



Proposing Business Growth of PT. DECRA Group Indonesia through Knowledge Management

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ABSTRACT: The informatics industry market has shown promising growth in the post-COVID era, presenting certification companies with lucrative business opportunities. The informatics market's GDP growth rate ranks fourth among other fastest-growing industries in Indonesia, demonstrating a 7.19% increase from 2022 to 2023. PT. DECRA Group Indonesia, a certification company, have intention to penetrate a new market which is IT Industry. Knowledge plays a crucial role in the certification process, especially ISO auditors are required extensive knowledge across various business types. Therefore, this research focuses on exploring the role of knowledge management in supporting the growth of PT. DECRA Group Indonesia. The study aims to investigate how knowledge management approaches can enable DECRA Group Indonesia to improve their resources and capitalize on the IT market. The data collection method in this research involves gathering qualitative data through interviews with the business owner and HR manager as the primary sources. These interviews aim to gain an in-depth understanding of their perspectives on the company's business growth. Additionally, secondary data sources such as the company's website, competence review forms, and lists of employee competencies will be utilized to supplement the research. The analysis employs Goal-Analysis approach using Fishbone Diagram model to identify what key areas in achieving company's goals. Building upon the analysis, KM Framework Table is constructed based on the People, Process, and Technology for each improvement that need to be made. Then SECI Model, derived from the KM Framework Table, guides the implementation of knowledge management practices, facilitating the conversion of tacit knowledge into explicit knowledge to foster innovation and organizational learning. Furthermore, to ensure successful implementation in SECI model, an Integrated Learning Cycle model is developed, which takes into consideration the communication channels and learning processes that are crucial for the effective knowledge transfer and acquisition. To facilitate the practical implementation of knowledge management strategies, a KM Roadmap is developed by providing a simple-structured approach for DECRA in aligning its people, processes, and technology considerations to support knowledge management initiatives. In conclusion, this research emphasizes the critical role of knowledge management in driving business growth for PT. DECRA Group Indonesia, enabling the company to enhance its internal operations, develop competencies, capitalize IT market successfully, and leverage knowledge as a strategic asset for sustained innovation and competitive advantage.

KEYWORDS: Business Growth, Goal-Analysis, Fishbone Diagram, Integrated Learning Cycle, KM Roadmap, Knowledge Management, SECI Model.

INTRODUCTION

In today's competitive business landscape, companies need to constantly innovate and adapt to stay ahead. Especially in Indonesia for industrial sector, they contribute to GDP about 20%, then for taxation around 30%, and the rest for export up to 74% (Kementrian Perindustrian RI, 2019). These results give a big push for "Making Indonesia 4.0" come to realization which largely driven by five key type industry: food and beverages, textile and clothing, automotive, chemical, and electronics industries. With the fact that the industrial sector has a fairly large impact on the Indonesian economy, improving the quality of products in the form of services and goods is a process that must be carried out by every company business in Indonesia. Therefore, companies often carry out certification to improve the quality of their own organization. The need for certification companies is undeniably a major player in the certification business, National certification (SNI in Indonesia) and international certification (ISO) are the main products of this business.

Because of this the certification industry in Indonesia has been experiencing steady growth even when the state of country got affected by COVID-19. One of the main reasons besides improving the work process is the need for companies to comply with regulatory standards and certification requirements. Even when the state of many countries got affected by COVID-19, the demand for



certification services has a significant increase in revenue. For instance, according to a report by Statista (2023) the market volume for this sector is anticipated to reach US\$36.90m by 2027, reflecting an annual growth rate of 11.32% during the period of 2023-2027. As the certification company, knowledge is important key for their sustainability. ISO auditors must have a lot of knowledge about various types of work in a company whose types of business also vary. Company certification is very dependent on people. Not to mention that certification companies are required to train other companies to understand and carry out their certification. Origination's ability to use and utilize knowledge is highly dependent on its company's human resources (Antunes and Pinheiro, 2020). With the current development of the Indonesian industry, mainly based on Figure 1. data provided by the Kemenprin (2020), the informatics industry is the fastest growing business due to the impact of COVID as well. After COVID, the informatics industry market still shows promising growth, as indicated by the data from Badan Pusat Stastika (2023) in Figure 2., which demonstrates a 7.19% increase in information and communication industry from 2022 to 2023. The informatics market's GDP growth rate ranks fourth among other fastest growing industries.

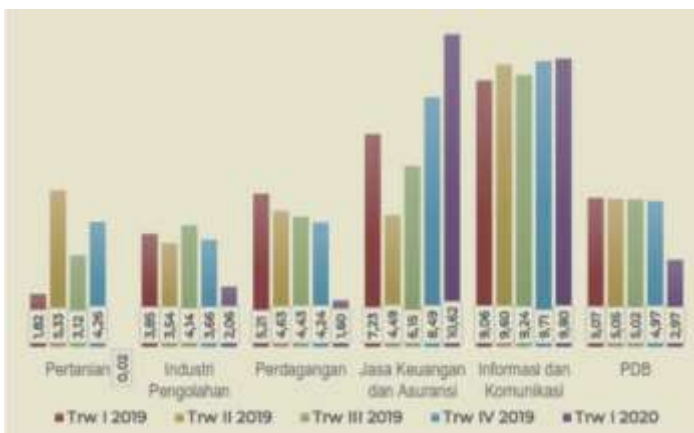


Figure 1. GDP Growth by Business Field (%) in 2020 (Kementrian Perindustrian Republik Indonesia, 2020)



Figure 2. GDP Growth by Business Field (%) 2022 to 2023 (Badan Pusat Statistik, 2023)

This is a pretty good business opportunity for certification companies. To address this challenge, certification companies are increasingly turning to knowledge management as a way to enhance their competencies and achieve sustainable growth in the IT industry. PT. DECRA Group Indonesia Certification or DGI Certification is one of the Certification Institutions in Indonesia that was formed to assure that the implementation of an organizational management system meets National Standards (SNI) and International Standards (ISO). As the certification company, knowledge is important key for their sustainability. ISO auditors must have a lot of knowledge about various types of work in a company whose types of business also vary. Company certification is very dependent on people. Origination's ability to use and utilize knowledge is highly dependent on its company's human resources (Antunes and Pinheiro, 2020). Not to mention that certification companies are required to train other companies to understand and carry out their certification. This study aims to explore the role of knowledge management in helping certification companies especially for DGI to develop the competencies needed to enter the IT industry.

LITERATURE REVIEW

This theoretical foundation section aims to provide a complete grasp of Knowledge Management (KM) by examining numerous fundamental ideas and models. The knowledge management for innovation paradigm, which provides a framework for exploiting knowledge to drive innovation inside an organization, will be investigated. The SECI model, which explains the process of knowledge generation and sharing, will also be investigated. By examining these key concepts and models, this theoretical foundation section will establish a strong basis for understanding KM and its relevance in this research.

Knowledge: Knowledge can be described as information that can be processed, understood, and absorbed by an individual or group. Understanding information can also be considered knowledge, as it is a valuable resource for improving performance, solving

problems, and developing new ideas (Mohajan, 2016). Therefore, knowledge is a crucial asset to enhance individual and group performance too.

Knowledge is one component of success in many disciplines, including business, technology, science, and politics. Knowledge, according to Ichikawa and Steup (2017), involves more than simply a genuine belief, it must also be justified and dependable. As a result, the necessity of reason and dependability in evaluating whether a belief qualifies as knowledge or not is highlighted while studying knowledge.

Knowledge Management: Knowledge management (KM) is a systematic procedure inside an organization for developing, collecting, sharing, and utilizing knowledge and information. The primary purpose of KM is to improve organizational performance, innovation, and competitive advantage through effective knowledge resource management. According to Alavi and Leidner (2001) define KM as the process of capturing, creating, sharing, and using organizational knowledge to achieve the organization's objectives. Databases, intranets, social media platforms, and knowledge portals are examples of tools and technology that may help with KM. As firms struggle to cope with the increased complexity, unpredictability, and fast change of the global marketplace, knowledge management has become increasingly vital in the current corporate environment. For a successful knowledge management projects, it requires a balance between people, process, and technology which means the company have to understand the function for each element to reap the most advantages (Anggoro & Simamora, 2019; Levallet & Chan, 2016). Therefore, in Figure 3 these three components are interdependent and must work in harmony to remain competitive in today's rapidly changing business environment.

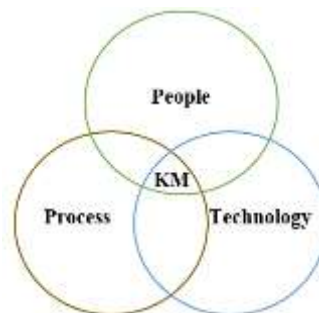


Figure 3. The Key Elements of Knowledge Management (Anggoro & Simamora, 2019)

Nowadays for a company to be able competing in challenging organizational environment, organizations need to learn from past mistake rather than repeating those mistakes itself and even increasing organization's value itself. Knowledge is an emerging concept area in several industries such as education, construction, agriculture, and many more (Fahroni & Tjakraatmadja, 2013; Yazdani et al., 2020; Onyeagam et al., 2020).

Goal Oriented Analysis using Fishbone Diagram: Innovation analysis is process to identify and analyze the key actions required for achieving organization's innovation goal (Fisher et al., 2011). It provides a structured approach to understanding the various factors that influence goal attainment. In this case, "innovation" represents the "future goal" that the organization need to achieve. Based on cause-and-effect analysis, fishbone diagram method is based on the core problem that have multiple cause that can be categorized into different categories (Slameto, 2016). But for goal analysis, fishbone method provides organizations with a systematic and visual approach to identify and analyze the key actions necessary to achieve their goal. In Figure 4, the fishbone diagram typically consists of a horizontal line representing the goal, and several diagonal lines branching out from it. Each branch represents a different action category, such as people, processes, technology, resources, or other relevant factors.

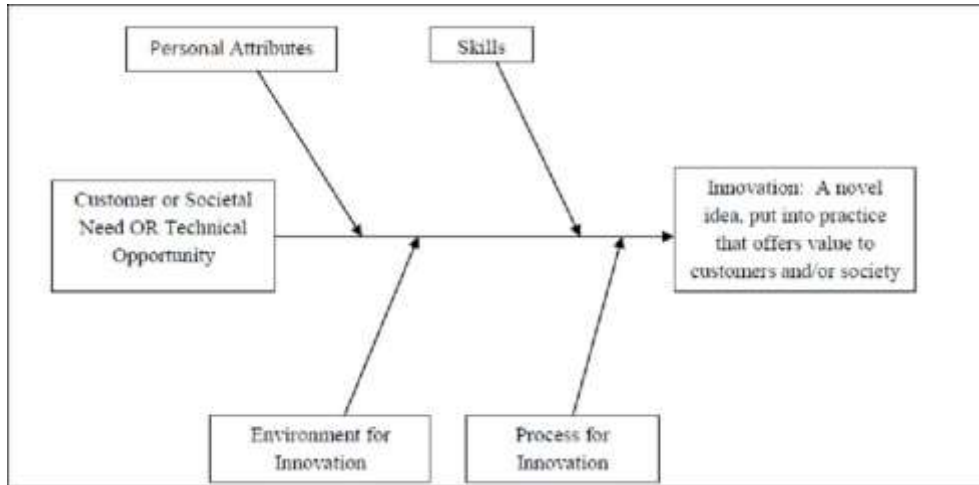


Figure 4. Fishbone Diagram for Innovation Analysis (Fisher et al., 2011)

Types of Knowledge: Knowledge can be several into several types, depending on what criteria such as its level of abstraction, origin, and formality. One common classification scheme for knowledge types are explicit knowledge and tacit knowledge. Tacit Knowledge is a knowledge that deeply ingrained in an individual's experiences, actions, values, emotions, and intuition. Tacit knowledge is subjective in nature and is often difficult to communicate or share with others. Explicit Knowledge is a knowledge that can be expressed in a clear and systematic manner using words and numbers. Examples of explicit knowledge include data, scientific formulae, specifications, manuals, and other similar forms of knowledge. This kind of knowledge can be easily transmitted from one person to another in a formal manner. To summarize, explicit information is simple to express and transfer, but tacit knowledge is intensely personal and difficult to formalize. To maximize their worth, businesses must develop ways to efficiently capture, store, and transmit both explicit and tacit information (Nonaka, 1990; Nonaka & Takeuchi, 1995; Nonaka & Nishiguchi, 2001).

Knowledge Creation Process – SECI Model: Based on two types of knowledge (explicit knowledge and tacit knowledge), the knowledge creation process model is a framework that explains how knowledge is created, share, and utilized within organizations (Nonaka & Takeuchi, 1995, Nonaka & Nishiguchi, 2001). The model is consisted into four stages, which are abbreviated as SECI and illustrated in Figure 5.

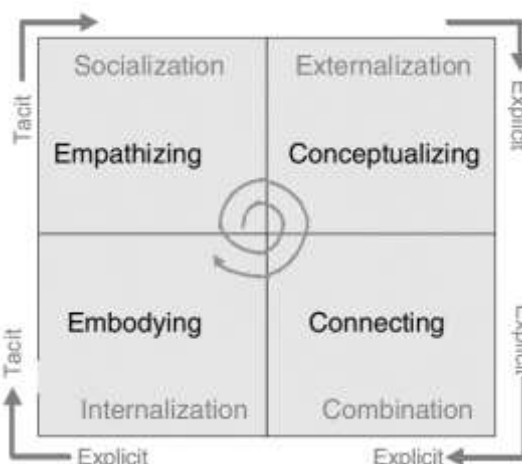


Figure 5. SECI Model (Nonaka & Nishiguchi, 2001)

1) **Socialization:** Transferring new tacit knowledge through shared experiences is vital, therefore being together and interacting or living in the same environment is important for transferring tacit knowledge. Socialization is more situational

and difficult to formalize, it's more like traditional apprenticeship. Apprentices learn their method through observing, imitating, and practicing the works of their masters or seniors rather than from written textbooks. The usage of informal encounters outside of the job, such as chat over meals and beverages, direct connections with suppliers and customers, and so on, is an example of socializing

2) **Externalization:** Process of converting tacit knowledge into explicit knowledge, so it can be read, seen, and understood clearly by others. From this, the knowledge can be shared to others and become the basis of new knowledge in the expressions that others can comprehend, such as concepts, diagrams, models, or even prototypes. However, these expressions sometimes are insufficient, inconsistent, and inadequate. The differences and gaps between these expressions and tacit images might foster "reflection" and interaction between individuals. Externalization can be carried out by articulation, visualization, or any other method of knowledge documentation

3) **Combination:** Knowledge is exchanged and combined through such media as documents, meetings, and computerized communication networks with reconfiguration of existing knowledge. Combination is more of a process of sorting, adding, combining, and categorizing to develop new knowledge therefore communication, diffusion, and knowledge systemization are the crucial keys. Combination may also refer to the breakdown of particular principles, such as corporate vision, into operationalized business. Justification of knowledge occurs throughout the combination phase to build the underlying agreement and allows an organization to take actual practical measures.

4) **Internalization:** The process of embodying explicit knowledge into tacit knowledge, is closely related to "learning by doing". Internalized knowledge is used to broaden, extend, and reframe organizational members' tacit knowledge based in the form of shared models or technical knowhow. In practice, internalization relies on two dimensions, learning action through explicit knowledge and simulations or experiments by themselves (learning by doing).

Integrated Learning Cycle: Integrated Learning Cycle or ILC is holistic approach of learning process in organization with integrating formal and informal learning activities. ILC is a mixed concept from SECI model and Bersin's learning method to create a culture of continuous learning, encourage knowledge generation, and improve individual and organizational performance (Telkom Indonesia, 2017). Based on Bersin's learning method, blended learning is the combination of different training medias such as technologies, activities, or types of events to create optimum training program for specific people. The term "blended" means that traditional instructor-led training is being supplemented with electronics formats, so blended learning programs use many different forms of learning (Barsin, 2004; Suriaman et al., 2022).

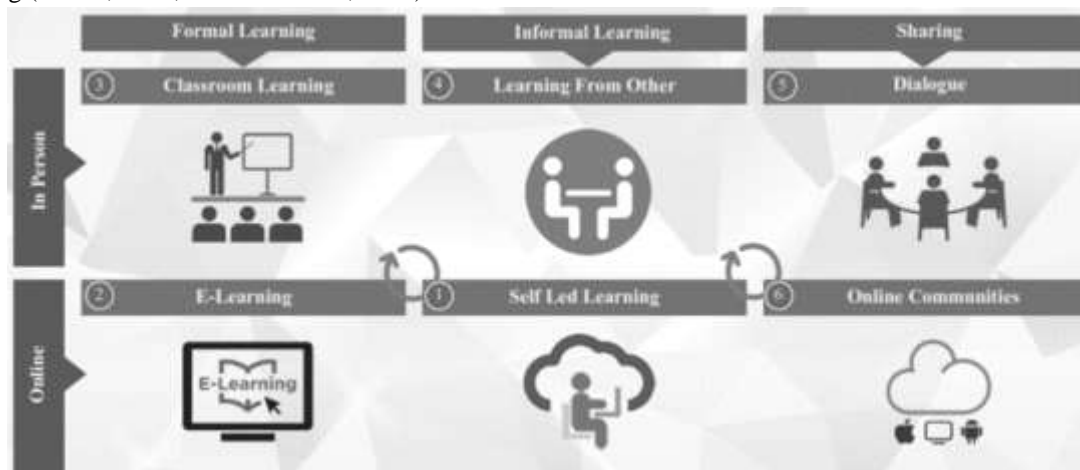


Figure 6. ILC Framework Model (Telkom Indonesia, 2017)

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traditional instructor-led training is being supplemented with electronics formats, so blended learning programs use many different forms of learning (Barsin, 2004; Suriaman et al., 2022). The factors in ILC are:

- a) **Formal Learning:** organized learning experiences intended to impart specific information and skills
 - In Person: Classroom learning → face-to-face organized education guided by teachers or educators.
 - Online: E-Learning → uses digital technology to offer instructional information and activities by allowing students to access resources at their own speed and convenience.
- b) **Informal Learning:** learning that takes place outside of standard teaching contexts
 - In Person: Learning from other → gaining knowledge through interactions with colleagues, mentors, and subject matter experts.
 - Online: Self-led learning → involves independent exploration, self-study, and self-reflection in which individuals reflect on their experiences in order to develop their understanding and expand their capacities.
- c) **Sharing:** engaging dialogue that involves the exchange of ideas, experiences, and resources among learners
 - In Person: Dialogue → meaningful discussions about ideas, experiences, and perspectives among individuals within learning context.
 - Online: Online Communities → virtual platforms where individuals with shared interests and goals can connect, collaborate, and learn more.

METHODS

A. Conceptual Framework

In the context of knowledge management, a conceptual framework plays a crucial role in structuring research efforts. It provides a comprehensive understanding of managing knowledge effectively within organizations. The framework integrates analytical tools such as fishbone analysis, goal analysis, the SECI model, and the Integrated Learning Cycle (ILC) to develop a robust knowledge management approach. For the conceptual framework illustration can be seen on Figure 7.

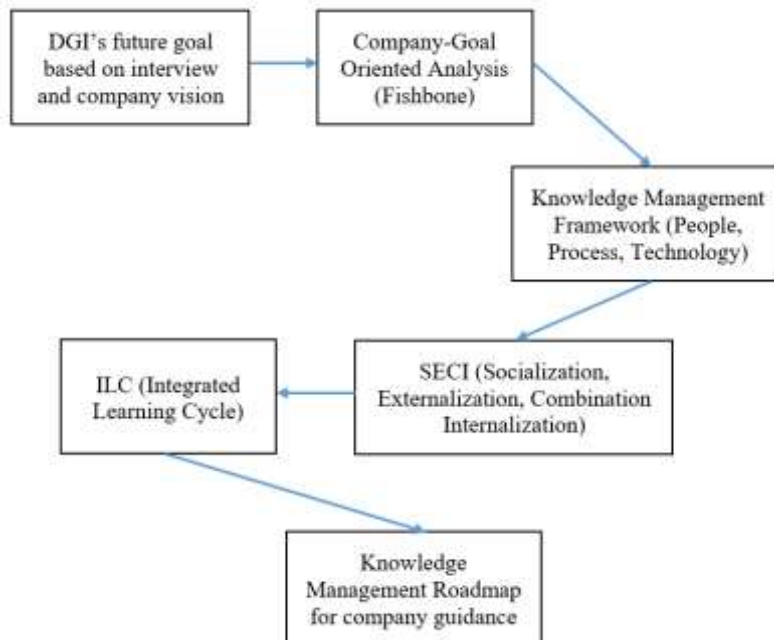


Figure 7. Conceptual Framework

B. Data Collection

The data collection process for this study will employ a combination of primary and secondary data collection methods. This is needed to capture the essential information needed for this study. In this study based on primary and secondary data, the researcher obtain data from.



1) Primary Data

Interviews are conducted with stakeholders within the company, allowing for in-depth exploration of their perspectives, experiences, and challenges related to internal business processes. Therefore, in Table 1. interview objectives are defined for each interview and job position, outlining specific areas of focus and desired insights to be gain from the interviews

Table 1. Interview Objectives

<i>Method</i>	<i>Position</i>	<i>Interview Objectives</i>
Semi Structured Interview	Business Owner	1. Business Overview 2. Current Condition of the company 3. Explore the future goals of the company 4. Short-term and Long-term Plans 5. Recent Challenges in achieving its goals 6. Actions that have been taken in facing challenges
Semi Structured Interview	HR Manager	1. HR Practices Overview 2. Knowledge Management Practices 3. Challenge in Talent Management

2) Secondary Data

Information is gathered from the company's internal sources, such as organizational records, reports, and documentation, to supplement the primary data. This source of data provides valuable context and supports a comprehensive understanding of the research subject within the company. As part of this study, specific secondary data from DGI's internal sources includes:

- i. Company website
- ii. Most recent company business plan (Made in 2016)
- iii. List of experts and their competencies based on EA Code
- iv. Competence review form

C. Data Analysis

The data analysis methods employed in this study include the goal analysis method using the fishbone diagram, the development of a knowledge management framework, the application of the SECI model, the utilization of the Integrated Learning Cycle (ILC) methodology, and the creation of a knowledge management roadmap. Each of these methods plays a crucial role in understanding the challenges faced by certification companies especially for DECRA and devising effective strategies to enhance their internal business processes.

- 1) Goal Analysis Method using Fishbone Diagram: The goal analysis method, employing the fishbone diagram, will be utilized to conduct a comprehensive examination of the factors influencing the achievement of the company's goals. By visually mapping out what effect of actions with goals relationships, this method will help identify the key actions where innovation is required to overcome challenges and drive improvement
- 2) Knowledge Management Framework Table: knowledge management framework will be developed based on the sub-actions identified within the fishbone diagram. This framework will consider the three critical elements of knowledge management: people, process, and technology. By integrating these elements, the framework will provide a structured approach to effectively capture, organize, and leverage knowledge within the organization, fostering collaboration and improving decision-making processes.
- 3) SECI Model: The SECI model, proposed by Nonaka and Takeuchi, will be employed to facilitate knowledge creation and transfer within the organization. This model emphasizes the conversion of tacit knowledge into explicit knowledge through



socialization, externalization, combination, and internalization processes. By implementing the SECI model, the research aims to enhance knowledge sharing and foster a culture of continuous learning and innovation.

- 4) Integrated Learning Cycle: The Integrated Learning Cycle (ILC) methodology will be utilized to support the knowledge management processes within the organization. This approach combines formal and informal learning methods, integrating direct interaction and online information sources. By incorporating both classroom learning and self-led learning, the ILC method aims to enhance knowledge acquisition, retention, and application.
- 5) Knowledge Management Roadmap: Based on the findings from the previous analysis methods, a knowledge management roadmap will be developed. This roadmap will outline the strategic steps and initiatives necessary to optimize knowledge management practices within the organization. It will provide a clear path for implementing the knowledge management framework, SECI model, and ILC methodology, aligning them with the organization's goals and objectives.

RESULTS

Based on the identified problems and the company's goal of expanding into the IT industry, here is a business situation analysis:

- Insufficient number of employees with the required competencies:
 - This issue indicates a potential skills gap within the company, which can lead to inefficiencies and delays
 - It poses a challenge in meeting client expectations and industry standards
 - The lack of skilled employees may hinder the company's ability to capitalize on growth opportunities and maintain a competitive edge in the ISO certification market.
- Existence of a significant amount of tacit knowledge that has not been adequately documented or shared:
 - The presence of undocumented tacit knowledge can result in knowledge silos, where valuable insights and expertise are not accessible to other employees.
 - Failure to capture and share tacit knowledge limits the company's ability to leverage its internal intellectual capital fully.
 - The lack of documented knowledge lead to inconsistencies in service delivery and hinder the smooth transfer of knowledge within the organization.
- Expansion into the IT industry:
 - Entering the IT market segment represents a growth opportunity for DGI Certification to diversify its service offerings and attract new clients.

In summary, DGI Certification faces challenges related to employee competencies, knowledge management, and the strategic goal of entering the IT industry. These issues highlight the need for comprehensive training and development programs to bridge the skills gap, effective knowledge sharing mechanisms to capture and disseminate tacit knowledge, and a well-planned market entry strategy to successfully tap into the IT market segment.

A. Company-Goal Analysis

The goal analysis is conducted based on interviews, the business objectives of the company, and supporting secondary data. This analysis aims to align the company's future business goals with innovative strategies, utilizing the fishbone diagram method (Fisher, 2011; Slameto, 2016). Through this analysis, two distinct objectives have emerged: improving internal business processes and expanding into new target markets, specifically the IT industry. These objectives are expected to enable DGI to tap into emerging markets while maintaining their presence in their current market.

- 1) Goal Analysis – Improving Company Business

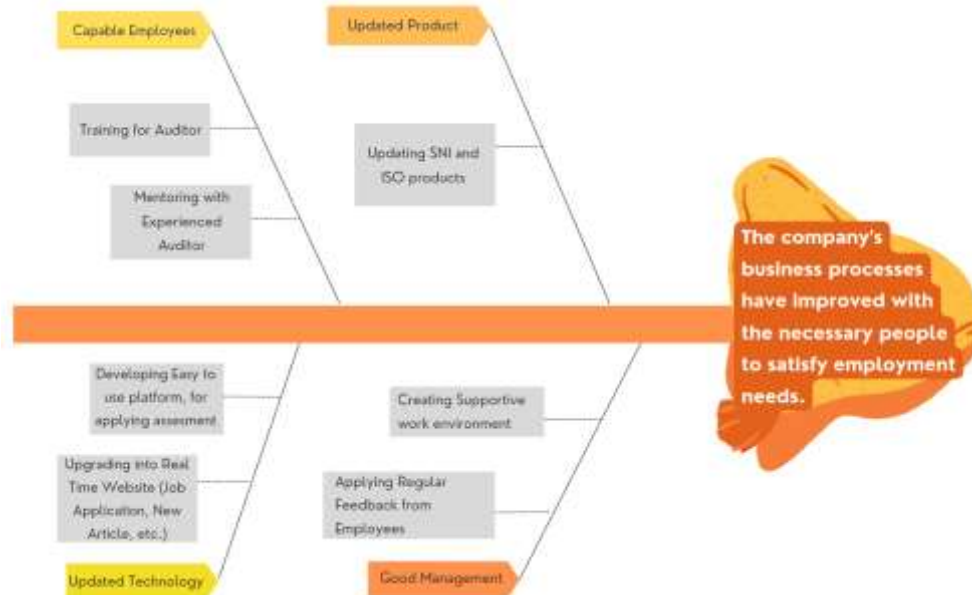


Figure 8. Fishbone Goal Analysis - Improving Company Business

The first goal focuses on enhancing internal processes within DGI to drive efficiency, productivity, and overall business performance. By identifying areas for improvement and implementing innovative solutions, the company aims to streamline operations, optimize resource allocation, and enhance customer satisfaction. This goal illustrates DGI's dedication to continual improvement and the implementation of cutting-edge methods in order to remain competitive in the industry, as seen in Figure 8. Based on the analysis, there were four categories with supporting sub-actions:

- i. Capable Employees
 - To enhance the company's capabilities, specific actions were identified →
 - a. Training for Auditor: Providing training programs to enhance the skills and knowledge of auditors, ensuring they stay updated with the latest industry standards and practices.
 - b. Mentoring with Experienced Auditor: Implementing a mentoring program where less experienced auditors can learn from experienced auditors, allowing for knowledge transfer and skill development.
- ii. Updated Product
 - To stay competitive and meet market demands, it was essential to keep the company's products up to date. The following actions were identified →
 - a. Updating SNI and ISO products: Continuously updating and improving products to comply with the latest standards and regulations, ensuring customer satisfaction and market relevance.
- iii. Updated Technology
 - To leverage technology for improved operations and customer experience, the following actions were suggested →
 - a. Upgrading into Real Time Website (Job Application, New Article, etc.): Transforming the company's website into a real-time platform, enabling job applications, providing up-to-date articles, and offering a seamless user experience.
 - b. Developing Easy to use platform, for applying assessment: Creating a user-friendly platform that simplifies the assessment process, making it more accessible and efficient for both auditors and clients.
- iv. Good Management
 - To create a conducive work environment and foster continuous improvement, the following actions were proposed →

- a. Applying Regular Feedback from Employees: Encouraging employees to provide feedback on their experiences and suggestions for improvement, fostering a culture of open communication and continuous learning.
- b. Creating Supportive Work Environment: Establishing policies and practices that promote teamwork, collaboration, and employee well-being, ensuring a positive and productive work environment.

2) Goal Analysis – Improving Company Business

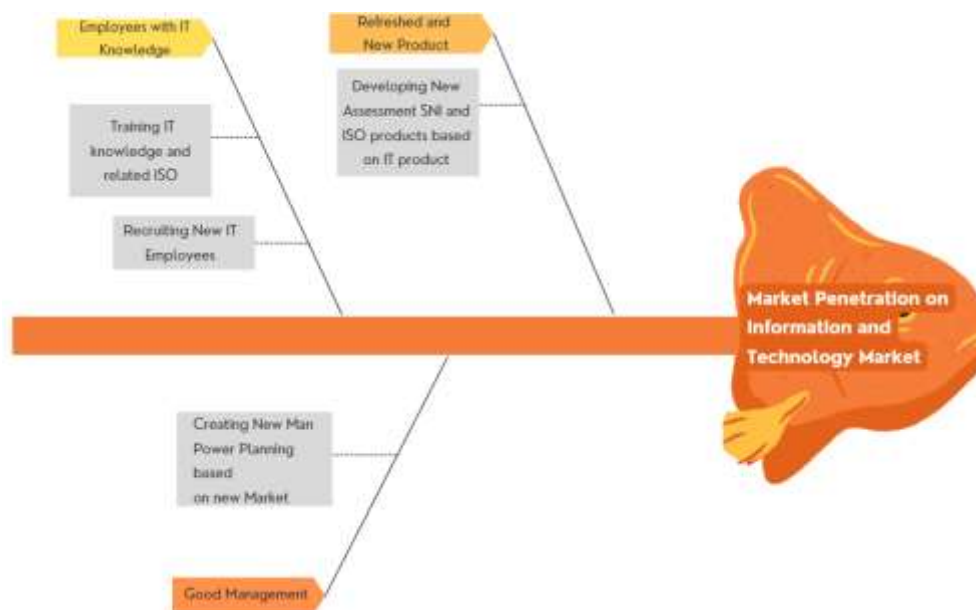


Figure 9. Fishbone Goal Analysis – Penetrating IT Market Segment

The second goal is about market expansion into the IT industry. Building upon their existing expertise and reputation in ISO certification, DGI aims to leverage their capabilities to penetrate the IT market segment. By capitalizing on emerging opportunities and addressing the unique needs of IT companies, DGI aims to broaden their customer base and diversify their revenue streams. Figure 9 illustrates this goal, which coincides with the company's growth plan and illustrates their proactive attitude to explore new business prospects. Through analysis Goal Analysis using fishbone diagram, several key areas were identified as critical for successfully entering and thriving in this market:

i. Employees with IT Knowledges

To ensure the company has the necessary expertise and skills to operate in the IT market segment, specific actions were identified→

- a. Training IT knowledge and related ISO: Providing training programs to employees for enhancing their understanding of IT concepts, technologies, and relevant ISO standards.
- b. Recruiting New IT Employees: Hiring new employees with specialized IT skills and knowledge to complement the existing workforce and support the company's expansion into the IT market.

ii. Refreshed and New Product

To meet the unique demands of the IT market segment and attract customers, the following actions were suggested→

- a. Develop New Assessment SNI and ISO products based on IT product: Developing innovative evaluation tools customized exclusively to the IT industry, combining IT-related criteria and standards. This guarantees that the organization provides IT clients with relevant and up-to-date services.

iii. Good Management



To effectively manage the transition into the new market segment and optimize resources, the following action was proposed→

- a. Creating New Man Power Planning based on new Market: Developing a comprehensive manpower planning strategy that aligns with the requirements of the IT market segment. This includes identifying the necessary skills, roles, and responsibilities required to successfully operate in the IT industry.

B. Knowledge Management Framework Table

Knowledge Management Framework or KM Framework serves as a strategic mechanism for managing organization’s intellectual assets and facilitating efficient knowledge capture. A successful knowledge management project necessitates a harmonious balance between people, process, and technology (Anggoro & Simamora, 2019; Levallet & Chan, 2016). By understanding the distinct roles and functions of each component, the company can harness their collective advantages to optimize knowledge sharing, retention, and utilization. Based on goal analysis, KM Framework table can be made by integrating people, process, and technology. It empowers employees to access relevant knowledge, collaborate effectively, and make informed decisions, thereby fostering innovation, improving operational efficiency, and enhancing overall business performance. Because there are two goals, two Knowledge Management Framework tables are constructed based on the previously described goals

- i. KM Framework Table for Improving Company Business Processes

The primary aim of this framework table is to improve internal DGI procedures in order to increase efficiency, productivity, and overall business performance. Table 2 depicts the components and solutions for improving DGI’s business processes

Table 2. Knowledge Management Framework Table for Improving Company Business

Action	Sub-Action	Critical Knowledge	KM Objectives	KM Framework		
				People	Process	Technology
Capable Employees	Training for Auditor	<ul style="list-style-type: none"> - ISO standards and guidelines - Auditing techniques - Relevant industry practices. 	To develop and enhance the skills and competencies of the auditors in assessing and training other companies (capable of meeting job requirements)	HR, Trainers and Auditors	<ul style="list-style-type: none"> - Conduct a training needs analysis to identify areas for improvement in auditor skills and competencies. - Deliver the training to auditors - Evaluate the effectiveness of the training by gathering feedback from auditors and assessing their performance on the job. 	LMS (Learning Management System)
	Mentoring with more experienced Auditor	<ul style="list-style-type: none"> - ISO standards and guidelines - Industry standards - Best practices. 	To provide support for less experienced auditors, enabling them	HR and Auditors	<ul style="list-style-type: none"> - Design and implement a mentoring program that pairs less experienced 	Communication tools (email, chat, video conferencing)



Action	Sub-Action	Critical Knowledge	KM Objectives	KM Framework		
				People	Process	Technology
			to learn from the experience of more senior colleagues and develop their skills and competencies		auditors with more senior colleagues. - Provide guidelines and training to mentors and mentees on how to maximize the benefits of the program. - Evaluate the effectiveness of the program by gathering feedback from participants and assessing its impact on auditor skills and competencies.	
Updated Products	Updating SNI and ISO product	- The latest updates and revisions of the relevant standards, - Regulatory requirements - Industry best practices.	To ensure that the company's auditors are up-to-date with the latest requirements and standards and can assess and train other companies accordingly.	Industry Experts, Operation Director, and Auditors.	- Identify subject matter experts and industry experts who can provide guidance on the latest updates and revisions to SNI and ISO standards. - Review and update company procedures and documentation to ensure compliance with the latest standards	Document management tools and communication tools
Updated Technology	Making Easy to use platform for customer applying assessments	- Customer's needs, preferences, and expectations - Company's assessment and training offerings - Ui/UX Design - App Creation	To create a user-friendly platform that enables customers to easily apply for assessments and training services.	Web Developers and Business Analysts.	- Identify requirements from customers and other stakeholders on what features and functionalities they need in the platform. - Design the platform using user-centric design	Internet, Web Development tools, CMS/Content Management System (Joomla), UI/UX design tools (Figma).



Action	Sub-Action	Critical Knowledge	KM Objectives	KM Framework		
				People	Process	Technology
					principles to ensure ease of use and accessibility. - Develop and test the platform to ensure it meets all requirements and is free of bugs and errors. - Launch the platform and monitor its usage and effectiveness over time.	
	Upgrading Company Website into better use (Realtime Customer Support, New Article, etc.)	- Understanding of the customer's needs, preferences, and expectations - The latest web design and development trends. - Search Engine Optimization (SEO)	To provide an informative and engaging online presence for the company, with real-time customer support and up-to-date content.	Web Developers and Customer Support Representatives.	- Conduct a review of the existing website to identify areas for improvement. - Create new content, such as articles and videos - Implement real-time customer support features, such as chatbots and live chat, to improve customer satisfaction and reduce response times.	CMS (Content Management System), Internet, Web Development tools, and Chatbots
Good Management	Supportive Work Environment	- Employee motivation, engagement, and well-being - Leadership Practices - Management practices.	To create a positive and supportive work environment that fosters employee growth, development, and job satisfaction.	HR Division, Owner, and Employees.	- Conduct employee engagement surveys to identify areas for improvement in the work environment. - Develop leadership and management programs to promote a positive and supportive culture. - Implement feedback and	Survey tools and HR Tools



Action	Sub-Action	Critical Knowledge	KM Objectives	KM Framework		
				People	Process	Technology
					recognition programs to encourage and reward high performance.	
	Regular Feedback from Employees to management	- Feedback mechanisms - Communication skills, Leadership practices	To provide a continuous feedback loop between employees and management, enabling the company to improve its operations, policies, and practices.	HR Division, Owner, and Employees.	- Design and implement feedback mechanisms that enable employees to provide regular feedback to management. - Evaluate the effectiveness of feedback mechanisms by gathering feedback from employees and assessing its impact on company operations and policies	Survey tools and communication tools.

ii. KM Framework Table for IT Market Penetration

After creating the knowledge management framework table to improve business processes, a new framework table is being developed (Table 3) for the goal of market penetration into the IT market. This is necessary because these two goals are different and cannot be combined into a single knowledge management framework table. By implementing these separate framework tables, DGI aims to align its knowledge management strategies with the specific objectives and requirements of each market segment, allowing for targeted improvements and enhanced business performance. This approach recognizes the unique challenges and opportunities associated with each market, enabling DGI to effectively leverage its knowledge resources to drive success in both the existing and new market segments.

Table 3. Knowledge Management Framework Table for Market Penetration

Action	Sub-Action	Critical Knowledge	KM Objectives	KM Framework		
				People	Process	Technology
Employees with IT Knowledge	Training IT knowledge and related ISO	- IT relevant ISO standards and guidelines - Training needs of employees and how to design effective training programs	To develop and enhance the IT knowledge and ISO related competencies of employees	HR Division, Auditor, Operation Director and IT Experts	- Identify required IT knowledge and related standards. - Form a training team to design and deliver training programs.	LMS (Learning Management System)



Action	Sub-Action	Critical Knowledge	KM Objectives	KM Framework		
				People	Process	Technology
		- Knowledge of industry best practices related to IT and ISO standards				- Evaluate training effectiveness
	Recruiting New IT Employees	- Technical knowledge and skills for IT product development - IT relevant ISO standards and guidelines	To recruit competent employees who can audit process, then develop and innovate IT products	HR Division and IT Experts	- Identify required competencies for new auditors and develop job postings to attract potential candidates - Conduct interviews to assess a candidate's qualifications, experience, and fit for the role. - Evaluate a candidate's technical skills, knowledge, and abilities related to IT auditing	HR software
Updated Products	Making New Assessment SNI and ISO products based on IT product	- Technical knowledge of IT product assessment - IT related on SNI/ISO standards	To develop new SNI and ISO products that are relevant and applicable to the IT industry	Auditor, IT Experts and Operation Director	- Identify demand for IT products and related SNI and ISO standards. - Develop new assessment products. - Conduct quality assurance activities to ensure high-quality standards.	Document management tools, Quality Assurance Tools (Checklist, Pareto, Fishbone)
Good Management	Creating New Man Power Planning based on new Market	- Knowledge of the IT industry - Market trends	To create a plan for hiring, training, and retaining IT employees based on market demands	HR Division, IT Experts, and Owner	- Research new market trends and required IT expertise. - Analyze workforce requirements.	Market Research Tools, and HR Software

C. SECI Model

Organizations strive to effectively capture, transfer, and utilize both explicit and tacit knowledge to enhance their competitive advantage. To address this challenge, the SECI model, developed by Nonaka and Takeuchi (1995) and further expanded by Nonaka and Nishiguchi (2001), provides a comprehensive model for understanding the dynamics of knowledge creation, sharing, and utilization within organizations. This analysis aims to explore the application of the SECI model within the context of a knowledge management framework that incorporates the elements of people, process, and technology. By combining two company goals with each KM framework table from the analysis before, a comprehensive SECI model can be developed for DGI. This model which can be shown in Figure 10 aims to address how DGI manages their knowledge transfer, knowledge creation and knowledge utilization inside the company.



Figure 10. SECI Model for DGI

1. Socialization

- Training with Mentorship Program for Auditors

This program is designed to improve auditors’ competencies and skills by formal teaching and then pairing them with experienced mentors. It addresses both sub-action in “Capable Employees”. The program facilitates knowledge transfer, learning, and professional development through mentorship, allowing auditors to gain insights and practical knowledge from the experienced auditors.

- Facilitate Peer-to-Peer Learning and Knowledge Sharing

The aim of this program focuses on fostering a positive work environment inside the company. Auditors are encouraged to share their expertise, experiences, and best practices with their coworkers. By fostering this, exchange of ideas, problem-solving mindset, and continuous learning can be promoted for the culture.

- “IT Knowledge on ISO” Training for Employee

This training seeks to prepare new and existing employee with purpose of market penetration on IT segment. It ensures that employees have the necessary technical skills and understanding of ISO requirements in the IT industry. The training helps employees to stay updated with the latest IT practices, quality standards, and compliance regulations.

- Recruiting new IT Auditor Employees

This program aims to improve the company’s capabilities in assessing and ensuring the quality of IT assessment. In order to achieve this, company focuses on identifying and recruiting employees with a strong background in IT auditing. These new employees will bring new insights and expertise, allowing the company to penetrate the IT market and remain to be competitive



in the IT industry itself. Through this, the company can foster diversified and competent employees of IT auditors who are capable conduct assessments and training.

2. Externalization

- Up to date ISO Standard and Guideline Training Materials

This program supports "Updated Products" in KM Framework by providing employees with readily accessible and easily understandable training materials related to ISO standards and guidelines. It ensures that employees have the necessary knowledge and reference materials to apply ISO practices effectively in their work.

- Best Practices Implementation and Procedure on IT Assessment

This program addresses IT penetration market by developing and implementing best practices and procedures for IT assessment in alignment with ISO standards. It ensures that employees can understand and implement ISO auditing and training methods specific to the IT industry.

- "Employee to Management" Feedback Program

This program promotes "Good Management" in KM Framework by doing a regular feedback mechanism between employees and management, management can get valuable insights, suggestions, and concerns to the management. This program has intention to foster open communication, employee engagement, and continuous improvement within the company itself.

- Manpower Planning for IT Resources Placement

This program is for fulfilling the IT market demands. It involves conducting market research to identify trends, customer needs, and required IT expertise. By developing a comprehensive manpower planning strategy, PT. DECRA Group Indonesia can effectively allocate IT resources, bridge skill gaps through targeted training initiatives, and remain agile and competitive in the dynamic IT industry, ultimately driving business growth and meeting the evolving needs of the market.

3. Combination

- New Assessment Products for The IT Industry

This program aims on developing new assessment products to fulfill the demand of the target market which is the IT industry. It aligns with the IT market penetration objective and supports the action of updated assessment products. This program falls under the category of combination as it stems from previous research in the area of externalization, specifically the "Best Practices Implementation and Procedure on IT Assessment," and will be published as a new product through available media channels such as the website and personalized client messaging.

- Real Time Website

This program addresses the need for updated technology and user-friendly platform with improved features. It aims to optimize the company's website to enhance user experience, increase conversion rates, and improve Search Engine Optimization (SEO). By providing a responsive and interactive website such as chat bot, articles, customer support, and etc., the company can effectively with potential customers and engage with clients.

4. Internalization

- Self Study on ISO Updated

This program encourages employees to engage in self-study to understand new rules and changes in the standard that introduced by ISO. By providing access to relevant materials, employees can stay informed and compliant with the evolving of ISO standards.

D. Integrated Learning Cycle (ILC)

Integrated Learning Cycle or ILC is a mix concept between SECI and Barsin's Knowledge to see the whole learning process within the company (Telkom Indonesia, 2017; Barsin, 2004; Suriaman et al., 2022). Based on the SECI analysis result, ILC can be made by seeing each program that proposed in SECI. Each program activity needs to be classified by its place to study, online or offline (in person), then an ILC model can be made based on the type of the learning process (formal, informal, and sharing) on the basis of the previous classification. The determination of the communication method and the type of learning must be

realistic as possible to be carried out by the company itself. By analyzing each program, a cycle of learning processes can be made with unique classification matrix. As a result, as shown in Figure 11, each program activity is categorized based on the learning process.



Figure 11. Integrated Learning Cycle for DGI

Description of each activity in ILC:

- Facilitator Lead Learning: An experienced facilitator guides the learning process and facilitates knowledge sharing among participants.
- Coaching and Mentoring: Experienced individuals provide guidance, support, and knowledge transfer to help others develop their skills and capabilities.
- Community of Practices: A group of people with shared interests and expertise come together to collaborate, learn, and share best practices.
- Collaborative physical workspaces: Physical spaces designed to foster collaboration, communication, and knowledge sharing among team members.
- Best Practices Sharing: The exchange of proven and successful approaches or methods to improve performance and achieve desired outcomes.
- Collaborative virtual workspaces: Online platforms and tools that enable remote teams to collaborate, communicate, and share knowledge virtually.
- Learning Review: An assessment or evaluation of the effectiveness of a learning program or activity to identify areas for improvement.
- Knowledge Café: An interactive and informal gathering where participants engage in open discussions and knowledge sharing.
- Discussion Forum Using Network Services: Online platforms or forums where participants can engage in discussions, ask questions, and share knowledge using network services.
- Document Libraries: Central repositories or databases that store and organize various types of documents and resources for easy access and retrieval.
- Feedback Portal: A dedicated platform where individuals can provide feedback, suggestions, or comments to improve processes, products, or services.



- Knowledge Portal: An online platform that serves as a central hub for accessing and sharing knowledge, resources, and information within an organization.
- Blog: An online platform where individuals can share their insights, experiences, and knowledge on specific topics or areas of interest.
- Knowledge Mapping: The process of visually representing and organizing knowledge, expertise, and relationships within a specific domain or context.
- Learning Portal: An online platform that provides access to learning materials, courses, resources, and tools to support continuous learning and development.

E. Knowledge Management Roadmap

By aligning the proposed solutions with the strategic goals and objectives of DGI, this section provides a roadmap for overcoming the identified obstacles and enhancing internal business processes. This roadmap will provide a structured approach for integrating SECI practices, ILC principles, and organizational objectives. Figure 12, created as the business solutions aim to leverage knowledge management practices, foster a culture of collaboration and continuous learning, and drive innovation within the organizations.

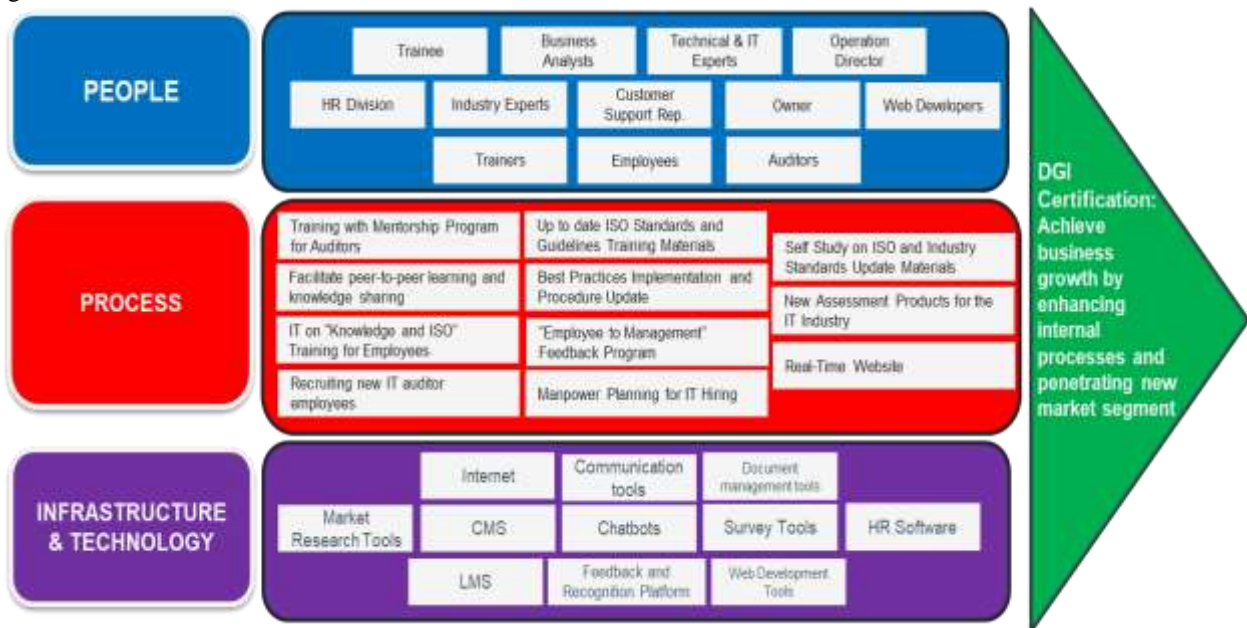


Figure 12. Knowledge Management Roadmap for DGI

A KM roadmap is essential for the company as it serves as a strategic plan and guide for implementing knowledge management initiatives. It is the final result of all the analysis conducted because it consolidates the findings, recommendations, and action plans derived from the various knowledge management frameworks and models used. The roadmap provides a structured approach for aligning the company's goals, resources, processes, and technology with its knowledge management objectives.

CONCLUSION

In conclusion, the journey of exploring knowledge management practices and their role in driving business growth for PT. DECRA Group Indonesia has been enlightening and promising. PT. DECRA Group Indonesia can enhance the quality of its certification process and expand into new market segments by implementing effective knowledge management practices. These practices are obtained by analyzing the necessary actions to be taken by the company. Goal Analysis is conducted using a fishbone diagram model, where the head of the fish represents the desired goal. Since there are two desired goals, two fishbone diagram models are



created with their respective action criteria. Then, a KM Framework Table is developed to outline the required processes for the analyzed actions, the people needed for the actions, and the technologies that support them. The SECI model is then applied as knowledge management practices, packaged as a "program" to address each required action in achieving the goals.

To implement knowledge management practices, PT. DECRA Group Indonesia may develop a comprehensive plan that encompasses various key elements. Therefore, the creation of an Integrated Learning Cycle (ILC) is necessary as a holistic approach to each program obtained from SECI. It includes various learning styles and methods, ensuring that employees can acquire knowledge through multiple channels such as formal training, informal discussions, experimental learning, and self-study. Additionally, the development of a KM Roadmap based on the previous analysis facilitates the identification of relevant and beneficial KM initiatives for the organization. The proposed KM Roadmap defines clear objectives and milestones, providing guidance for the implementation of KM practices aligned with DECRA's mission and vision.

REFERENCES

1. Alavi, M. and Leidner, D.E. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly*, 25(1): 107-136
2. Anggoro, L. A. and Simamora, B. H. (2019). Knowledge Retention Strategy Evaluation & Knowledge Management System Design at Plastic Injection Company in Indonesia. *International Journal of Organization Business Excellence*, 2(11): 11-20
3. Antunes, H. J. G. and Pinheiro, P. G. (2020). Linking Knowledge Management, Organizational Learning, and Memory. *Journal of Innovation & Knowledge* 5: 140-149
4. Badan Pusat Statistik. (2023). Berita Resmi Statistik: Ekonomi Indonesia Triwulan I-2023. Indonesia: Badan Pusat Statistik.
5. Fahroni, R. and Tjakraatmadja, J. H. (2013). Implementation of Knowledge Management for Business Competitiveness in Provecta Capital (Venture Capital). *The Indonesia Journal of Business Administration*, 3(11): 1248-1262
6. Fisher, E., Biviji, M., and Nair, I. (2011). New Perspectives on Teaching Innovation to Engineers: An Exploration of Mental Models of Innovation Experts. *ASEE Annual Conference & Exposition*. Washington DC: American Society for Engineering Education
7. Ichikawa, J. J., & Steup, M. (2017). The Analysis of knowledge. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy Summer 2017 edition*. Retrieved from <https://plato.stanford.edu/entries/knowledge-analysis/>
8. International Organization for Standardization. (2023). *ISO in Figures 2022*. Geneva: Switzerland.
9. Kementerian Perindustrian Republik Indonesia. (2019). Retrieved from <https://kemenperin.go.id/artikel/20091/Industri-Manufaktur-Berperan-Penting-Genjot-Investasi-dan-Ekspor->
10. Kementerian Perindustrian and Indra. (2020). Analisis Pembiayaan Industri Manufaktur Non Migas 2020. Pusdatin Kemenprin:Indonesia.
11. Levallet, N. and Chan, Y.E. (2016). Chapter 7: Knowledge loss and retention: the paradoxical role of IT, Successes and Failures of Knowledge Management. Cambridge, UK: Elsevier.
12. Mohajan, H. K. (2016). Knowledge is an Essential Element at Present World. *International Journal of Publication and Social Studies: Munich Personal RePEc Archive*
13. Nonaka, I. (1990). *Chishiki-Souzou no Keiei (A theory of organizational knowledge creation)*. Tokyo: Nihon Keizai Shimbun-sha.
14. Nonaka, I. and Nishiguchi, T. (2001). *Knowledge Emergence: Social, Technical, and Evolutionary Dimensions of Knowledge Creation*. Oxford University Press
15. Nonaka, I., and Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Oxford University Press.
16. Onyeagam, O., Nwaki, W., Obonadhuze, B., and Zakariyau, M. (2020). The Impact of Knowledge Management Practices On the Survival and Sustenance of Construction Organisations. *CSID Journal of Infrastructure Development*, 3(2): 173-188
17. Slameto. (2016). The Application of Fishbone Diagram Analysis to Improve School Quality. *Dinamika Ilmu*, 16(1): 59-74
18. Statista. (2023). Professional Certificates - Indonesia. Retrieved from <https://www.statista.com/outlook/dmo/eservices/online-education/professional-certificates/indonesia#revenue>



19. Suriaman, A., Tadeko, N., Manurung, K., Usman, S., and Yuliyani, A. (2022). English Blended Learning: An Analysis of Indonesian Students' Perception. *Indonesian Journal of English Education*, 9(1): 1-18
20. Telkom Indonesia. (2017). *Developing Great People Through Learning Culture Transformation* [Power Point Slides]. Indonesia: Telkom Corporate University.
21. Yazdani, S., Bayazidi, S., and Mafi, A. A. (2020). The Current Understanding of Knowledge Management Concepts: A Critical Review. *Medical Journal of the Islamic Republic of Iran*, 34(1): 870-879

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