Training Need Analysis For Developing People: A Case Study of Market Development Division in PT XYZ

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ABSTRACT

The impact of Industry 4.0 on the Indonesian stock market, with a special focus on PT XYZ. PT XYZ has experienced a significant surge in individual investors, particularly from the younger generation, who are technologically savvy and prefer the stock exchange as an investment method. This paper discusses the critical role of the Market Development Division at PT XYZ in meeting the educational needs of prospective investors and companies planning to list. One significant challenge identified is the knowledge gap within PT XYZ, especially between employees with varying levels of experience, and the absence of a centralized knowledge repository. This gap hinders education for potential investors and listed companies, thereby impacting service quality. In response, PT XYZ acknowledges the need to enhance Knowledge Management (KM) practices and begins developing a tailored knowledge sharing strategy. This strategy aims to bridge the existing knowledge gap and prevent knowledge loss, utilizing the Zack Framework for gap analysis. Qualitative research methods, including semi-structured interviews with 3 experts, were employed in this study. It resulted in a gap analysis between the current state and PT XYZ's necessary knowledge regarding the implementation of knowledge sharing, leading to the recommendation of eight knowledge sharing strategies.

1. Introduction

In today's world, the impact of Industry 4.0 is clearly felt, as companies in different industries look forward to its significant effects on their supply chains, operations, and business strategies [1]. Meanwhile, the Indonesian stock market has seen a significant rise in the number of investors, growing from 3,451,513 in 2021 to 4,002,289 in 2022, an increase of nearly 16% [2]. Notably, an overwhelming 99.79% of these investors are individuals, mostly from the younger generations, including Gen Z and Millennials [2]. These groups show a strong preference for using mobile apps in their daily activities [2][3]. These apps have not only changed consumer patterns in areas like online shopping and banking but have also made a deep impact on the investment sector [3].

PT XYZ is an institution that facilitates securities trading in Indonesia, including stocks, bonds, and mutual funds. With a vision to be the leading stock exchange in Southeast Asia, PT XYZ aims to develop a professional, liquid, transparent, and innovative capital market that benefits all stakeholders. In response to the increasing number of retail investors in Indonesia, the Market Development Division at PT XYZ plays a crucial role. This division is responsible for managing activities that include the provision of strategies, programs, and educational materials for market development. Its primary focus is on the development of investors and Listed Companies. These activities also encompass the management of effective capital market socialization and education

programs in various areas, particularly aimed at enhancing investor awareness and understanding of the capital market and making wise investment decisions.

In its efforts to educate prospective investors and companies looking to be listed, PT XYZ recognizes a knowledge gap within its organization, especially between employees with differing levels of experience. This issue is compounded by the lack of a knowledge repository for general information related to the capital market, with knowledge still dispersed across various divisions. This gap stems from the fact that, unlike other financial institutions, PT XYZ does not have direct training programs such as on-the-job training, Office Development Programs, and Management Trainee programs, which are common in other financial industry sectors.

Moreover, due to the capital market industry being less popular compared to other industries, the transfer of knowledge from senior to new employees faces obstacles. This situation makes it difficult for new employees to effectively engage with investors. This issue adds to the complexity of the existing knowledge gap, impacting not only the new employees' ability to perform their duties efficiently but also potentially affecting the quality of service offered to investors and prospective listed companies.

The primary process in Knowledge Management (KM) involves collecting and sharing intellectual capital, encompassing both tacit and explicit knowledge. This sharing, crucial for promoting collaboration, occurs among employees within an organization or between different organizations and can be facilitated by technological or non-technological tools [20]. This activity is generally known as knowledge sharing.

Recognizing the critical need for effective Knowledge Management (KM) especially in Knowledge Sharing to prevent knowledge gaps and loss, the company realized that these KM practices play a vital role in the company's Key Performance Indicators (KPIs). This is because if KM implementation at PT XYZ is optimally executed, it can indirectly impact the increase in the number of potential investors and listed companies. However, currently, it is not fully optimized. The senior leadership of PT XYZ initiated efforts to enhance KM implementation. This study aimed to develop a knowledge sharing strategy tailored to PT XYZ, addressing existing knowledge gaps and losses. It involved a gap analysis to identify areas requiring optimization, comparing the current state to the ideal Knowledge sharing strategy.

Research Questions: What Knowledge sharing strategy should PT XYZ use in its market development division?

The paper was structured into five primary sections. The first section provided an introduction to the topic. This was followed by a review of relevant literature and previous research in the second section. The third section described the research methods used. The findings of the research were presented in the fourth section. Finally, the fifth section concluded the paper, addressed its limitations, and suggested areas for future research.

2. Theoretical Background

2.1 Knowledge Sharing and Related Concepts

Illustrated in Figure 1. The KM process comprises four main processes: knowledge discovery, knowledge capture, knowledge sharing, and knowledge application [19].

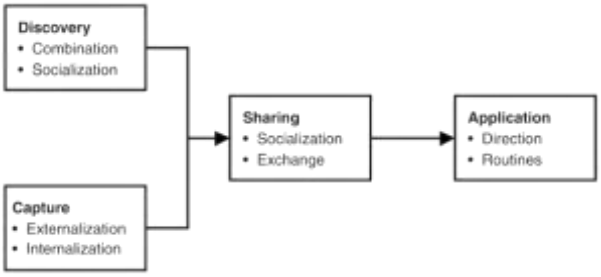

Fig. 1. Knowledge Management Process

The KM process begins with the acquisition of knowledge. This acquisition consists of two processes: knowledge discovery and knowledge capture. Knowledge discovery is the process of developing new knowledge, both tacit and explicit. On the other hand, knowledge capture is the process by which an organization obtains knowledge, whether tacit or explicit, from individuals, artifacts, or entities within the organization. Knowledge discovery can be achieved through two processes in the SECI model: Combination and Socialization. Meanwhile, knowledge capture can be accomplished through the other two SECI model processes: Externalization and Internalization [19]

Once knowledge is acquired by an organization through knowledge capture and discovery, the next KM process is knowledge sharing. Knowledge sharing is the process where an organization's knowledge, both tacit and explicit, is communicated to every individual who needs it to perform their tasks. There are three important clarifications in this process. The first is that knowledge sharing means effective transfer, so the recipient understands the knowledge well enough to perform their tasks with it. The second is that what is shared is knowledge itself, not recommendations based on the knowledge, ensuring the recipient receives the knowledge and can act on it. The last clarification is that knowledge sharing can occur across individuals, groups, work units, and organizations [19]

2.2 Knowledge Management Strategies

Strategic Knowledge Management (SKM) refers to the practices and systems used by organizations to acquire, generate, and distribute knowledge, vital for the creation of strategies and informed strategic decision-making [9]. A knowledge strategy refers to an organization's deliberate plan to ensure that its knowledge assets and capabilities are in harmony with its strategic requirements. Embracing a strategic mindset is crucial for staying ahead in the competitive landscape

Practically, companies recognize the importance of knowledge management for staying competitive and fostering growth. As a result, many businesses globally are actively managing their knowledge and innovation [10]. The importance of knowledge is evident, yet it raises questions about the timing, methods, and purposes of its application. Currently, knowledge plays a more crucial role and appears in unpredictable and uncontrollable forms, leading to increasingly complex, dynamic, and adaptable knowledge systems [11].

Diverse views on knowledge exist across various scientific fields such as strategy, management, organizational theory, and philosophy. These differing perspectives lead to varied interpretations of strategic knowledge management. Our focus is on knowledge as a strategic asset, aligning with the resource-based view (RBV) of business strategy [12]. According to the RBV, competitive advantage stems from internal resources and capabilities that are valuable, unique, and difficult for competitors to imitate.

2.3 Zack Framework

The Zack Framework is a tool that can be utilized for conducting gap analysis in the development of Knowledge Management (KM) strategies [13]. It helps in aligning a company's business strategy with its knowledge assets. As Zack Furter described, each strategy is linked to specific knowledge resources and capabilities [14][15]. This framework is also effective in determining what an organization is capable of achieving with its current knowledge base. Furthermore, it aids in identifying the necessary knowledge required for accomplishing the organization's objectives and vision. By leveraging this framework, it becomes possible to pinpoint existing knowledge gaps. This, in turn, enables the formulation of targeted strategies and the development of applications to fulfil these knowledge requirements.

This framework describes how organizations can determine their present status using an evaluation and interview method, as illustrated in Figure 2. Four key aspects need to be identified by the organization: "what your company knows" and "what your company is capable of doing" in the current scenario, along with "what your company needs to know" and "what your company needs to do" for future circumstances [18].

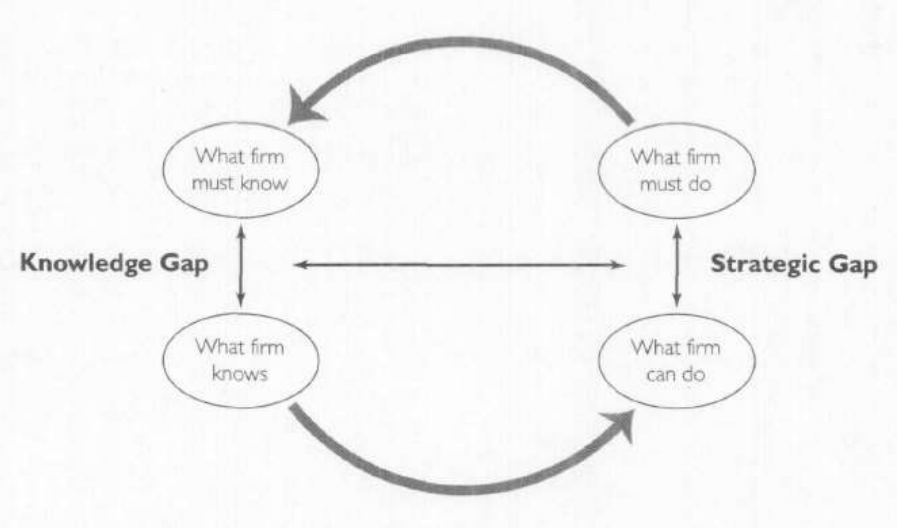

Fig. 2. Zack Framework

The knowledge gap present within an organization can serve as a catalyst for developing strategies to improve the organization and diminish this gap. Addressing and rectifying the knowledge gap can enhance the organization's competitive edge and steer the company towards greater value and improved direction.

2.4 Research Studies

Suroso [16] used the Zack Framework to design a knowledge management system application that supports a culture of sharing and innovation at Pondok Indah Mall, Jakarta, using the Zack and Tiwana framework approach. The result is that the development of this knowledge management system is expected to support employees in efficiently sharing knowledge and reducing problem-solving time by utilizing solutions stored in the application.

This research [17] is centered on the development of an ontology-based knowledge sharing system to overcome the disparity in knowledge management of applications within the Indonesian government, utilizing methods like the Zack Framework, CommonKADS, and Methontology. The application of the Zack Framework in this study is used to identify knowledge gaps within an organization, focusing on exploration/exploitation and both internal/external knowledge.

Budiman [18] addressed the knowledge gap at PT XYZ, a company grappling with incomplete project documentation and uneven knowledge distribution, by using a qualitative method through semi-structured interviews with experts. The outcome was the recommendation of eight knowledge management (KM) strategies, with four identified as primary priorities and the other four as secondary, based on a gap analysis using the Zack Framework and SWOT analysis

3. Method

The researchers will extensively review literature to help them gain a precise understanding of completing this paper. Subsequently, they will identify the research subject through observation or direct interviews with relevant parties. Afterward, they will commence identifying the gaps in the implementation of knowledge management at PT XYZ using the Zack Framework approach. Following this, they will develop and generate recommendations for a knowledge sharing strategy for the implementation of knowledge management at PT XYZ.

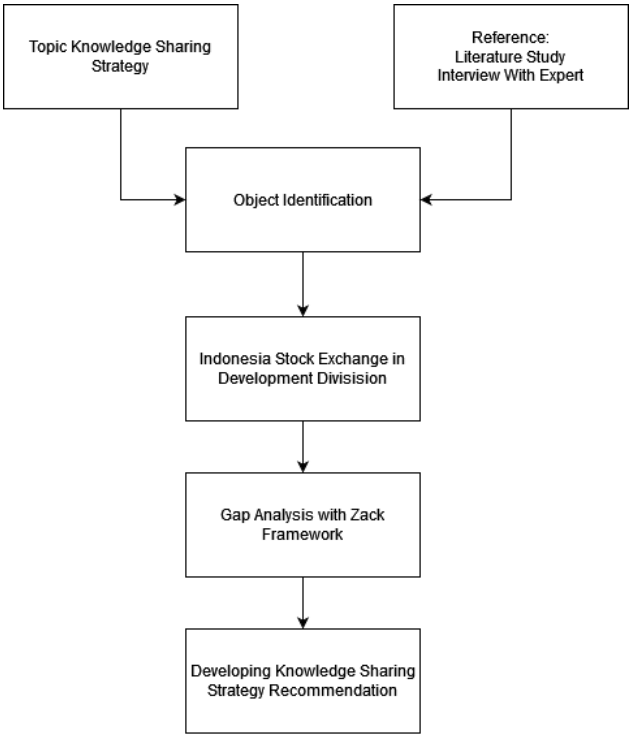

Fig. 3. Methodology

In Figure 3, the research methodology is outlined, starting with the development of research instruments through literature studies and expert interviews. This is followed by a case study identification of PT XYZ, where a gap analysis is conducted using the Zack framework. The findings from this analysis form the basis for formulating recommendations for a knowledge sharing strategy.

3.1 Instrument Development Phase

Initially, a literature review is conducted to select appropriate theories for a gap analysis in knowledge sharing strategy. The chosen framework for this analysis is the Zack Framework, which is employed alongside qualitative methods. This involves semi-structured interviews with experts at PT XYZ regarding KM implementation and its strategic alignment. The interviews, guided by a custom list of questions, explore the company's current knowledge ("Know" and "Can Do") and future requirements ("Must Know" and "Must Do"). The questions, designed to align with the Zack Framework, are refined after a review by a subject matter expert. In Table 1, a list of questions is presented, which are tailored based on the Zack framework

Table 1. Interview Questions

No	Question	Mapping in Zack Framework
Q1	What current trends and technologies are crucial in the capital market?	Must Know (Knowledge and Skills Required)
Q2	What are the key regulatory changes expected in the Indonesian capital market in the next five years?	Must Know (Deepening Knowledge and Skills)
Q3	How can we develop and implement effective training programs for new employees?	Must Do (Actions to Apply Knowledge)
Q4	What strategies can PT XYZ implement to enhance knowledge sharing between departments?	Must Do (Actionable Steps)
Q5	Can you describe the existing educational resources available for investors and companies?	Know (Current Knowledge Assets)
Q6	How do PT XYZ's current educational materials align with investor needs, especially for younger generations?	Know (Utilizing Current Knowledge)
Q7	How does PT XYZ leverage technology for efficient knowledge management?	Can Do (Existing Capabilities)
Q8	What innovative methods can PT XYZ employ to engage new investors through technology?	Can Do (Leveraging Capabilities)

3.2 Data Collection Phase

In the data collection phase, interviews were conducted with three subject matter experts (SMEs) from different fields within the organization. The first correspondent, with 7 years of experience, specialized in Literacy Development and Market Inclusion focusing on Market Development. The second, an expert in Information Technology Operations, brought 12 years of experience in Information Technology. The third correspondent, with 6 years of experience, was involved in Business Incubation, contributing insights into Business.

3.3 Data Analysis Phase

In the data analysis phase, the interview outcomes with PT XYZ experts will be examined through the Zack Framework. This process will help ascertain the current state of knowledge sharing strategy implementation and lead to the development of strategic recommendations for KM at PT XYZ. To further refine these strategies, additional interviews will be conducted, focusing on determining their priority based on the immediate needs and requirements within the company

4. Result nnd Discussion

In the results and discussion section, the data obtained from expert interviews were analyzed using the Zack Framework. This involved mapping the "Must Know" and "Must Do" categories, which represent the future strategic knowledge needs of the company, along with "Know" and "Can Do," reflecting the current state of knowledge strategy. These mappings are shown in Table 3. Additionally, to identify future knowledge management strategies, gap analysis was conducted within the "Should Know" and "Know" areas of the Zack Framework. The resultant recommendations for konwledge sharing strategies are detailed in Table 4, focusing solely on the Zack Framework mapping.

In the study, Table 3 showcases the analysis of expert interviews utilizing the Zack Framework. This table maps the strategic future knowledge requirements: Must Know (MK) and Must Do (MD) and the current knowledge status: Know (K) and Can Do (CD) within the company. This mapping provides a clear view of both the present state and future needs in terms of knowledge management.

Table 2. Interview Results Mapped with Zack Framework

Code	Must Know	Code	Must Do
MK1	Current trends and technologies in the capital market	MD1	Develop and implement training programs for new employees
MK2	Effective methods for educating retail investors and listed companies about stock market principles, current regulations, and industry trends	MD2	Create mechanisms for knowledge sharing between senior and new staff
MK3	Industry-specific regulations and compliance requirements about Initial Public Offering or IPO	MD3	Establish continuous professional development programs
MK4	Best practices in knowledge transfer and documentation	MD4	Integrate mobile technology into investor education strategies
MK5	Digital transformation strategies in financial markets	MD5	Enhance investor outreach and communication strategies
MK6	Effective risk management in modern capital markets	MD6	Build a knowledge-sharing network with other financial institutions
MK7	Effective risk management in modern capital markets	MD7	Develop digital literacy programs for employees
MK8	How to analyze raw data into meaningful insights	MD8	Developing a comprehensive online investor education portal
MK9	Gain a broad understanding of PT XYZ's various departments	MD9	Creating a mentorship program for new and experienced employees
		MD10	Creating more engagements via interactive approach such as quizzes, competitions, and tutorials
		MD11	Implementing Artificial Intelligence for recommendation and insight about trading patterns
		MD12	Establish 'tech ambassadors' or 'champions' system across departments
		MD13	Creating more robust regulations about investor's confidential data protection
		MD14	Create a knowledge repository about

			information of every department of PT XYZ
Code	Must Know	Code	Must Do
K1	Existing knowledge about PT XYZ's role and operations	CD1	Leverage technology for efficient knowledge management
K2	Current educational materials and resources for investors and companies	CD2	Foster a culture of continuous learning and improvement
K3	Insights into investor behavior, especially among younger generations	CD3	Innovate in investor education methods
K4	Current gaps in employee training and knowledge	CD4	Adapt and apply best practices of knowledge sharing
K5	Feedback on PT XYZ's current market development initiatives	CD5	Implementing advanced analytics for market predictions
K6	Assessment of PT XYZ's technological infrastructure	CD6	Organize educational events such as seminars and webinars for new market participants
K7	Employee perspectives on knowledge management challenges	CD7	Leverage social media for educational purposes
K8	Analyze daily trading reports	CD8	Use cloud solutions for data analysis
		CD9	Implement SharePoint 365 for departmental knowledge sharing

Table 4, on the other hand, focuses on defining future knowledge sharing strategies. It presents the outcomes of the gap analysis conducted within the "Should Know" and "Know" sections of the Zack Framework. This table offers knowledge sharing strategic recommendations for knowledge sharing, based solely on the insights derived from the Zack Framework mapping.

Table 3. Recommendation of Knowledge Sharing Strategies

Code	Knowledge Sharing Strategy	Code Mapping From Zack Framework (Must Do)
KM1	Develop a comprehensive digital platform for knowledge sharing and collaboration among employees.	MD2, MD4, MD7, MD8,
KM2	Implement a structured onboarding program that integrates knowledge transfer from experienced to new employees.	MD3, MD9, MD1, MD2
KM3	Establish regular training sessions on emerging market trends and technologies relevant to the capital market.	MD10, MD1, MD4
KM4	Create an internal knowledge repository with accessible and up-to-date information about every department of PT XYZ.	MD5, MD14, MD6, MD7
KM5	Foster a culture of continuous learning and innovation, encouraging employees to contribute to knowledge development.	MD6, MD12
KM6	Integrate mobile technologies into knowledge dissemination, targeting younger investor demographics.	MD4, MD11
KM7	Build strategic partnerships with academic and research institutions for advanced financial market studies.	MD12
KM8	Enhance cybersecurity awareness and training, focusing on the protection of sensitive market and customer data.	MD13

PT XYZ plans to develop a knowledge management system to support their defined knowledge sharing strategies. This will include a knowledge repository system for storing, searching, and accessing company knowledge easily. Additionally, the company will establish an e-learning system to assist employees in learning new technologies and enhancing their awareness of information security.

5. Conclusion

It is observed that the implementation of Knowledge sharing strategy is currently limited to specific departments and has not yet adopted collaborative tools and knowledge repositories for managing knowledge. The optimization of the knowledge sharing strategy was carried out by formulating strategies using the Zack Framework based on interview results to identify gaps in knowledge management.

There are 8 knowledge sharing strategy recommendations for the company. Then, based on the interview results, these 8 recommendations will be considered for continuous improvement at PT XYZ to manage knowledge management. These recommendations could include the application of technology in the implementation of Knowledge Management, the development of employee

development programs, and the creation of a centralized knowledge repository. Indirectly, these recommendations could impact the increase in the number of potential investors and listed companies.

Limitation of Study

Due to time constraints, only three experts were consulted to develop the knowledge sharing strategy. Because of this constraints, the KM strategy covers the main business activities that are the primary targets of the company's KPIs, namely the increase in the number of active investors and listed companies, and may not include all KM implementations in other divisions.

Future Work

For further research, alternative frameworks like the Triwana Framework involving factors of people, process, and technology. Additionally, the distribution of internal questionnaires could be necessary so that the success perspective of Knowledge Management implementation can be directly assessed by its users. Moreover, further research can explore the implementation of the recommended knowledge sharing strategies in the company.

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