology, and business administration. According to Nonaka and Takeuchi (1995), knowledge is “a dynamic human process that justifies an individual’s belief in ‘truth’”. This definition emphasizes the subjective and dynamic nature of knowledge and is shaped by individual beliefs, experiences and perspectives (Nonaka, I., & Takeuchi, H., 1995).

Knowledge can be categorized into two broad types: explicit and tacit knowledge. Explicit knowledge is knowledge that can be easily articulated, codified, and stored in a tangible form, such as books, documents, or databases. Tacit knowledge, on the other hand, is personal knowledge that is difficult to articulate or transfer, such as intuition, experience, and skills (Polanyi, Michael., 1996).

The distinction between explicit and implicit knowledge is fundamental to the knowledge management literature. Explicit knowledge is often easier to manage and communicate because it can be organized and stored in different media (Alavi, M., & Leidner, D. E., 2001). Tacit knowledge, on the other hand, is difficult to articulate and transfer, as it is embedded in personal experiences, beliefs, and skills (Nonaka, I., & Takeuchi, H., 1995).

Other types of knowledge have also been identified, such as declarative knowledge (knowledge of facts and concepts), procedural knowledge (knowledge of how to perform a task), and strategic knowledge (knowledge of how to achieve a goal) (Alavi, M., & Leidner, D. E., 2001).

Tacit knowledge and explicit knowledge are two types of knowledge that are often discussed in the field of knowledge management. Tacit knowledge is knowledge that is not easy to interpret or put into words, whereas explicit knowledge is knowledge that can be presented in a clear and structured way (Nonaka, I., & Takeuchi, H., 1995). Tacit knowledge includes experience, intuition, subjective views of individuals or groups, and is often difficult for others to access or interpret. Therefore, tacit knowledge is often viewed as a



highly valuable and intangible asset to an organization and must be properly managed in order to improve its performance (Becerra-Fernandez, I., & Sabherwal, R., 2015).

Explicit knowledge, on the other hand, can be easily written down and communicated through documents, reports, and other media. Explicit knowledge is viewed as a manageable asset that can be used for training, performance improvement, and as a reference for decision-making at the organizational level. However, not all knowledge can be expressed explicitly, and some types of knowledge are easier to understand through direct experience or observation (Nonaka, I., & Takeuchi, H., 1995).

In practice, tacit and explicit knowledge interact and often complement each other within an organizational context. Both types of knowledge can be used to improve business performance and should be properly managed through a good knowledge management strategy (Becerra-Fernandez, I., & Sabherwal, R., 2015).



Figure 2. DIKW Hierarchy (Rowley, 2007)

DIKW (Data, Information, Knowledge, Wisdom) is a widely recognized concept in the field of knowledge management. The DIKW model shows a hierarchical relationship between the four concepts, with data representing the most basic forms of information and knowledge and wisdom representing the highest levels of understanding. Data refers to raw facts, while information is data that has been processed and interpreted. Knowledge is a deeper level of understanding that is obtained from a combination of information, experience and intuition, and wisdom is the highest level of understanding that can be achieved through the application of knowledge.

Knowledge is "a dynamic human process that justifies individual belief in 'truth'". This definition emphasizes the subjective and dynamic nature of knowledge and is shaped by individual beliefs, experiences, and perspectives (Nonaka, I., & Takeuchi, H., 1995). The DIKW model has been widely studied by researchers in various fields. For example, research examines the differences between data, information, knowledge, and wisdom, and suggests that the DIKW hierarchy is a useful framework for understanding the value and limitations of each concept (Ackoff, R. L., 1989). Similarly, there is also research that argues that the DIKW model clarifies the relationship between data, information, knowledge and wisdom and helps guide the development of knowledge management strategies (Wilson, T.D., 2002). However, some researchers criticize the DIKW model, arguing that it oversimplifies the complexity of knowledge management. For example, one researcher pointed out that the DIKW model does not adequately address the social and cultural aspects of knowledge creation and sharing (Bates, M.J., 2005).

Despite these criticisms, the DIKW model remains a useful tool for understanding different levels of understanding and guiding knowledge management strategies. Table II.1 summarizes the main characteristics of each level of the DIKW hierarchy.

Table 2. Data, Information, Knowledge, and Wisdom (Ackoff, 1989)

Level	Definition
Data	Raw, unorganized facts and figures that have no context or meaning on their own.
Information	Data that has been processed and structured to provide context and meaning. Used to answer specific questions or support decision-making processes.



Knowledge	A deeper understanding of information through experience, analysis, and synthesis. Often considered the most valuable asset for organizations.
Wisdom	The ability to apply knowledge and experience in a way that leads to the best possible outcomes. Often associated with higher-level thinking, intuition, and creativity.

Knowledge management is the process of acquiring, storing, sharing, and using an enterprise’s knowledge. It includes a set of practices, processes, and technologies that help organizations effectively create, share, and apply knowledge to achieve their goals. Knowledge management is essential for businesses that want to improve performance, innovate and remain competitive in an ever-changing environment (Alavi, M., & Leidner, D. E., 2001).

Knowledge management (KM) describes both a business practice and an emerging theoretical field of study. The desire to share knowledge is something so natural that it seems strange that knowledge management has emerged as something newly invented by corporations. This definition of knowledge brings together the activity of knowing as well as the artifacts that represent knowledge, and it emphasizes the dynamics of routines, processes, and practices, further reinforcing the notion that knowledge is by its nature a force in motion. Knowledge is dynamic, not only in individuals, but also in organizational knowledge where there must be movement for knowledge to be transferred or shared (McInerney, 2002).

Knowledge Management (KM) or Knowledge Management is a strategic approach aimed at identifying, collecting, organizing, storing, managing and sharing knowledge owned by individuals, groups or entire organizations (Alavi, M., & Leidner, D. E., 2001). In an organizational context, knowledge can be both explicit knowledge documented in the form of documents, databases, or procedures, and tacit knowledge related to personal experiences, skills, and beliefs.

To effectively manage knowledge, you need a framework that helps you plan, implement, and evaluate knowledge management initiatives within your organization. A knowledge management framework is a conceptual framework that provides guidance and structure for the systematic organization, management, and use of knowledge (Jennex, Murray E; & Olfman, Lorne., 2006). Frameworks can take the form of models, methods, or concepts used as a basis for knowledge management.

These frameworks provide guidance on the phases, processes, elements, and factors to consider when implementing knowledge management in your organization. Using this framework, organizations can effectively plan, organize, manage, and use knowledge to achieve organizational goals and success (Alavi, M., & Leidner, D. E., 2001).



Figure 3. PPT Framework (Henrico Dolfing, 2020)

The people, process, and technology (PPT) framework is essential for organizational transformation and management. Each component plays a crucial role in achieving organizational efficiency, and maintaining a balance between them is crucial. The PPT framework is often used in information technology management, but it can also apply to other areas such as business intelligence. For





successful implementation of the PPT framework, it is important to ensure that all three elements are in alignment. Proper processes must be in place to enable people to effectively utilize technology. Without well-defined processes, people may not be able to maximize the benefits of technology, leading to inefficiencies and potential failures (Becky Simon, 2019).

While technology can be expensive, it can provide significant value when implemented correctly. It is essential to choose technology that aligns with your organization's needs and ensure that employees are properly trained to use it. Integration with existing processes is also crucial to extract value from the investment in technology. By effectively managing the relationship between people, process, and technology, organizations can achieve improved productivity, streamlined operations, and successful transformation. The PPT framework serves as a guide for organizations to make informed decisions and optimize their resources for long-term success (Becky Simon, 2019).

Several studies have shown that PPT frameworks can support effective and efficient development of organizational knowledge capabilities (Majid, A. B. A., Yusoff, R. C. M., & Razak, R. A., 2020). To successfully implement a PPT framework, organizations need to pay attention to various factors such as organizational culture, employee motivation, and the right technology infrastructure (Yuniar, R. P., Wibowo, A., & Gunawan, F., 2021).

The SECI model is a widely used framework for understanding knowledge management processes. The SECI model was developed by Nonaka and Takeuchi (1995) to describe four knowledge transformation processes: Socialization, externalization, bonding, internalization.

#### Socialization:

Socialization is the process of sharing tacit knowledge through social interactions such as observation, imitation, and training. Knowledge is imparted through personal relationships and shared experiences. Socialization is often facilitated through informal networks and communities of practice that provide opportunities for individuals to learn from each other (Nonaka, I., & Takeuchi, H., 1995).

#### Externalization:

Externalization is the process of articulating tacit knowledge into explicit forms such as documents, diagrams, and models. This process transforms knowledge into tangible artifacts that can be shared and communicated with others. Externalization is often facilitated by tools and techniques that support knowledge acquisition and organization (Nonaka, I., & Takeuchi, H., 1995).

#### Combination:

Combination is the creation of new knowledge by combining existing explicit knowledge. Knowledge from different sources is integrated and brought into new forms. This combination is often facilitated by technologies such as databases, search engines, and knowledge management systems (Nonaka, I., & Takeuchi, H., 1995).

#### Internalization:

Internalization is the process of embodying explicit knowledge into tacit knowledge through personal experience and practice. This process integrates knowledge into personal beliefs, values, and skills. Internalization is often facilitated through training, coaching, and mentoring programs that support individual learning and development (Nonaka, I., & Takeuchi, H., 1995).

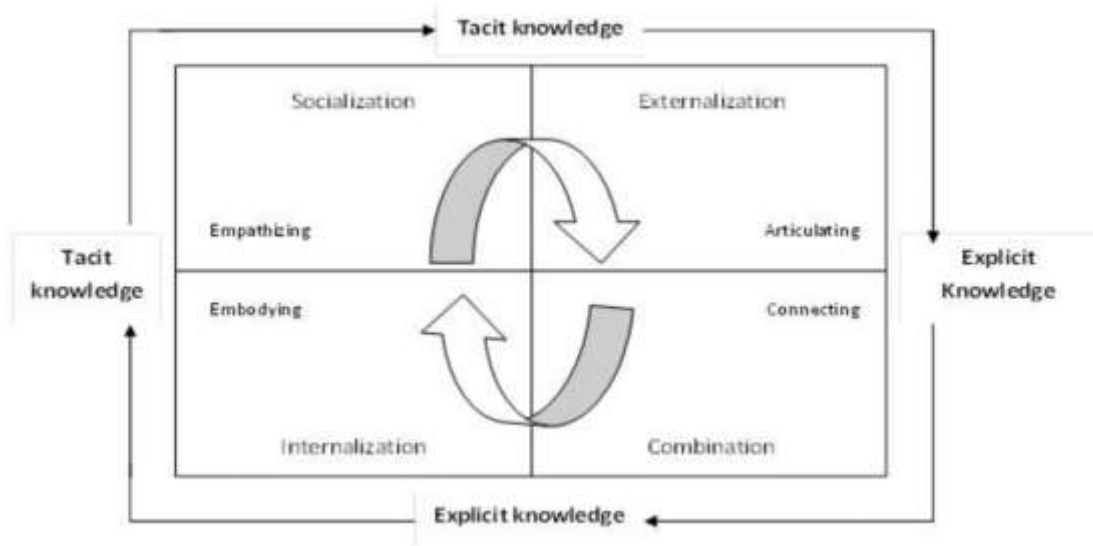


Figure 4. SECI Model (Nonaka and Takeuchi, 1995)

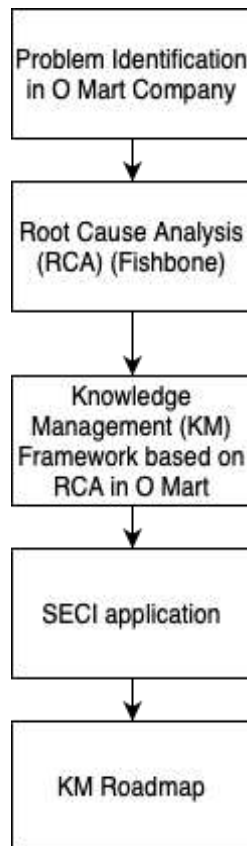


Figure 5. Conceptual Framework

Problem Identification in O Mart Company: The first step in improving business processes at O Mart Retail Company is to identify the problems and challenges faced by the organization, such as inefficiencies, errors, or customer complaints. This can be achieved



through methods such as process mapping, surveys, and interviews with stakeholders (Kumar, H., Singh, M. K., Gupta, M. P., & Madaan, J., 2020).

Root Cause Analysis (RCA) (Fishbone): In order to address the root causes of the identified problems, a fishbone diagram will be used to perform RCA, which involves analyzing the potential causes of a problem in order to identify the root cause(s) (Ishikawa, 1990).

Knowledge Management (KM) Framework based on RCA in O Mart: Based on the RCA results, a KM framework will be developed that takes into account the identified root causes and their impact on business processes at O Mart Retail Company. This framework will guide the implementation of a knowledge management system that addresses the identified root causes and improves business processes. The framework will draw on established KM models such as the SECI model (Nonaka, I., & Takeuchi, H., 1995).

SECI application: The proposed knowledge management system will be based on the SECI model, which emphasizes the socialization, externalization, combination, and internalization of knowledge within an organization. This model will be applied to create, share and manage knowledge that is relevant to the identified root causes and the overall improvement of business processes at O Mart Retail Company. The SECI model has been widely used in various industries and has been shown to be effective in improving knowledge sharing and innovation (Alavi, M., & Leidner, D. E., 2001).

KM Roadmap: In order to effectively implement the proposed knowledge management system, a KM roadmap will be developed that outlines the steps and milestones required to achieve the desired outcomes. This roadmap will serve as a guide for the implementation and monitoring of the knowledge management system, as well as for measuring its impact on business processes at O Mart Retail Company. The roadmap will draw on established frameworks such as the Knowledge Management Roadmap (KM Roadmap) (Liebowitz, J., 2000), and will be customized to fit the specific needs and context of O Mart Retail Company.

**METHODS**

**Data Collection Methods**

In this study, data was collected through semi-structured interviews with key informants from the O Mart retail company. Key informants were selected based on their experience and expertise in the business processes that occur in minimarkets. Interviews are conducted in person or via video conferencing or telephone, depending on participant availability. Interviews were conducted on January 29 2023, May 25 2023 and June 24 2023 with a duration of approximately 30 minutes, and the author also made observations at the store on May 25 and 26 2023. The author was at the mini market for about 3 hours. The results of the interviews were recorded with the consent of the informants and then transcribed verbatim for data analysis (Alvesson, M., & Kärreman, D., 2019), and the results of the observations will be placed in the appendix.

**Table 3.** Classification of Data Information

<i>Data Types</i>	<i>Method</i>	<i>Stakeholder</i>	<i>Objectives</i>	<i>Interview conducted</i>	<i>Duration (Minutes)</i>
Primary Data	Semi-Structured Interview	CEO O Mart	O Mart minimarket overview Knowledge Management Proposed Business Solutions Ask for Suggestions	January 29 2023  July 5 2023	60 minutes  At Least 40 Minutes
Primary Data	Semi-Structured Interview & Field Observation	Store Manager O Mart BSD	Gain understanding related to knowledge management in store operations Observation on O Mart BSD	May 25 2023	30 minutes





Primary Data	Semi-Structured Interview	Store Manager O Mart Cipali	Gain understanding related to knowledge management in store operations Proposed Business Solutions Ask for Suggestions	June 24 2023  July 6 2023	15 minutes  At least 30 Minutes
Primary Data	Semi-Structured Interview	Crew Store O Mart	O Mart Minimarket operational Knowledge Management Practice on the field		10 Minutes

Semi-structured interviews were chosen as the data collection method because they allow flexibility and in-depth exploration of research topics, while still providing a level of structure to ensure that all relevant topics are covered (Bryman, A., 2016). The use of interviews also allows researchers to collect rich and detailed data from the perspective of participants, which is very important in knowledge management studies (Alvesson, M., & Karreman, D., 2019).

Interviews were conducted with stakeholders at OMart minimarket, the author interviewed the CEO of OMart Company, then interviewed the store manager and crew store. This interview is the main way to find out the information obtained directly and understand what problems exist in the OMart company.

During the interview, open-ended questions were asked to allow for detailed answers and insight into the current state of the OMart company. The author examines the problems that exist in OMart such as the focus on operational activities carried out in stores and Standard Operating Procedures (SOP) which are carried out soberly because there is still no SOP module so that the business process becomes inefficient.

Through interviews with key stakeholders, especially CEO, store managers, and crew store of OMart minimarkets, the authors gain insights related to OMart minimarkets in running their business.

Secondary data such as information related to rest areas and also promotions from minimarkets can be obtained from the Instagram platform which can be seen from the posts that have been made on that account.

**Table 4.** Secondary Data Information

<i>Platform</i>	<i>Link</i>	<i>Relevant Information</i>
Instagram	<a href="https://www.instagram.com/O Mart101_102/">https://www.instagram.com/O Mart101_102/</a>	Official Account of Cipali 101.102 Branch, Product Information and operational activities
Instagram	<a href="https://www.instagram.com/official_restareakm7/">https://www.instagram.com/official_restareakm7/</a>	About the rest area in the BSD area and also the tenants there including the O Mart BSD branch
Instagram	<a href="https://www.instagram.com/official_restarea101_102/">https://www.instagram.com/official_restarea101_102/</a>	About the rest area in the Cipali area and also the tenants there including the O Mart Cipali branch
Google Business	<a href="https://business.google.com/website/O Martrestareakm7">https://business.google.com/website/O Martrestareakm7</a>	Operational activities including documentation of activities in the O Mart BSD branch
Lokasi tempat	<a href="https://lokasitempat.com/alamat/O Mart-minimarket-rest-area-km102-tol-cipali-subang">https://lokasitempat.com/alamat/O Mart-minimarket-rest-area-km102-tol-cipali-subang</a>	O Mart branch location in Cipali



The results of observations at O Mart Minimarket show that the arrangement of incoming goods is still not organized and tidy. This can lead to difficulties in finding certain items and can result in inefficiencies in inventory management. and also makes a mess in the shop because the placement of goods has no place to store them so that the goods are visible to consumers who want to shop. To overcome this problem, adopting a systematic and structured approach to placement of goods on arrival is expected to improve the overall organization and accessibility of products within stores.

The use of IPOS4 as POS software at O Mart Minimarket has been identified as a problem due to a lack of existing modules in the application, so that reports received from the application must be re-recorded by employees (not automatic). Updating the software to a more sophisticated system is expected to be improve shop operations. Investing in a modern, feature-packed POS software solution is expected to significantly improve operational efficiency and customer satisfaction.

Cleanliness in the mini market is still not clean as revealed from the observation results. Maintaining a clean and hygienic environment is essential to ensure customer satisfaction and comply with health regulations. Implementing strict hygiene protocols, including regular inspections, staff training, and availability of cleaning supplies, can help increase hygiene levels and create a pleasant shopping environment for customers.

The arrangement of goods in the shop at Minimarket O Mart looks unorganized. This can lead to customer confusion and difficulties in finding the desired product. Implementing a systematic shelving and categorization system, along with clear markings, can greatly enhance the shopping experience and facilitate efficient product browsing for customers. A well-organized layout will not only increase customer satisfaction but also contribute to increased sales and operational effectiveness.

The observation results show a lack of proactive offers made by cashiers to customers at O Mart Minimarket. Cashiers play a critical role in enhancing the customer experience and driving sales. Providing cashiers with training and incentives to engage actively with customers and provide relevant product advice can significantly increase sales and customer satisfaction. Encouraging cashiers to offer promotions and discounts can also contribute to increased customer loyalty and repeat visits.

Promotional banners posted at Minimarket O Mart were identified as less attractive based on observation findings. Eye-catching and eye-catching promotional materials are essential to grab customer attention and drive sales. Improving promotional banner designs, incorporating bright colors, attractive graphics, and clear messages, can significantly increase their effectiveness in attracting customers and conveying promotional offers. Updating banners regularly with fresh and relevant promotions will also help maintain customer interest and encourage repeat visits.

**Table 5.** Observation Results

<i>Observation Results</i>
Arrangement of incoming goods is still not neatly arranged
POS Software still uses IPOS4 which still has many deficiencies
Cleanliness in the minimarket is still not good
The arrangement of goods in the shop is still not neatly arranged
Lack of offers made by cashiers to customers
Promotional Banners that are still less attractive

## Data Analysis

Data analysis plays an important role in understanding and solving problems at O Mart Retail Minimarket. In this study, researchers conducted interviews with stakeholders in the company to gather valuable insights and perspectives on issues that exist in the company. The interview data collected was transcribed and organized to facilitate the analysis process.

The analysis was carried out using the Knowledge Management (KM) framework, which focuses on the People, Process, Technology (PPT) model, this framework consists of three parts which represent aspects that exist within the company.

People in the PPT framework include employees or collaborators who have the knowledge and skills to create, manage and share knowledge within an organization, in this case the author can analyze anyone with an interest in OMart who can be included in the framework

After determining the interested people, the author then determines the PPT Framework Process which includes procedures, policies, and practices used to facilitate knowledge management within an organization.

To facilitate and simplify the process that will be carried out, then technology will be used in the PPT framework which can also be used to support the collection, storage, and dissemination of knowledge. By obtaining the PPT framework that has been analyzed, the author can continue making the SECI Model, followed by the KM Roadmap and Implementation plan.

The results of the various methods used to analyze this will form the basis for a knowledge management design proposal to improve business processes within the company.

**RESULTS**

**Fishbone Analysis**

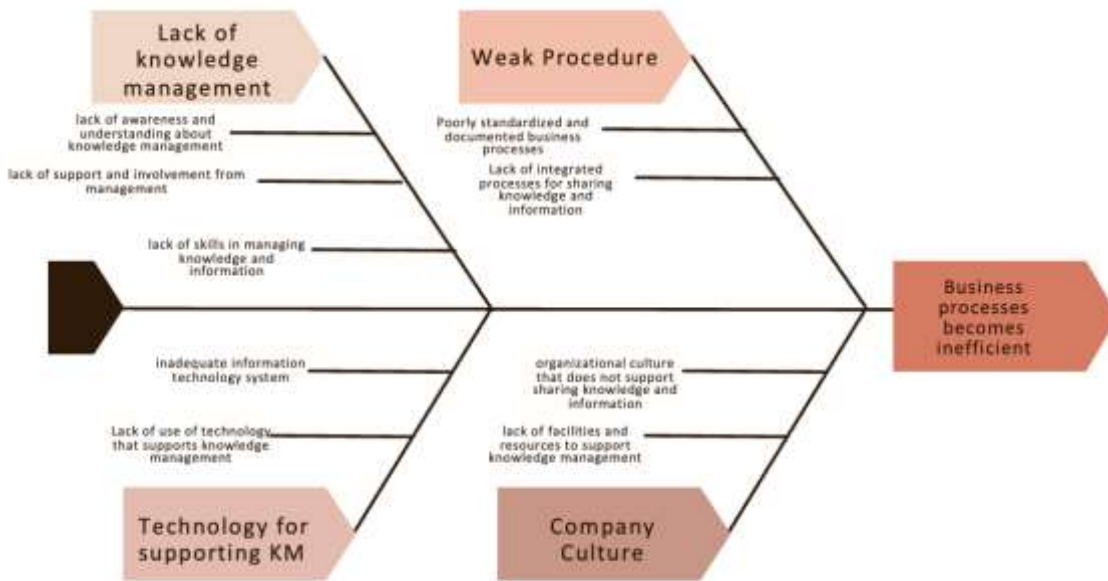


Figure 6. Fishbone Analysis

As for the fishbone we can define that there are 4 aspect that causes business processes becomes inefficient in O Mart minimarket. The problem contain lack of knowledge management, weak procedure, technology for supporting KM, and company culture.

Through a comprehensive fishbone or root cause analysis conducted at O Mart, it becomes evident that multiple factors are responsible for the inefficiency observed in the company's business operations. Among these factors, a significant one is the lack of knowledge management. This encompasses several aspects, including the absence of awareness and understanding regarding knowledge management, insufficient support and involvement from the management team, and a deficiency in skills related to knowledge and information management. Addressing these issues requires a focused effort on educating both employees and managers about the importance of knowledge management and implementing targeted training programs aimed at enhancing their knowledge management capabilities.

Another contributing factor to the inefficiency of business operations at O Mart is the presence of weak procedures. This includes non-standardized and inadequately documented business processes, as well as a lack of integrated mechanisms for sharing knowledge



and information throughout the organization. To rectify this problem, the company can implement a comprehensive knowledge management framework that establishes standardized procedures and facilitates the effective exchange of information. By adopting such a framework, O Mart can ensure that employees have clear guidelines to follow and can easily access and share relevant knowledge and information.

Furthermore, the absence of suitable IT systems and technology that support knowledge management also contributes to the inefficiency of business processes. It is imperative for the company to make strategic investments in advanced technologies and tools that are specifically designed to enhance knowledge management processes. By leveraging the power of modern IT solutions, O Mart can streamline its operations, facilitate efficient knowledge sharing, and optimize the utilization of critical information across various departments and functions.

Lastly, the organizational culture plays a vital role in fostering knowledge exchange, and the availability of adequate facilities and resources is crucial for supporting effective knowledge management operations. O Mart must actively work towards cultivating a culture that encourages and values the exchange of knowledge and information among its employees. This can be achieved through initiatives such as promoting open communication channels, establishing communities of practice, and recognizing and rewarding knowledge sharing behaviors. Additionally, the company should provide the necessary infrastructure, including dedicated spaces and digital platforms, as well as allocate resources for knowledge management activities.

**Knowledge Management Framework**

	Cause	Sub-Cause	Action	Critical Knowledge	KM Objectives	KM Framework		
						People	Process	Technology
<b>Business Processes become inefficient</b>	Lack of knowledge management	Lack of awareness and understanding about knowledge management	Training and education about KM for improving business processes	Psychology and human behavior Communication and Collaboration Best Practice Knowledge Base	Increase awareness and understand how important KM is to the company Can improve business processes to make them more efficient	CEO Human Resources Store Manager Merchandiser	Design and run Training Programs that knowledge is essential to improve business processes	Knowledge Database
		Lack of support and involvement	Support KM activities by	Communication and Influencing Leadership	Align KM initiatives with the company'	CEO Human Resources	Implement multiple communication	Gadget Communication Apps



		nt from management	creating programs related to the importance of KM in streamlining existing business processes		s business goals and objectives Enhance knowledge sharing and collaboration among employee	Store Manager	channels, such as company meetings, newsletters, emails or presentations, to convey important messages about the benefits and goals of KM.	(Whatsapp, Zoom)
		Lack of skills in managing knowledge and information	Training and Development program Mentoring and Coaching	Training and development Communication and Influencing Leadership	Improve skills in managing by using knowledge and information to streamline business processes in the organization	CEO Human Resources Store Manager	Implementing a system that supports employees in acquiring and honing skills through training, mentoring and personal development resources	Knowledge Database Gadget Communication Apps (Whatsapp, Zoom)

Figure 7. Knowledge Management Framework Analysis

Business Processes becomes inefficient	Cause	Sub-Cause	Action	Critical Knowledge	KM Objectives	KM Framework		
						People	Process	Technology
	Weak Standard Operational Procedure	Poorly standardized (SOP) and documented	<ul style="list-style-type: none"> <li>Make good documentation and SOP</li> <li>Standardize business processes:</li> </ul>	<ul style="list-style-type: none"> <li>Documentation</li> <li>Training SOP</li> </ul>	<ul style="list-style-type: none"> <li>Make SOPs well documented and neat so that they</li> </ul>	<ul style="list-style-type: none"> <li>CEO</li> <li>Human Resources</li> <li>Store Manager</li> </ul>	<ul style="list-style-type: none"> <li>Create guidelines or documents that explain operation</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge Database</li> <li>Open Source Software (Google)</li> </ul>



	ure (SOP)	business processes	Once business processes are documented standardized them so they can be applied consistently across the company	<ul style="list-style-type: none"> <li>• Process Analysis</li> <li>• Clear and Concise Writing</li> </ul>	can be used as knowledge guides by employees.	<ul style="list-style-type: none"> <li>• Merchandiser</li> </ul>	nal procedures, policies and best practices in a clear and documented form.	docs, spreadsheet, etc)
	Lack of integrated processes for sharing knowledge and information	<ul style="list-style-type: none"> <li>• Encourage a culture of sharing knowledge and information</li> <li>• Implement an integrated process for knowledge and information sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge Management System</li> <li>• Communication and Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• The company conducts knowledge sharing for the organization so that employees within it can continue to develop (organizational learning) so that good knowledge can be developed into new SOP.</li> </ul>	<ul style="list-style-type: none"> <li>• Store Manager</li> <li>• Crew Store</li> <li>• Merchandiser</li> </ul>	<ul style="list-style-type: none"> <li>• Implementing a system that supports both traditional and digital-based knowledge exchange.</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge Database</li> <li>• Gadget</li> <li>• Communication Apps (Whatsapp, Zoom)</li> </ul>	

Figure 8. Knowledge Management Framework Analysis





	Cause	Sub-Cause	Action	Critical Knowledge	KM Objectives	KM Framework		
						People	Process	Technology
<b>Business Processes becomes inefficient</b>	Technology for supporting KM	Inadequate information technology system	<ul style="list-style-type: none"> <li>Procurement and implementation of new software to replace obsolete cashier software, namely IPOS 4</li> </ul>	<ul style="list-style-type: none"> <li>Best Practice</li> <li>Software Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>To make the cashier software more modern so that it can help operational activities become more efficient, because the IPOS 4 software has no updates</li> </ul>	<ul style="list-style-type: none"> <li>Store Manager</li> <li>Crew Store</li> </ul>	<ul style="list-style-type: none"> <li>Using the latest POS application to accommodate knowledge resources. Using Google Drive as data storage. The data obtained comes from POS applications related to in-store operations (sales orders, purchase orders, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Point of Sale Software</li> <li>Personal Computer</li> <li>Knowledge Database</li> </ul>
		Lack of use of technology that supports knowledge management	<ul style="list-style-type: none"> <li>Developing a plan to integrate technology solutions to support knowledge</li> </ul>	<ul style="list-style-type: none"> <li>IT Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Integrate technology solutions to support the creation, sharing, and</li> </ul>	<ul style="list-style-type: none"> <li>Store Manager</li> <li>Crew Store</li> </ul>	<ul style="list-style-type: none"> <li>Conduct training and assistance to employees in the use of knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Gadget</li> <li>Communication Apps (Whatsapp, Zoom)</li> <li>Knowledge Database</li> </ul>



			management.		dissemination of knowledge across the organization.		technology. <ul style="list-style-type: none"> <li>• Create a database in which consists of SOPs that have been made as well as knowledge data that can be used to assist store operations</li> <li>• Using a database in which there are already SOPs and knowledge data to help store operations.</li> </ul>	
--	--	--	-------------	--	---	--	--	--

Figure 9. Knowledge Management Framework Analysis

Business Processes becomes inefficient	Cause	Sub-Cause	Action	Critical Knowledge	KM Objectives	KM Framework		
						People	Process	Technology
	Company Culture	Organizational culture that does not	<ul style="list-style-type: none"> <li>• Developing a Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership</li> <li>• Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a culture of knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Human Resources</li> </ul>	<ul style="list-style-type: none"> <li>• Implementing mentoring sessions,</li> </ul>	<ul style="list-style-type: none"> <li>• Communication Apps (Whatsapp, Zoom)</li> </ul>



	<p>support sharing knowledge and information</p>	<p>Sharing Plan</p> <ul style="list-style-type: none"> <li>• Creating a Knowledge Sharing Culture</li> <li>• Conducting Knowledge Management Workshops</li> </ul>	<p>Management</p> <ul style="list-style-type: none"> <li>• Management Skills</li> <li>• Communication and Collaboration</li> </ul>	<p>Knowledge sharing and collaboration across the organization.</p> <ul style="list-style-type: none"> <li>• Foster the development of communities of practice and knowledge sharing networks.</li> </ul>	<ul style="list-style-type: none"> <li>• Store Manager</li> <li>• Crew Store</li> <li>• Merchandiser</li> </ul>	<p>knowledge sharing, and discussions related to store operations</p> <ul style="list-style-type: none"> <li>• Allows employees to study documents available on Google Drive, internal database and so on.</li> </ul>	<ul style="list-style-type: none"> <li>• Gadget</li> <li>• Knowledge Database</li> </ul>
	<p>lack of facilities and resources to support knowledge management</p>	<ul style="list-style-type: none"> <li>• Using Open Source Software to assist knowledge management activities within the company</li> <li>• Use Cloud Based Solutions such as storage</li> </ul>	<ul style="list-style-type: none"> <li>• Software Knowledge</li> <li>• IT Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Accessible information and resources for employee to make store operational processes easier</li> </ul>	<ul style="list-style-type: none"> <li>• Human Resources</li> <li>• Store Manager</li> <li>• Crew Store</li> </ul>	<ul style="list-style-type: none"> <li>• Create guidelines related to how employees store their knowledge in the form of writing, pictures or reports about store operations into a database.</li> <li>• The use of communication applicati</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge Database</li> <li>• Communication Apps (Whatsapp, Zoom)</li> <li>• Open Source Software (Google docs, spreadsheets, etc)</li> </ul>



			which does not require hardware to store activities related to knowledge management				ons (such as whatsapp groups) to obtain knowledge and information shared by colleagues.	
--	--	--	---	--	--	--	---	--

Figure 10. Knowledge Management Framework Analysis

SECI Model

<p><b>Socialization</b></p> <ul style="list-style-type: none"> <li>• Implementing mentoring sessions, knowledge sharing, and discussions related to store operations</li> <li>• Implementing a system that supports employees in acquiring and honing skills through training, mentoring and personal development resources.</li> </ul>	<p><b>Externalization</b></p> <ul style="list-style-type: none"> <li>• Create guidelines or documents that explain operational procedures, policies, and best practices in a clear and documented form.</li> <li>• Create guidelines related to how employees store their knowledge in the form of writing, pictures or reports about store operations into a database.</li> </ul>
<p><b>Internalization</b></p> <ul style="list-style-type: none"> <li>• Allows employees to study documents available on Google Drive, internal database and so on.</li> <li>• The use of communication applications (such as whatsapp groups) to obtain knowledge and information shared by colleagues.</li> </ul>	<p><b>Combination</b></p> <ul style="list-style-type: none"> <li>• Using Google Drive as data storage. The data obtained comes from POS applications related to in-store operations (sales orders, purchase orders, etc.)</li> <li>• Create a database in which consists of SOPs that have been made as well as knowledge data that can be used to assist store operations</li> <li>• Using a database in which there are already SOPs and knowledge data to help store operations.</li> </ul>

Figure 11. SECI Model

Socialization (Tacit to Tacit)

Knowledge transfer at O Mart is greatly assisted through outreach. O Mart convenience stores can implement a number of programs to encourage knowledge sharing. The initial program was to conduct mentoring sessions, share knowledge, and discuss store operations and then implement a system that supports employees in acquiring and honing skills through training, mentoring and



personal development resources. This program is intended for shop workers to gain knowledge through guidance provided by store managers and other superiors, of course, who have experience in areas related to store operations. The implementation of this program serves to share knowledge that is useful for company operations.

**Externalization (Tacit to Explicit)**

Knowledge that has been disseminated through the socialization process at O Mart both in mentoring and discussion sessions is then made even more structured, namely by making guidelines or documents that explain operational procedures, policies and best practices in a clear and documented form and Creating guidelines for how employees store their knowledge in the form of writing, pictures or reports about store operations into the database. It is hoped that the data obtained will be well documented and can be used as a store operational guideline.

**Combination (Explicit to Explicit)**

After creating SOPs and knowledge data in a structured manner with the final result in the form of documents, the company then goes through a combination stage, namely Using Google Drive as data storage. The data obtained comes from POS applications related to in-store operations (sales orders, purchase orders, etc.). Then also create a database containing the SOPs that were made previously and this database can be used to assist employees in operating the store.

**Internalization (Explicit to Tacit)**

At the internalization stage, the company allows employees to study documents available on Google Drive, internal database and so on and also uses communication applications (such as whatsapp groups) to get knowledge and information shared by colleagues, it is hoped that with this process employees can learning related to knowledge that has been documented.

**Business Solution**

**Knowledge Management Roadmap**

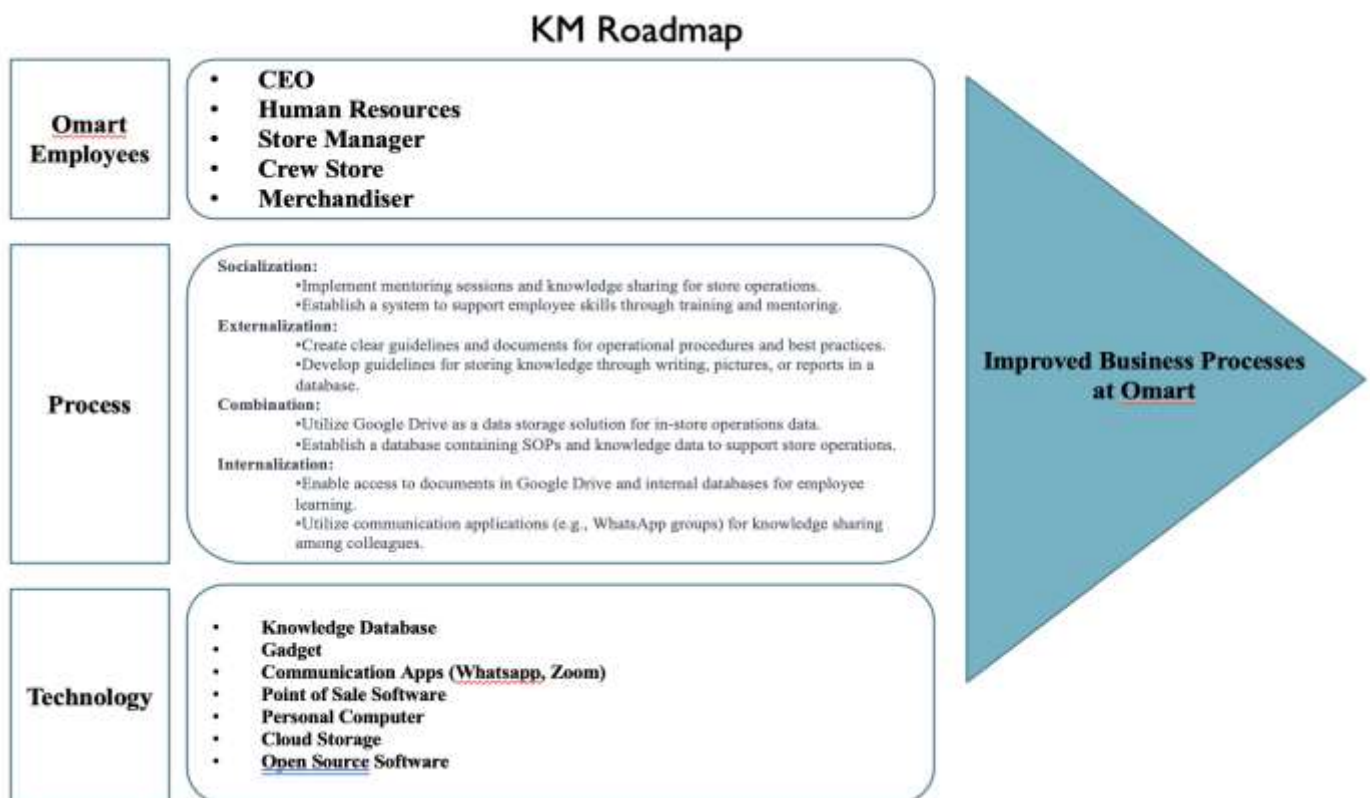


Figure 12. KM Roadmap



A knowledge management roadmap (KM Roadmap) is a systematic approach to identify, capture, organize and share knowledge within an organization. It can be used to improve business operations by increasing efficiency, effectiveness and innovation.

The knowledge management framework and the SECI model can be used to develop a knowledge management roadmap. The knowledge management framework provides a high-level overview of the knowledge management process, while the SECI model provides a more detailed view of how knowledge is created, shared and used within an organization, this time the author wants to create a KM Roadmap based on the knowledge management framework and the SECI model that has been resentfully made.

This roadmap serves as a strategic plan to assist companies using a knowledge management approach to improve business processes at Omart companies so that they become more efficient.

The KM Roadmap here describes steps to be taken to improve knowledge management practices. It covers various aspects that have been analyzed in the previous chapter.

By obtaining a solution in the form of the KM Roadmap itself, it is hoped that the company can optimize its knowledge base and streamline its business processes.

## CONCLUSION

This study highlights the business processes that occur at O Mart which are constrained by SOPs that are still not good and that knowledge management has not been implemented in the company. By designing the KM Framework researchers are trying to solve the problems that occur in this company.

In conclusion, in order for O Mart's minimarket business operational processes to be more efficient than before, it is necessary to create a structured SOP by applying knowledge management practices by adopting the Knowledge Management Framework (PPT and SECI) approach. managing the knowledge they have, by explaining the problems they have and also how to solve these problems. This roadmap is also expected to help O Mart slowly manage its resources, the processes carried out, and the technology used to assist the process. After the roadmap is made, it is continued with the creation of an implementation plan which is divided into 5 stages. The first is the Introduction and Preparation Knowledge Management stage in O Mart, the second is the Development of Knowledge Management Framework, the third is Training and Outreach, followed by Knowledge Management System Implementation, and ends with Evaluation and Improvement. It is hoped that the program created by the company can streamline their business processes by making more structured SOPs as well as implementing knowledge management in the company's daily activities.

## REFERENCES

1. Ding, W. and Marchionini, G. 1997 A Study on Video Browsing Strategies. Technical Report. University of Maryland at College Park.
2. Tavel, P. 2007 Modeling and Simulation Design. AK Peters Ltd.
3. Sannella, M. J. 1994 Constraint Satisfaction and Debugging for Interactive User Interfaces. Doctoral Thesis. UMI Order Number: UMI Order No. GAX95-09398., University of Washington.
4. Brown, L. D., Hua, H., and Gao, C. 2003. A widget framework for augmented interaction in SCAPE.
5. Y.T. Yu, M.F. Lau, "A comparison of MC/DC, MUMCUT and several other coverage criteria for logical decisions", Journal of Systems and Software, 2005, in press.
6. Spector, A. Z. 1989. Achieving application requirements. In Distributed Systems, S. Mullende
7. Forman, G. 2003. An extensive empirical study of feature selection metrics for text classification. J. Mach. Learn. Res. 3 (Mar. 2003), 1289-1305.
8. Fröhlich, B. and Plate, J. 2000. The cubic mouse: a new device for three-dimensional input. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.
9. Bowman, M., Debray, S. K., and Peterson, L. L. 1993. Reasoning about naming systems. .
10. Ackoff, R. L. (1989). From data to wisdom. Journal of Applied Systems Analysis, 16(1), 3-9.
11. Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS Quarterly, 25(1), 107-136.
12. Bates, M. J. (2005). Information and knowledge: An evolutionary framework for information science. Information Research, 10(4), 251.





13. Becerra-Fernandez, I., & Sabherwal, R. (2015). Knowledge Management: Systems and Processes (2nd ed.). Routledge.
14. Becerra-Fernandez, I., Gonzalez, A., & Sabherwal, R. (2004). Knowledge management: Challenges, solutions, and technologies. Upper Saddle River, NJ: Pearson Prentice Hall.
15. Becky Simon. (2019). Everything You Need to Know about the People, Process, Technology Framework. <https://www.smartsheet.com/content/people-process-technology>
16. Choi, B., Poon, S. K., & Davis, J. G. (2008). Effects of knowledge management strategy on organizational performance: A complementarity theory-based approach. *Omega*, 36(2), 235-251.
17. Choo, C. W. (2002). The knowing organization: How organizations use information to construct meaning, create knowledge, and make decisions. Oxford University Press.
18. Chua, A. Y. K., & Lam, W. (2005). Why KM projects fail: A multi-case analysis. *European Journal of Information Systems*, 14(3), 245-260. Doi:10.1057/palgrave.ejis.3000537.
19. Dalkir, K. (2013). Knowledge management in theory and practice. Routledge.
20. Davenport, T. H., & Prusak, L. (1998). Working knowledge: How organizations manage what they know. Harvard Business Press.
21. Greg Kelly, Sajal Kohli, & Tobias Wachinger, Daniel Zipser. (2020). Perspectives on retail and consumer goods.
22. Jennex, Murray E; & Olfman, Lorne. (2006). A Model of Knowledge Management Success. *International Journal of Knowledge Management*, 2(3), 51-68.
23. Kumar, H., Singh, M. K., Gupta, M. P., & Madaan, J. (2020). Moving towards smart cities: Solutions that lead to the Smart City Transformation Framework. *Technological Forecasting and Social Change*, 153(October 2017), 1–16.
24. Liebowitz, J. (2000). Knowledge management and its link to artificial intelligence. *Expert Systems with Applications*, 18(1), 1-6. Doi:10.1016/S0957-4174(99)00093-6.
25. Maier, R. (2007). Knowledge management systems: Information and communication technologies for knowledge management. Springer.
26. Majid, A. B. A., Yusoff, R. C. M., & Razak, R. A. (2020). The impact of people, process, and technology factors on knowledge management effectiveness in Malaysian local authorities. *Journal of Information and Knowledge Management*, 19(3), 2050014. <https://doi.org/10.1142/S0219649220500144>.
27. McInerney, C. (2002). Knowledge management and the dynamic nature of knowledge. *Journal of the American Society for Information Science and Technology*, 53(12), 1009–1018. <https://doi.org/10.1002/asi.10109>
28. Nonaka, I., & Takeuchi, H. (1995). The knowledge creating company: How Japanese companies create the dynamics of innovation. Oxford University Press.
29. Polanyi, Michael. (1996). The Tacit Dimension. Garden City, New York: Doubleday Company Inc. ISBN: 978-0-226-67298-4.
30. Rahimli, A. (2012). Knowledge Management and Competitive Advantage. 2.
31. Sung, P.-L., Chang, Y.-H., Chao, K.-C. & Chuang, C.-M. (2014). Global distribution pattern of histological subtypes of epithelial ovarian cancer: A database analysis and systematic review. *Gynecol. Oncol.* 2014; 133, 147–154.
32. Wiig, K. M. (1997). Knowledge management: An introduction and perspective. *Journal of Knowledge Management*, 1(1), 6-14. Doi:10.1108/13673279710800678.
33. Wilson, T. D. (2002). The nonsense of “knowledge management”. *Information Research*, 8(1), 155.
34. Yuniar, R. P., Wibowo, A., & Gunawan, F. (2021). Knowledge management success factors in manufacturing industry: A systematic literature review. *IOP Conference Series: Materials Science and Engineering*, 1094(1), 012023. <https://doi.org/10.1088/1757-899X/1094/1/012023>.

---

*Cite this Article: Muhammad Alif Iman Aulia, Dedy Sushandoyo (2023). Proposed Knowledge Management Design to Improve Business Processes at O Mart Retail Company. International Journal of Current Science Research and Review, 6(7), 5187-5207*