Analysis of Knowledge Sharing Practice Capability At Pt Pusri Palembang Factory

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Abstract
This study aims to analyze the readiness and capability of knowledge sharing practices at the PT Pusri Palembang factory related to the development of a knowledge sharing model at the largest fertilizer factory in Indonesia, namely PT Pusri Palembang. This research is quantitative descriptive. Data was collected through participant observation, document study, recording, and distributing questionnaires. This study focuses on analyzing the readiness and ability of workers in factories to share knowledge where the component analyzed is the informal learning component, the process of sharing knowledge between employees where knowledge stored in individual employees is shared and accumulated to all employees in various work units to improve company memory and corporate intelligence. This research produces a score of readiness and capability of the work unit and the data is obtained through a survey questionnaire which is distributed directly to factory employees who have carried out knowledge sharing, whose questions contain a kind of assessment from employees who share knowledge. Prior to data collection, the researcher selected and sorted out the components in the 70:20:10 learning and development model and shared knowledge only for those components of informal learning that intersect or intersect between.
In this study, an analytical model of practice measurement and knowledge sharing skills was produced as a research innovations.

Keywords: Human Capital Management, Learning and Development 70:20:10, Formal Learning and Informal Learning, Knowledge Management, and Knowledge Sharing Process.

Introduction

Effective human capital management to create value for the organization's human resources and lead factory operational excellence, is the main goal implemented by PT Pusri Palembang in anticipating the strategic challenges faced in supporting the national food security and sovereignty program.

Human capital management is classified by Baron & Armstrong (2007: 204–206) into seven series of activities, namely; 1) talent management, 2) learning and development management, 3) knowledge management, 4) performance manage-ment, 5) reward management, 6) line manager development and 7) activities for enhancing job engagement and organizational commitment.

In the organization's internal environment, two of the seven activities, namely learning and development management and knowledge management, are enablers for the implementation of the other five human capital management activities and play the most important role in improving individual competencies and organizational capabilities. Therefore, in implementing human capital management, these two activities are the main concern and priorities of the organization to be developed first.

Learning and development management is a process by which people acquire and develop new knowledge, skills, capabilities, and attitudes, and progress from a state of current understanding and knowledge to a future state where higher skills, knowledge, and competencies are required. While knowledge management is the process of storing and sharing the wisdom, understanding, and skills accumulated in the organization regarding its processes, techniques, and operations (Baron & Armstrong, 2013: 281).

A survey conducted by the American Society for Training & Development (ASTD) on learning and development management showed that approximately 80% of what employees learn about work is not obtained from formal training or learning programs but through informal tools, including when carrying out work, on a daily basis, by collaborating with their colleagues (Dessler, 2010: 287). This is reinforced by the statements of Eraut (2011) and Noe, Tews, & Marand (2013) in Decius et al. (2019: 496) which indicate that "Indeed, the majority of learning in the modern workplace takes place informally; the literature indicates a range of 70–90% for the degree of the informality of learning". This indicates that 70-90% of learning in the modern workplace takes place informally and the trend in the last decade shows that the 70:20:10 learning and development approach or model has been increasingly adopted by organizations where 90% of the practice is informal learning.

Meanwhile, in terms of knowledge management, Jennings (2011) in Nazarudin (2015: 1) states that formal learning is best done explicitly, while informal learning is best done tacit or silently. Learning while working (learning by doing) or learning at work (workplaces learning) is part of the learning and development process with the category of informal learning considering that formal activities in the workplace are in reality working, not learning.

Informal learning is defined by Merriam, Caffarella, & Baumgartner (2007) as "unstructured learning takes a place in daily life and so embedded in our daily activities that it is often goes unrecognized as problems are solved and knowledge is built upon" (Holland, 2018: 2). Informal learning is not planned and occurs at any time spontaneously, when a problem is solved, it turns out that knowledge has been built from it.

On the other hand, in the external environment of the organization, the economy which was originally only based on a natural resource-based economy, has now changed and is strengthened by a knowledge-based economy, which is accompanied by the transformation of industrial workers who previously worked according to instructions and to fulfill job demands, have now become knowledge-based workers or knowledge workers who have several skills at once (multi-skilled workers) in a knowledge-based society. Amin W. Tunggal (2004: 1) states that a knowledge-based economy requires high technology services from people who are trained, highly educated, and experienced in their fields. The knowledge-based economy is related to three main components, namely; knowledge, information, and skills levels are maintained and disseminated throughout the organization.

Peter F. Drucker (2011) in his textbook The New Realities defines that knowledge as 'information' that can change a person and as a reference in acting, or that makes a person or organization work more effectively. In a different perspective, Ikujiro Nonaka defines knowledge as a 'belief' of a group of organizational members that can increase their capacity or ability to do work more effectively (Tjakraatmadja & Kristinawati, 2017: 24). Knowledge owned by human beings exists in human brains (Ho et al., 2006: 752).

The collection of individual knowledge is defined by Hult (2003) in Raharso (2011: 34) as organizational knowledge, namely credible information that has potential value for an organization. This potential can be empowered to increase organizational capability so that the organization can act effectively. Capabilities are strategic skills needed to integrate and apply competencies (Dalkir, 2005: 9). While competence is the skills necessary to achieve a certain (high) level of performance (Dalkir, 2005: 16).

Dubois & Rothwell (2004: 16) define competence in full as the characteristics possessed and used by individuals appropriately and consistently to achieve the desired performance. These characteristics include knowledge, skills, aspects; self-image, social motives, traits, thought patterns, mind-sets (beliefs), ways of thinking, feelings, and actions. Draganidis & Mentzas (2014: 52), strengthen the definition of competence as a combination of tacit & explicit knowledge, behavior, and skills that give a person the potential to be effective in carrying out tasks to produce performance (Naim & Lenkla, 2016: 144).

In relation to efforts to increase competence and capability, the purpose of human capital management is to create value through increasing organizational capability as reflected in the quantity and quality of human capital or knowledge workers resulting from learning and development programs within the organization itself, so that they are able to process and manage natural resources and organizational resources into products that have high added economic value (Tjakraatmadja & Kristinawati, 2017: xii). Of course the role of knowledge management is crucial, according to Scarborough et. al. divided into several parts of the process or practice, namely creating, acquiring, capturing, sharing, and using knowledge at any time, to improve learning and performance organization (Baron & Armstrong, 2013).

It is interesting to observe that between the elements of learning and development management as well as elements of knowledge management there is a wedge or intersection, namely the knowledge sharing process which is characterized by the same linkage in the pattern of activities that are both informal learning. Tjakraatmadja & Kristinawati (2017: 56) say that in supporting the successful application of knowledge management, the habit of sharing knowledge is an important mindset to continue to be developed.

The achievement of organizational performance will continue to be maintained so that it requires individuals and organizations to learn and practice systematically and continuously, especially when carrying out daily routine work activities, as well as 'contributing' and 'collaborating' with full motivation so that they become superior human beings (groups) capable of creating value and continue to develop science and technology. Learning and practicing in the workplace as well as routinely carrying out the knowledge sharing process is the main capital to transform from mediocre human resources into prime quality human resources called knowledge workers to professional human capital.

Contributing means exploring things together; the level of skills, competencies, and results achieved, which contribute to the achievement of the strategic objectives of the organization. While collaborating is an effort to create how knowledge and information can flow freely, as stated by Bontis et al. (2000); "that it is flows as well as stocks that matter". That the most important thing is the supply of knowledge and its flow, as in a healthy human body there is the blood that flows smoothly, so in a healthy organization, there is the knowledge that flows smoothly among its people (Baron & Armstrong, 2013: 163).

The knowledge and technology owned by the organization will be maintained on an ongoing basis between individuals from all generations even though there are employee turnovers or rotations-promotions-mutations from time to time. Daft & Weick in Baron & Armstrong (2007: 7) says "individuals come and go, but organizations preserve knowledge over time". In its continuity, the organization always tends to preserve the knowledge it has from time to time.

Fitz-enz (2000) states that "Organizational capital (knowledge) stays behind when the employee leaves; human capital is the intellectual asset that goes home every night with the employee". Organizations anticipate the drastic loss of human capital brought by employees outside the company through a knowledge transfer process in addition to implementing learning and competency development programs (Armstrong, 2010: 72). For organizations, it is very important to maintain the corporate memory as much as possible and try to prevent brain drain or loss of expertise to a minimum with the departure of these experts.

Knowledge and technology or new technological innovations that emerge (discovered) from these work activities are the accumulated growth of the company's intellectual property that has the potential to increase the company's capital. Ikujiro Nonaka said that knowledge -as a competency maker and developer of technology and innovation- is developed through interactions between people in the organization and disseminated in their communities (Zeeman, 2018).

The problem (issue) of this research is how the implementation (practice) of knowledge sharing in the workplace or sharing of experiences that are informal learning takes place and integrates with the 70:20:10 learning and development process which is informal learning (70% + 20%) and formal learning (10%).

If the elements or components of learning management and development together with knowledge management components are described and analyzed, then there is a slice or intersection of components, namely the knowledge sharing process which is characterized by the same attachment in the pattern of both activities which are informal learning.

Focus and Subfocus
In general, the focus of research in large studies is the process of sharing knowledge or informal learning at the PT Pusri Palembang factory which is integrated with the 70:20:10 learning and development model applied at PT Pusri Palembang.
The sub focus in this study is the analysis of knowledge sharing capabilities at the PT Pusri Palembang factory. This analysis is to determine the competence or potential capabilities of employees in carrying out the Knowledge Sharing process (practice) and to see their readiness if the knowledge sharing model built is applied.
This analysis will then be used as supporting data in developing a knowledge sharing model and also as a measure of the performance of knowledge sharing management practices.

Research Questions

The research question is: "How is the implementation (practice) of knowledge sharing at the PT Pusri Palembang factory?".

Research Objectives

The purpose of this study is to analyze the ability of knowledge sharing practices at the PT Pusri Palembang factory through observation of the implementation (practice) of knowledge sharing at the PT Pusri Palembang factory.

Literature Review

Learning and Development Management

Learning and development cover a broad sense including individual learning & development, education, training, management development, blended learning, and organizational learning (See Figure 2.1).
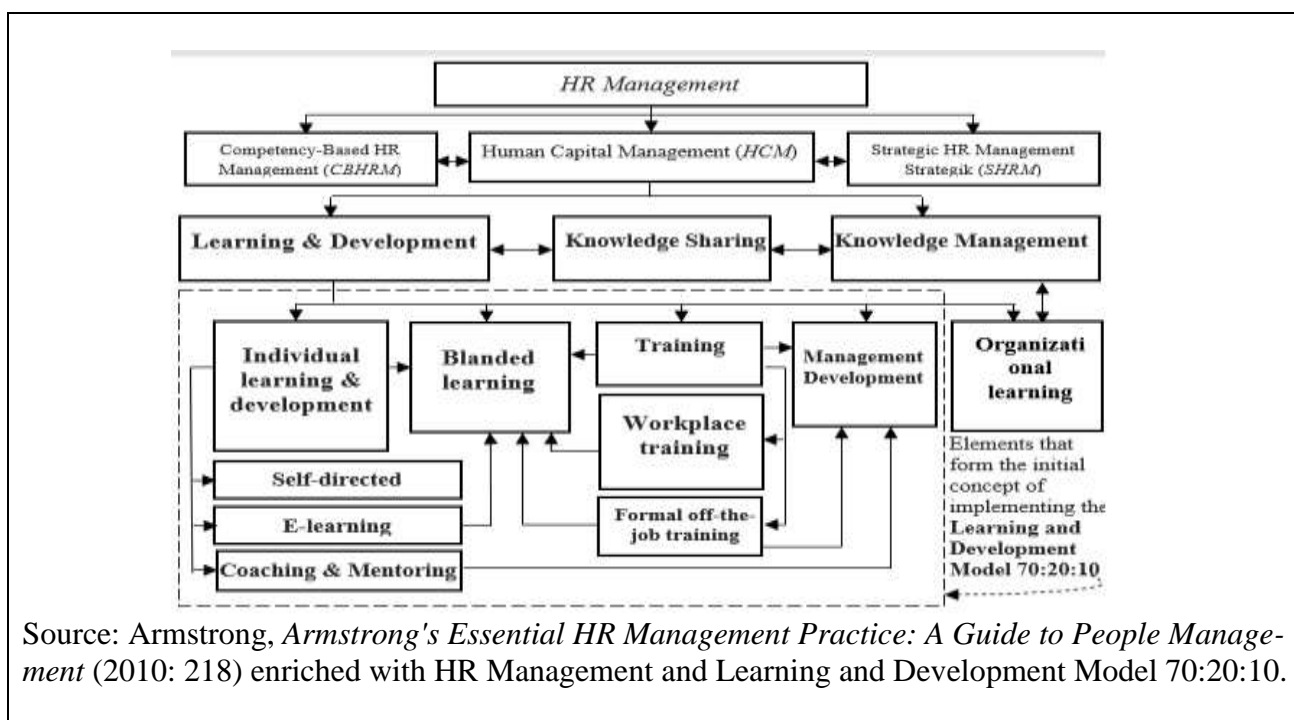
Source: Armstrong, *Armstrong's Essential HR Management Practice: A Guide to People Management* (2010: 218) enriched with HR Management and Learning and Development Model 70:20:10.

Figure 2.1. Elements of Learning and Development.

Armstrong defines learning and development as the process of acquiring and developing knowledge & skills capabilities as well as behaviors & attitudes through experiences, events, and programs provided by the organization, through guidance & coaching provided by line managers and others, as well as through self-directed learning or self-managed activities. Learning and development functions to ensure that the organization has a knowledgeable, skilled, and engaged workforce that the organization needs (Armstrong, 2010: 217).

The four learning and development program activities can be distinguished in several aspects, namely program content and program duration/time horizon, as well as differences in relation to program-specific focus and format as shown in the following table.

Table 2.1. Learning, Education, Training, and Development.

	Learning	Education	Training	Development
Program content	Knowledge transfer and share it (sharing) throughout the organization	Intellectual ability and conceptual understanding	Knowledge and skills	The development of a person and the development of competencies
Time horizon	Lifetime	Useful for future work	Useful for current work	Career/future job
Program focus	Organizational concerns	Individual	Work	Organizational concerns and organizational interests
Custom format	Organizational learning and *HR management* initiatives	Courses or seminars, instructor-led training	Skills training on the job, or outside of work (workshops)	Coaching-mentoring-counseling

Source: Chris Rowley (2012: 435).

The following is an explanation of the table above.

1) Learning

Learning is a very broad activity (universal), designed to increase capabilities and capacities and facilitated formally and informally by many people at various levels of the organization (Swanson & Holton, 2001: 204). The capability in question is "the ability or power to do something", while the capacity is "the ability to produce, experience, understand or learn something" (Oxford, 2000).

Honey & Mumford in Armstrong (2010: 217) emphasize the definition of learning, namely "learning has happened when people can demonstrate that they know something that they did not know before (insights, realizations as well as facts) and when they can do something that they could not do before (skills)". Learning or learning is a way or method for a person to acquire and develop new knowledge, skills, abilities, behaviors, and attitudes, or what is called 'competence'. The essence of 'learning, both formal learning, and informal learning, is a chance to know more than before.

2) Education and Training

Within the organization, the implementation of education and training is mostly united in one functional work unit, namely the Education and Training work unit or Training Center. Education places more emphasis on areas related to 'content', because education has a tendency to develop intellectual abilities and conceptual understanding. Education is important for the flow of self-development; to increase knowledge and insight, personal and leadership development, and increase competence.

As for 'training', Armstrong said that "Training involves the application of formal processes to impart knowledge and help people to acquire the skills necessary for them to perform their jobs satisfactorily". Training is a formal process to disseminate knowledge to employees and help them acquire the skills needed to do work with satisfactory results (Armstrong, 2010: 217). Dessler (2010: 280) defines 'training' as an integrated process used by employers to ensure that employees work to achieve organizational goals.

In general, the training consists of 2 categories, namely:

a. *Workplace training or On-the-job training (in-house),* carried out in normal work situations, using tools, equipment, documents or real materials, that will be used by trainees after being trained. This training is most effective for jobs that require vocational skills or vocational skills. Dessler (2010: 277) categorizes this training as informal training.

b. *Formal off-the-job training,* carried out away from normal work situations -it is assumed that workers are not directly counted as productive workers during the training. Workers concentrate more on the training itself because they leave work for a while (Rowley & Jackson, 2012: 434).

3) Development

Development is said by Amartya Sen (a Nobel laureate in economics) as "development is expansion of people's capabilities" (Wibowo, 2014: v). Development is a process, method, or action to build human capability/power or capability. Competency development can be interpreted as a process of building individual competencies so that they are 'able' to work productively.

Learning and development are like two sides of a coin that cannot be separated. Development in the concept of learning emphasizes the process of developing knowledge, skills, and attitudes (competency development), which prepares humans to assume greater or higher responsibilities in the future.

Development is obtained through cognitive learning (mind) as well as direct experimental (experience) by working. Cognitive abilities include the use of concepts and rules in solving problems (Sukma, 2017). More broadly, HR development is a process carried out to develop knowledge, skills and abilities of workers, as well as other competencies through training and development, organizational learning, leadership management, and knowledge management, all of which for the sake of improving performance.

Learning and Development Model

The 70:20:10 learning and development model, first developed by Morgan McCall, Robert Eichinger, and Michael Lombardo at the Center for Creative Leadership in the mid-1990s, is a further development of learning management and development in which blended learning become the core (see Figure 2.1).

The three of them surveyed nearly 200 executives looking at their learning philosophies. The survey results found that learning must come from various sources of learning (blended), both formal and informal; 70% of challenging assignments, 20% of developmental relationships, and 10% of coursework and training.

Rabin (2013) suggests that the 70:20:10 learning and development framework is that 70% of learning comes from practicing and doing experiences, 20% from other people (managers, co-workers, coaches, mentors, etc.) and 10 % of formal learning (classrooms, conferences, e-Learning, etc.), resulting in almost 90% of learning being informal. Previously, Jennings (2011) said that most learning occurs through experience, practice, conversation, and reflection in the context of the workplace (Nazarudin, 2015: 1).

The survey data is then translated or developed into the company language and tried to understand how to apply it (practice) in the work environment. 70% of learning is experiential that comes from the tasks that employees face at work. 20% is social or peer-to-peer learning that is achieved through mentoring, feedback, and relationships with colleagues (peer). Together, these two types of practice (90%) form informal learning that takes place outside the classroom environment. 10% is formal learning carried out through instructional training sessions (Colman, 2020: 1).

While traditional training programs emphasize the 'knowledge' or 'know-what' aspects of change, the learning model and 70:20:10 are approaches that are oriented towards aspects of 'behavior' or 'know-how' changes that have an impact on employee 'performance'. Around 70% of the learning process is carried out by providing challenging assignments (job assignments) and direct experience in the field. 20% is developed through social learning in the form of relationships and feedback (coaching, mentoring, counseling) and 10% of learning is carried out by attending formal in-class training or training (Cross, 2011).

Knowledge Management

Chun Wei Choo in Kimiz Dalkir (2005: xiii) defines Knowledge Management; "as a framework for designing an organization's goals, structures, and processes so that the organization can use what it knows to learn and to create value for its customers and community". Karl-Erik Sveiby said that Knowledge Management is the art of creating added value by utilizing intangible assets (J. Budi Soesetyo, 2013: xxi).

Dalkir (2005: 3) says that Knowledge Management is planned and systematic coordination of people in the company, technology, processes, and organizational structures to add value through the reuse of knowledge and innovation. This coordination is achieved through creating, sharing, and using knowledge and by incorporating valuable lessons learned and best practices into corporate memory to encourage sustainable organizational learning.

Knowledge management is not only a tool for knowledge transfer through the process of externalizing tacit to explicit knowledge. Sometimes for organizational effectiveness from the learning process and knowledge sharing can be done with this knowledge management approach, which empowers knowledge management capabilities in improving corporate memory as well as corporate intelligence, namely by means of rotation & mutation programs, and the OJT (on the job training) program. According to Dunamis (2004: 53)

corporate memory is achieved through traveling across time barriers (reaching across time barriers) and corporate intelligence is achieved through traveling across internal work unit boundaries (reaching across internal divisions). The image below shows "Two Core Opportunities - Leverage Knowledge Management".
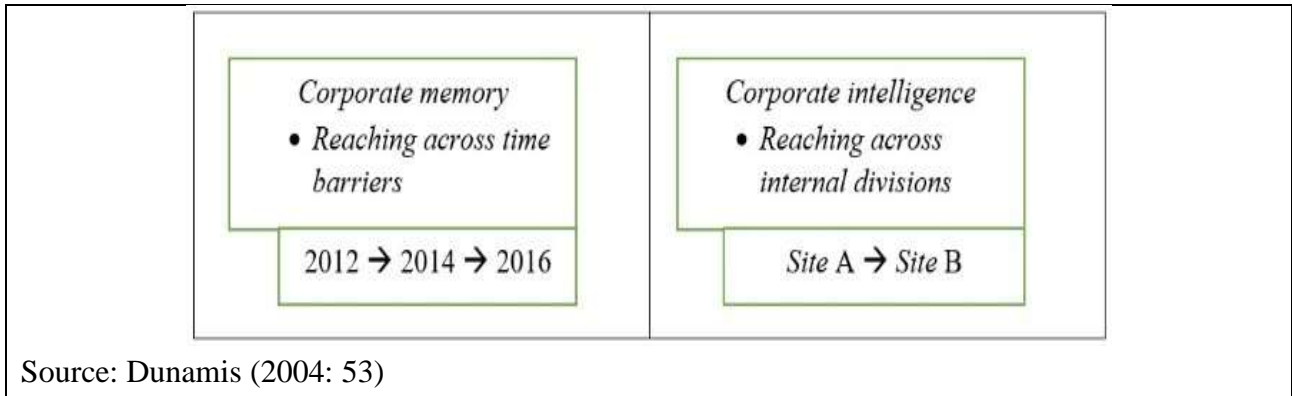

Source: Dunamis (2004: 53)

Figure 2.2 Corporate Memory and Corporate Intelligence.

Sometimes organizationally, an internal work unit can be a barrier to organizational effectiveness. Of course, it makes sense to keep someone in a certain work unit so that the organization can focus, but basically, it can cause the organization to have a significant disadvantage in two main aspects; unable to remember what it did some time ago so as to act more appropriately in the future, and the second one may run into a situation - wherein human terms - the left hand has learned how to pick up a cup, but the right hand still needs to learn this basic ability by trial and error.

From the above perspective, Knowledge Management is further about creating an organization that can integrate lessons learned from its past experiences and be able to improve capabilities from one area to the next effectively. Organizations that have developed in such a way, corporate memory will be able to claim the following (2004: 53); "we've done a successful acquisition once – it becomes a core capability which we can take with us to increase our chances of success in the next acquisition", to increase our chances of success in our next acquisition)", and organizations can achieve the ability to make internal connections (corporate intelligence) can state; "one of our divisions have found a better way to work, we can safely assume that all of our divisions are now operating on that better platform".

APO (Asian Productivity Organization) Knowledge Management Model Framework

There are six layers of the Knowledge Management development process according to the APO (Asian Productivity Organization) Knowledge Management Model framework which was first proposed by Shigeo Takenaka (2009) as a practical guide that must be considered in an organization. The APO model aims to provide shared understanding among member countries and emphasizes Knowledge Management values for organizational success, as shown in the figure below (Sensuse & Rohajawati, 2013: 2).

The explanation of the six layers of the Knowledge Management development process, namely (Tjakraatmadja & Kristinawati, 2017: 100–121):

"A. Layer-1: Organizational Vision and Mission Statement, namely Knowledge Management is a management tool to help organizations achieve the vision and maintain the organization's mission. The vision of the organization then needs to be reduced to organizational goals/targets, which should serve as guidelines for determining the most appropriate Knowledge Management Strategy and Process.
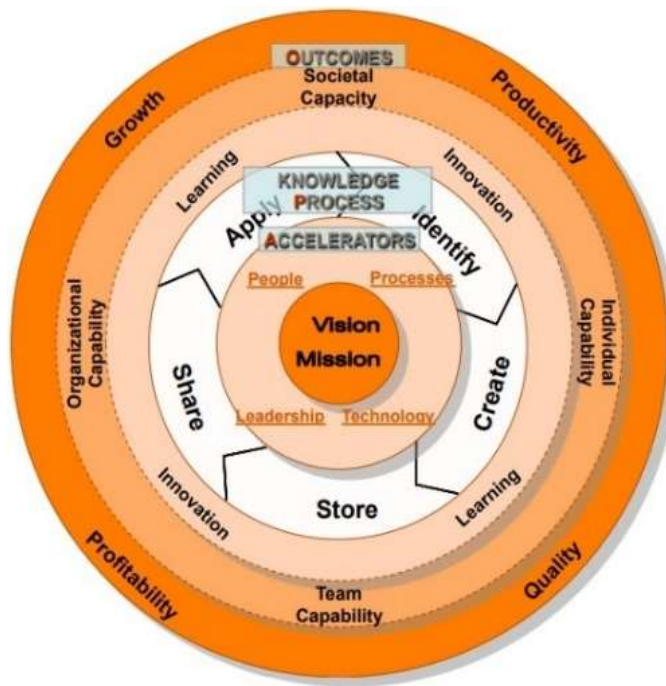
Source: Tjakraatmadja & Kristinawati (2017: 99)

3Figure 2.3.   APO Knowledge Management Model Framework

B. Layer-2: Acceleration Stage, which is the stage where the Knowledge Management process is complete and intact. The Knowledge Management acceleration stage must be supported by four important elements as accelerators (energizers), which encourage and accelerate the successful application of Knowledge Management initiatives within the organization, namely Leaders, Human Capital (knowledge workers), Business Processes, and Information Technology.

C. Layer-3: Organizational Knowledge Development and Conversion Process, includes five Knowledge Management processes, namely: knowledge identification (identify), knowledge creation (create), Knowledge storage (Store), knowledge sharing (share), and Knowledge use (Apply).

Examples of methods and tools to support one of the KM processes, namely the Knowledge Sharing process, can be seen in the table below

Table 2.2.   Steps/Process of Knowledge Sharing and Methods/Equipment used.

Steps/Process of Knowledge	Definition	Metode dan Perangkat yang dapat digunakan
Knowledge Sharing	The process for sharing knowledge among organizational members, both virtual and face-to-face, and in both formal and informal forums.	➢ Peer Assist, Learning Reviews, After Action Reviews, Expert Locator, Communities of Practices, Storytelling, Collaborative Virtual Workspaces, Collaborative Physical Workspaces, Document Libraries, Knowledge Bases (Wiki's etc), Blogs, Voice and VOIP, Knowledge Clusters, Taxonomy, Knowledge Cafe's, Knowledge Portal, Video Sharing, Mentor/Mentee. ➢ Social Networking Services.

D. Layer-4: Learning and Innovation; includes:

• Knowledge Processes enable learning and innovation at all levels and areas of the organization.

• Produce product improvements, services, processes, markets, technologies, or innovative business models.

- Building individual, team, and internal organizational capabilities or collaborating with external parties (taking advantage of organizational social capital).

E. Layer-5: Individual Capability, Group Capability, Organizational Capability, and Social Capacity, is the potential energy of the organization that will be generated and accepted by the organization due to the growth and development of the organization's collective knowledge/intelligence. There is a positive and significant correlation between the development of group/organizational collective knowledge/ intelligence and group/ organizational capability. With the growth and development of organizational capabilities, it is expected that organizational outcomes (discussed at layer 6) will also increase.

F. Layer-6: Productivity, Profitability, Quality, and Organizational Growth, are measures of achievement of added value targets (outcomes) that will be received by the organization because the implementation of Knowledge Management, through the growth and development of knowledge/experience, leads to the development of organizational capabilities, and ultimately result in growth in organizational outcomes".

Knowledge Management Framework the Competencies for Managing Knowledge

Knowledge Management framework; The competencies for managing knowledge are used to measure or analyze the readiness level of Knowledge Management (KM Readiness) in an organization before the organization implements Knowledge Management or to evaluate existing Knowledge Management.

Knowledge Management Readiness (KM Readiness) can be defined as the ability of a particular organization or group to adopt, use, and utilize Knowledge Management. Knowledge Management readiness measures the level of the organization in terms of readiness to benefit from the implementation of Knowledge Management with a focus on human, process, and technological issues (Zin & Egbu, 2010). Knowledge Management readiness is the minimum maturity level of Knowledge Management before Knowledge Management can be applied in an organization (Dalkir, 2005).

In line with that, Knowledge Management Readiness is a receptive attitude of an organization member to be involved in the Knowledge Management process through resource capabilities (Razi & Karim, 2010). An analysis of Knowledge Management Readiness can provide an overview to the organization or company regarding the readiness condition of each aspect related to the implementation of Knowledge Management.

Several studies have broken down the knowledge management critical success factor (KMCSF) into several different factors. David Skyrme explains the factors that influence the success of Knowledge Management implementation into 10 factors, namely; leadership, culture, processes, explicit knowledge, tacit knowledge, knowledge hubs and centers, valuation, exploitation/marketing, workers/skills, and technology infrastructure (Skyrme 2000). Jennex and Olfman summarized the literature on KMCSF into 12, namely; knowledge strategy, motivation and commitment from users, integrated technical infrastructure, organizational structure and culture, knowledge structure, support from senior management, learning organization, having clear goals for Knowledge Management, Knowledge Management System function, business process suitability, and knowledge security/protection (Jennex and Olfman).

Meanwhile, Beccera, Fernandez, and Sabherwal said that Knowledge Management infrastructure is part of the existence of Knowledge Management. Knowledge Management infrastructure includes; organizational culture, organizational structure, information technology infrastructure, general knowledge, and physical environment (Becerra-Fernandez & Sabherwal, 2015).

In analysing the level of readiness for the implementation of Knowledge Management, the measure used is based on the Framework the Competencies for Managing Knowledge from KnowHouse. KnowHouse is a global consulting firm in South Africa that was founded in 1998. This strategic partner of Dunamis Organization Services focuses on Knowledge Management solutions and learning experiences in its implementation, this framework uses "9 Competencies to Build Knowledge Management Capabilities (the 9 Competencies to Build KM Capability) as follows:

"1. *Expert Locator (EL)*: Build a talent pool and infrastructure for networking (e.g., Enterprise 2.0) that enables talented employees to manage their careers. To do this, expert seekers (EL) must manage their own self-managed expertise directory that is linked to a clear value proposition, for example, always updating their information (curriculum vitae), and the company is committed to who meets certain requirements, has a chance of promotion.

2. *Communities of Interest (CoI)*: Is an ideal forum for organizations to build a knowledge-sharing habitat within the organization that is able to improve smooth-flowing learning communication built on new speculative ideas, what-ifs, new ways of thinking, and innovation in organizations. Organizations can carry out a collective examination of emerging issues and future trends as potential realities. Because it is aimed at the future, CoI can escape the hierarchies of today's daily operational realities, and offer opportunities for knowledge workers to network and measure each other's thinking and knowledge creation skills. For the new "Knowledge Management Initiative", creating these unstructured forums either in real-time or online is a great starting point for demonstrating the value of learning conversations to experts before moving on to more structured forms of collaboration. like a practice community (Dunamis, 2004: 7).

3. *Peer Assists (PA)*: Access and use organizational expertise or share knowledge between colleagues (peers) before undertaking a high-impact project or activity or business initiative by using past learnings to reduce the risk of recurrence. The steps in running Peer Assists are (Dunamis, 2004: 10):

- Identify the High-Impact Event Link to the challenge team.
- Direct/Pareto cause analysis -getting stakeholder agreement on challenges/defining challenges.
- Identify functional/process competencies -Find an assistance team.
- Define ground rules & roles (e.g., no transfer of accountability) -Get approval from the challenge team.
- Invite the assistance team -set ground rules & venue -explain the role of facilitation.
- The challenge team is present on root causes analysis.
- The challenge team reflects on the challenge, perhaps modifying the challenge.
- The companion team asked clarifying questions, got additional information: documents, tools, plans.
- The mentoring team offers at least 2 options for interventions & other knowledge tools/assets.
- Challenge team reflects on options & thanks support team.
- The challenge team decides on an action plan & provides feedback to the counterpart team.
- Peer assistance is proposed & circulated to stakeholders with relevant knowledge assets/outcomes.
- The expert locator profile of all participants is updated.

4. *Shared Learnings (SL)*: Provide a publication channel to contributing reflections to the company's knowledge base on a user-friendly basis and share know-how from daily business interactions and best practices.

5. *Project Retrospectives (PR)*: Reviewing the results and impacts or thematic and reflective discussions (learning) of an activity/project or work initiative that has been completed.

6. *Communities of Practice (CoP)*: Building strategic CoPs as a tool for goal-directed strategic collaborations. It is self-governed measurable and aims to create and validate an organization's knowledge assets.

7. *Technology Enablement (TE)*: Define technology as the backbone that drives knowledge sharing and Knowledge Management initiatives. Technology should facilitate, and not hinder Knowledge Management initiatives.

8. *Change Management (CM)*: Aligning factors such as Performance Management System, Human Capital, and Leadership that encourage knowledge sharing, and encourage knowledge workers to actively share their insights & best practices with each other.

9. *Knowledge Management Strategy (KMS)*: An integral part of the overall business strategy. Is the ability to align business and Knowledge Management strategies.

In this framework, it can be seen that the competencies are interrelated with each other and become the basis for the formation of a good Knowledge Management Readiness in a company.
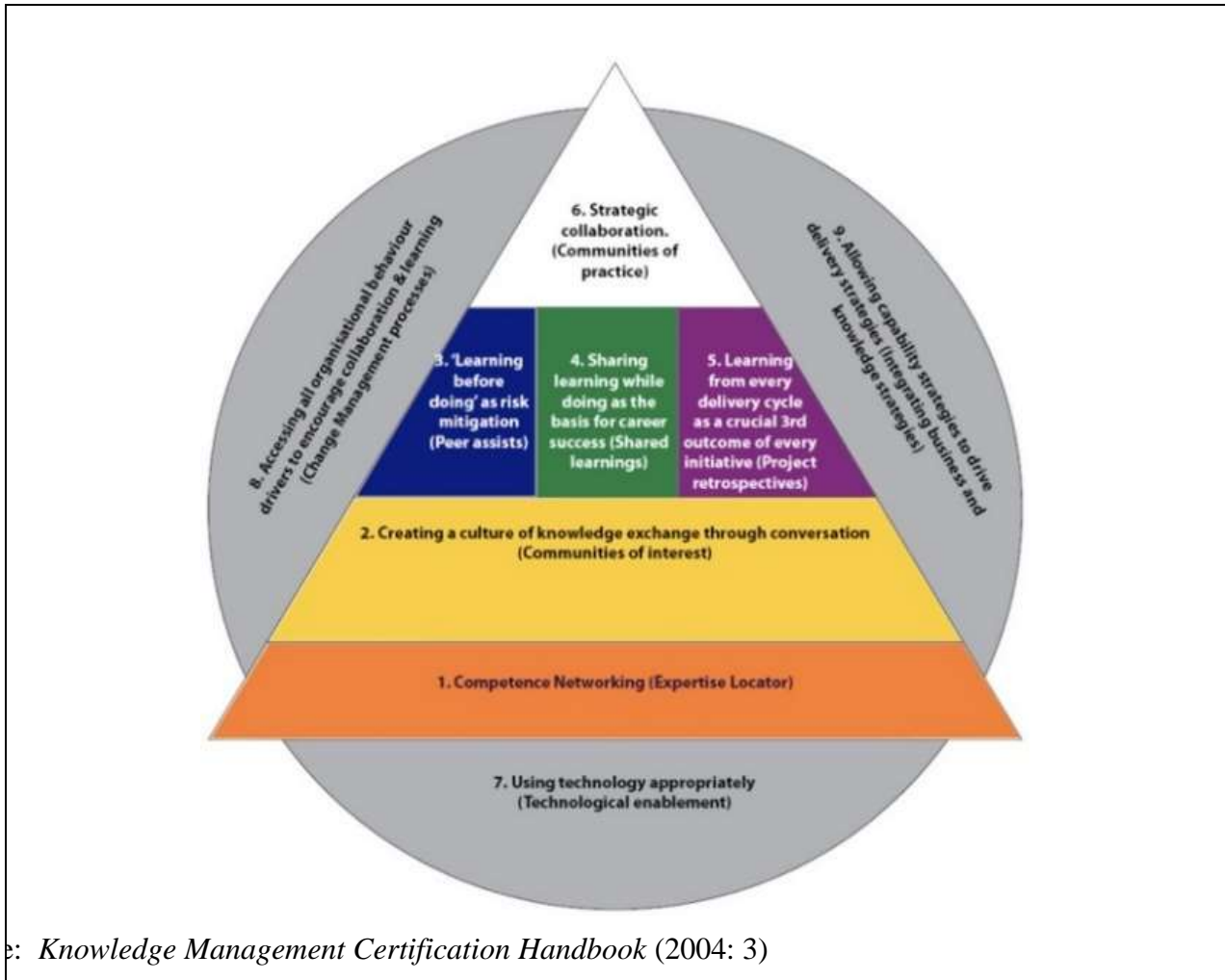
Source: *Knowledge Management Certification Handbook* (2004: 3)

Figure 2.4. *The 9 Competencies to Build KM Capability diagram*.

Knowledge Sharing

Knowledge sharing is one of the main processes in knowledge management that aims to maximize the use of knowledge through the distribution of knowledge to members of the organization who need it. Sharing knowledge is informal learning that forms social capital which is its strength. Knowledge sharing then becomes crucial when new members arrive and others leave or retire.

Knowledge sharing is defined as formal and informal mechanisms for sharing, integrating, interpreting, and applying know-what knowledge, know-how knowledge, and know-why knowledge as awareness embedded in individuals and groups to assist in improving the performance of activities or project tasks performance (Boh, 2006: 28). Know-what information relates to facts related to theoretical aspects, and know-why information relates to more scientific facts about why things happen the way they do. Meanwhile, know-how information is tacit knowledge obtained through the learning process and daily experience so it is very difficult to codify as well as explicit or well-codified know-what and know-why knowledge (Andre et al., 2018: 30–31).

Hooff & Ridder (2004) in Padliansyah (2015: 1) defines knowledge sharing as a process in which individuals collectively and iteratively improve a thought, idea, or suggestion according to instructions and from individual experience. Knowledge sharing is a process in which individuals exchange knowledge, both tacit and explicit knowledge, which in turn can create new knowledge in an integrated manner.

Knowledge sharing is defined by Santos et al. (2014) & Cummings (2004) in Zahedi et al. (2016: 996) as the provision of task information and knowledge (know-how) to a person, so that he or she can collaborate with others to solve problems, develop new ideas or to implement policies and procedures. Knowledge sharing involves the transfer of knowledge from one (or more) people to one (or more) other people. Knowledge sharing is the main concern of Knowledge Management. Most organizations that are implementing Knowledge Management for the first time mostly end up at the knowledge documentation stage, even though they must also be ready to immediately share that knowledge. Moreover, it is still a debate that the

focus of Knowledge Management, is it only on the distribution or dissemination of knowledge, or includes knowledge sharing which in its application requires special knowledge in sharing knowledge with different methods for different types of knowledge (Elita, 2005: 12).

Ipe (2003) in Vuori & Okkonen (2012: 593) says that knowledge sharing is the act of making knowledge available to others in the organization. Knowledge sharing is a conscious and voluntary act between two or more individuals that results in the shared ownership of knowledge between the sender and the receiver.

Naim & Lenkla (2016: 143–144) say "*knowledge sharing takes place when an individual is willing to share and acquire knowledge from others, resulting in building competencies*". Knowledge sharing occurs when an individual is willing to share and acquire knowledge from others, thereby building competence. In addition, knowledge sharing is accompanied by a socio-cognitive perspective where employees develop social relationships, exchange knowledge, insights, and experiences that will help their cognitive development. In a broad sense, this is facilitated by social interactions involving dialogue and inquiry, leading to the development of competencies.

Bock and Kim (2002) state that knowledge sharing is a social interaction between people. Tasmin and Woods (2007) asserted that knowledge sharing as a social system that supports collaboration and integration is usually facilitated by technology (Rusuli & Tasmin, 2010: 797). Alison Tucker says communication is a basic human trait, sharing knowledge nurtures people. Communication and collaboration are at the core of knowledge sharing.

Choo and Alvarenga Neto (2010) in Zahedi et al. (2016: 996) identify four main categories of conditions to enable knowledge sharing; social/behavioral characteristics of the team (eg, mutual trust, attentive inquiry, open dialogues), cognitive/epistemic attributes (common knowledge, shared values and goals), organizational structure/strategy (eg, empowered divisions, leadership style) and provision of information systems (eg, internet, intranet, yellow pages).

An illustration of why knowledge sharing is increasingly important in organizations can be seen from a survey conducted by the IBM Institute in 2000 of 40 managers in large accounting organizations identifying the sources of information used by people in organizations that have a well-developed knowledge management system or infrastructure. good - indicates that 85% of people choose to interact with each other in seeking information, solving problems, and making decisions. In fact, the company's knowledge base only ranks fourth among the five preferred sources of information, namely; people (85%), previous material (40%), web (25%), knowledge base (12%), and others (12%), as stated by Bartlett (2000) in Dalkir (2005: 111). This indicates that a country whose society is very individualistic and implements a sophisticated knowledge management system, naturally still believes in people more than others.

The main components of knowledge sharing systems in organizations are people, organizational components and data processing tools. The human component is the top, middle and lower managers who act to map experts, to share and organize knowledge. For example, in community practice and workshops. Tyndale (2002) states, in order for organizational components of HR to be motivated, they need self-recognition and must act in groups dedicated to knowledge management (Mery, 2020: 1).

This technology is double-edged, it can potentially leave humans far behind, which causes the process of knowledge sharing and collaboration that has been rooted for thousands of years to become foreign and not common anymore. Humans also tend to be individualistic and leave the inherited values of social life. The advantage of sharing knowledge is in terms of exploring tacit knowledge between employees directly without the need for an externalization stage, which is more effective.

Knowledge sharing is considered a central element of knowledge management practice. In terms of how knowledge is shared within organizations, McDermott and O'Dell (2001) note that there is no one right way to get people to share, but many different ways depending on the values and style of the organization. Van den Hooff and Van Weenen (2004) make a distinction between two different forms of knowledge sharing: knowledge donation (communicating to others what one's personal 'intellectual capital' is) and knowledge gathering (consulting with colleagues so they can share their intellectual capital) and argues that the required knowledge is obtained using both methods. Van den Hooff and Van Weenen (2004) identified that this study adopted two dimensions of knowledge sharing namely; knowledge collection and knowledge donation (Yesil & Hirlak, 2018: 103).

Conseptual Framework of Research

An employee who goes to the workplace every day is actually not just for work, but he starts the process of his social life (begin the socialization process) that day. Even though the 'work' activity is considered formal by the organization, a worker in his daily life will not be separated from learning situations. Therefore, the conceptual assumption held is that learning is an informal activity (informal learning) when someone is working or at workplace, or often also called learning at work (workplace learning).

The following figure shows the relationship between elements of the Human Capital management system. This figure is a simplification of Figure 2.1 above which will be used as a conceptual framework for the research.
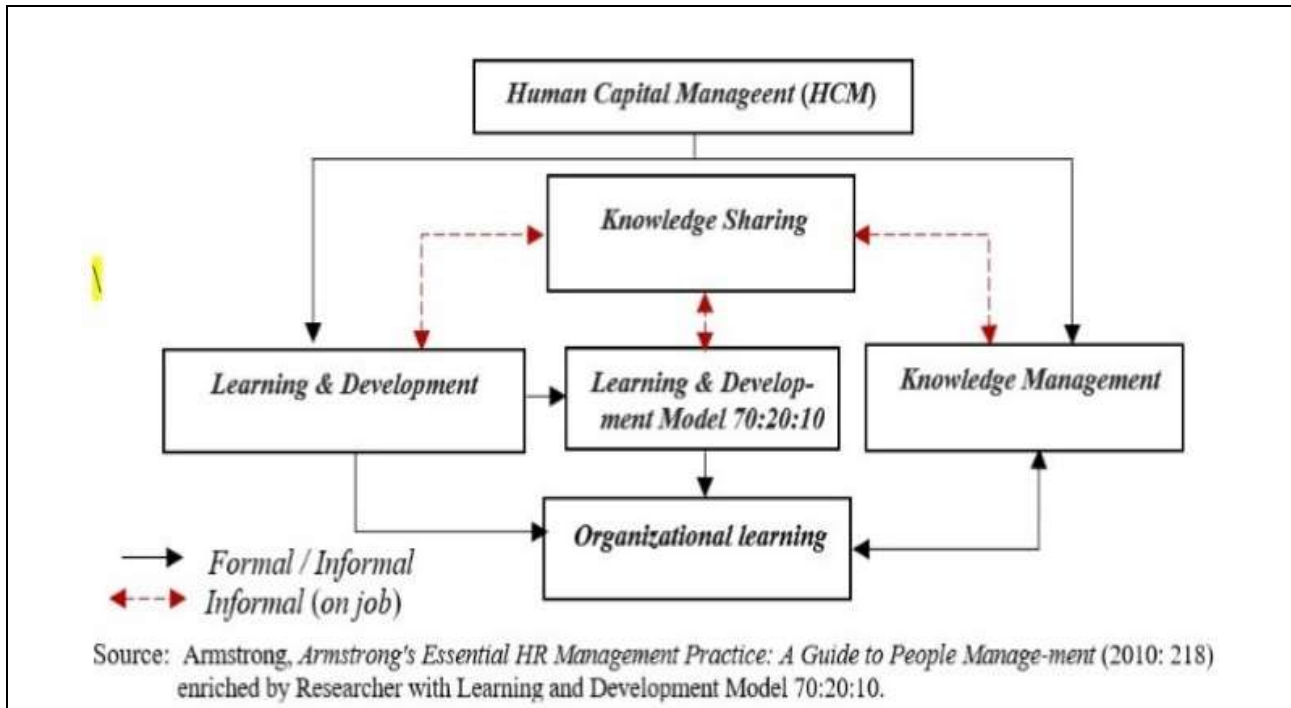

Figure 2.5.   Relationship Between Elements of Human Capital Management System.

Within the scope of knowledge management, knowledge sharing is the process of sharing, transferring, disseminating, and exchanging knowledge (tacit and explicit) through social interaction for better implementation and to create new knowledge. Meanwhile, within the scope of learning & development, knowledge sharing is informal learning carried out in conjunction with formal working hours as mentioned above.

While the 70:20:10 learning and development model has the principle that learning must come from various learning sources (blended), both formal and informal; 70% challenging assignments or practicing and doing work, 20% developmental relationships or learning from others (managers, coworkers, coaches, mentors, etc.), and 10% from coursework and training or from formal learning (classrooms, conferences, e-learning, etc.), so that almost 90% of learning becomes informal. The transformation from formal to informal in every organization, the speed is different.

In the picture above, Amstrong (2010: 218) dan Dalkir (2005: 3) include organizational learning as a complement to the relationship between elements of learning and development with elements of knowledge management within the scope of the human capital management system. The reason is that the collection of indivdual learning is organizational learning where the formation of corporate memory increases and is shared equally by employees.

The theoretical search (review) above includes components that are related or related to the knowledge sharing component, namely by taking a slice of learning and development elements with knowledge management elements from the informal learning side in the knowledge sharing process. The research will be easy and directed by first building a conceptual framework or schema of knowledge sharing elements that are related to the elements; 70:20:10 learning and development model, organizational learning, and knowledge management as a single human capital management system.

A new concept in the form of a knowledge sharing process model will be explored in this study, which is able to integrate with the application of the 70:20:10 learning and development model in managing human capital development which is the ultimate goal of this research. To facilitate the analysis of research results.

The intersection of the two elements is an informal learning activity that shows the high social aspect of capital in the knowledge sharing process, moreover, the current learning and development management approach has implemented a 70:20:10 learning and development model in which many components of formal learning (formal learning) has transformed into informal learning (90%), while the knowledge sharing process is 100% an informal activity with the assumption of 'learning by doing'.

The dichotomy or boundary between formal learning and informal learning is getting 'unclear'. The 70:20:10 learning and development model makes all mixed learning (formal and informal) equal. Formal learning is slowly transforming towards informal learning until it is close to 90%. Formal learning, such as in-class training or courses, is decreasing. The following table slices activities that are informal.

Table 2.3. Tabulation Slices of Learning and Development Components 70:20:10 with Knowledge Sharing Components.

Human Capital Management (Components)	Processes / Model			
	Learning & Development Model 70:20:10		Knowledge Sharing Process Model	
Slice of Learning & Development Model 70:20:10 and Knowledge Sharing Components	Formal	*Informal*	Formal	*Informal*
Learning				
1 *Individual learning / Self-directed learning*		V (70%)		
2 *Action Learning*		V (70%)		
3 *Informal and incidental learning*		V (70%)		
Education				
Training				
1 *Workplace training/on the job training (blended learning)*		V (70%)		
Development (Competency)				
1 *Coaching*		V (20%)		
2 *Mentoring*		V (20%)		
3 *Counseling*		V (20%)		
Pembelajaran Campuran (*Blended Learning*)				
1 *Work Experience (Rotation-Mutation-Promotion)*		V (70%)		
2 *Shared Learning (Class discussion, Morning briefing, Web, SocMed)*		V (70%)		
3 *Communities of Practice/CoP (skills, insight, & competency)*		V (70%)		
4 *Retrospective Project/Retro-Pro (Completed project learning/evaluation)*		V (70%)		
Organizational learning				
Knowledge Management			V (30%)	
1 *Knowledge Sharing*		V (70%)		V (100%)
2 *Tacit Knowledge*				V (100%)
Knowledge Management (*Model APO - Asian Productivity Organization*)				
1 *Knowledge Sharing:*				
Peer Assist, Learning Reviews, After Action Reviews, Expert Locator, Communities of Practices, Storytelling, Collaborative Virtual Workspaces, Collaborative Physical Workspaces, Document Libraries, Knowledge Bases (Wiki's etc), Blogs, Voice and VOIP, Knowledge Clusters, Taxonomy, Knowledge Cafe's, Knowledge Portal, Video Sharing, Mentor/Mentee.				V
Social Networking Services.				V
Learning & Development 70:20:10 Model				
1 *70% of challenging assignments or practicing and doing or through experiential*		V (70%)		
2 *20% of developmental relationships or social learning through mentoring, feedback, and relationship with co-workers (peer to peer)*		V (20%)		

The following is the final conceptual framework for the research components analysis scheme.
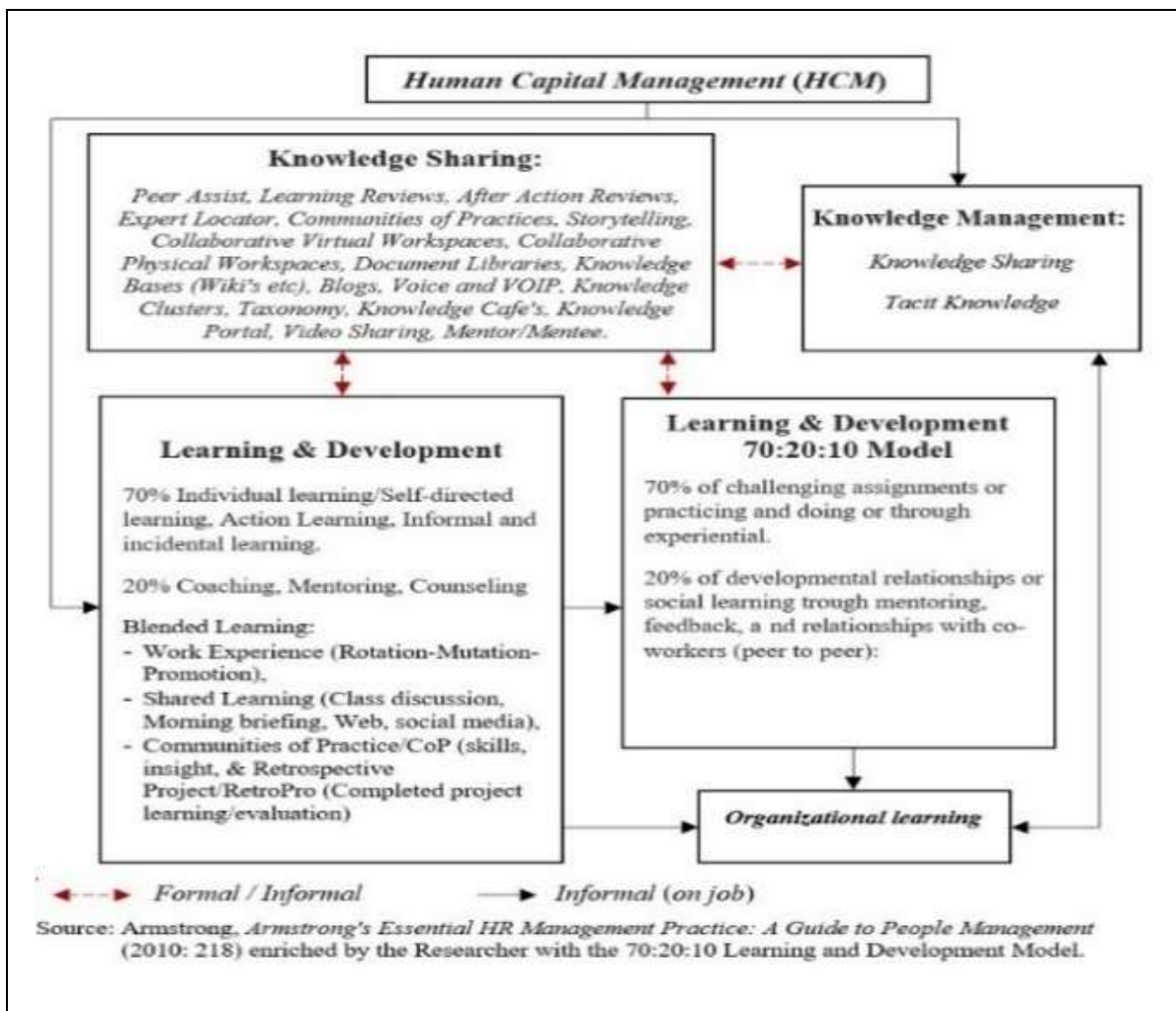
Figure 2.6. Research Conceptual Framework - Final Scheme of Informal Learning - Knowledge Sharing Model #1 - Final Scheme of Informal Learning.

The conceptual framework of the research (Knowledge Sharing Model #1 - Final Scheme of Informal Learning) above is a screening of theories (literature review) on learning management and the development of Model 70:20:10 and knowledge management (in this case knowledge sharing). The conceptual framework of the research above will be used to create a framework for further research.

Research Methods
Definition of Analysis
To find out how far the practice of knowledge sharing at the PT Pusri Palembang factory is, it is necessary to analyze the capability of the knowledge sharing practice at the PT Pusri Palembang factory in order to support the implementation of the 70:20:10 learning and development model at PT Pusri Palembang.

The analysis is a detailed examination or study of something or someone. Analysis means a person or group of people who are examining methodically (Danar, 2020: 1). Spradley in Sugiyono (2013: 333) states that: "Analysis of any kind involve a way of thinking. It refers to the systematic examination of something to determine its parts, the relation among parts, and the relationship to the whole. The analysis is a search for patterns". Analyze anything that involves thinking. It refers to the systematic examination of something to determine its parts, the relationship between the parts, and the relationship to the whole. The analysis is a search for patterns

Research Questionnaire
To find out how far the practice of knowledge sharing at the PT Pusri Palembang factory is, it is necessary to analyze the capability of the knowledge sharing practice at the PT Pusri Palembang factory in order to

support the implementation of the 70:20:10 learning and development model at PT Pusri Palembang by distributing questionnaires.

A questionnaire or questionnaire is a set of written statements or questions on a sheet of paper or through an electronic media equivalent to/a type of Google Form, namely SurveyMonkey, and submitted to respondents or research participants who are involved in the implementation of knowledge sharing, to be filled out by them without intervention from researchers or other parties.

This questionnaire or questionnaire is used to obtain information in terms of their experiences related to their participation in knowledge sharing activities or other things they know. In this study, the researcher used a questionnaire whose answers had been provided with 5 Likert scales. The targets to be given the questionnaire are factory employees. This questionnaire or questionnaire was run by researchers to obtain attitudes, opinions, or perceptions as input in developing a powerful knowledge sharing model through respondents spread across the research domain, namely SVP staff/VP staff who are factory employees where the leaders have been interviewed in depth (in-depth interviews).) previously.

The following is a schematic of the data collection procedure, especially for the primary data collection process, namely in-depth interviews and questionnaires filled out by all employees per department.
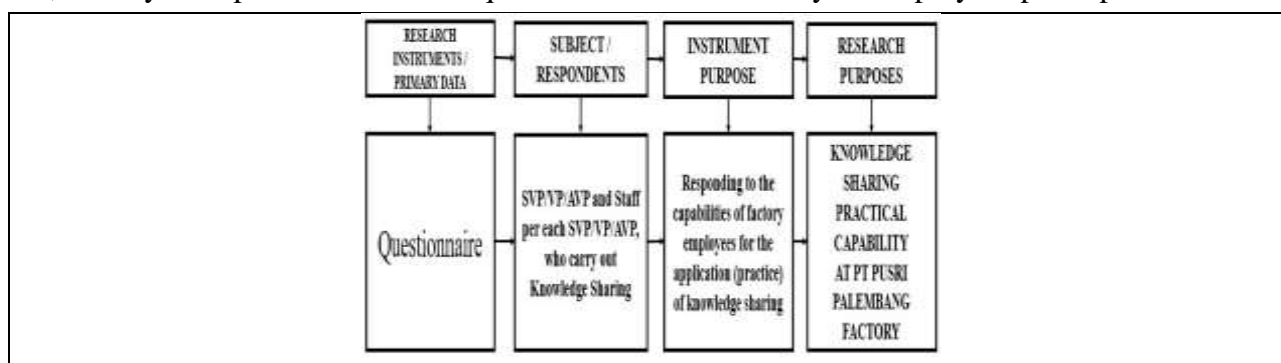
Figure 3.1 Data Collection Procedure Schema

Research Results And Discussion

Capabilities Analysis of Knowledge Sharing Practices at PT Pusri Palembang Factory

It is important in this research, to distribute questionnaires to determine the competence or potential capabilities of employees in carrying out the Knowledge Sharing process (practice). This designed questionnaire/questionnaire consists of:

First, the Design of Knowledge Sharing & Informal Learning Capability, namely the design of a questionnaire that contains the components of informal learning obtained from the intersection of the informal learning component of the Knowledge Sharing element with the informal learning component of the Development and Learning Model 70:20:10 (see Figures 2.15 and 2.17 in the sub-chapter conceptual framework and research framework: Research Conceptual Framework - Knowledge Sharing Model #1). The framework of 6 components, among others; knowledge sharing (KS), tacit knowledge capacity (TK), individual innovation capability (KI), job rotation/work experience (JR), employee performance (KK), and availability of individual knowledge (KP). See table bellow.

Table 4.1. The 9 Competencies to Built Knowledge Sharing Capacity

No	Competency	Indi-cator	Definition
1	Knowledge sharing (KS)	KS01.1	is part of informal learning and knowledge management where employees share knowledge and or share experiences related to work that is their shared responsibility or for learning purposes.
		KS01.2	
		KS01.3	
		KS01.4	
		KS01.5	
2	Tacit Knowledge	TK02.1	is the capacity of knowledge stored in the human mind, for

	Capacity (TK)	TK02.2	example ideas/ideas, perceptions, ways of thinking, insights, expertise/skills, and others gained from years of work experience resulting in creativity and innovation.
		TK02.3	
		TK02.4	
		TK02.5	
3	Individual Innovation Capability (KI)	KI03.1	It is an individual's potential energy resulting from the growth and development of his knowledge/intelligence. With the growth and development of individual capabilities, it is hoped that organizational outcomes will increase.
		KI03.2	
		KI03.3	
		KI03.4	
		KI03.5	
4	Job Rotation: Rotation-Mutation-Promotion (JR)	JR04.1	Is the need to learn and gain new knowledge and the need for career development.
		JR04.2	
		JR04.3	
		JR04.4	
		JR04.5	
5	Employee performance (KK)	KK05.1	Is a summary in terms of quality, quantity, working hours and also collaboration to achieve a company goal in accordance with the authority, duties, and responsibilities.
		KK05.2	
		KK05.3	
		KK05.4	
		KK05.5	
6	Individual Knowledge Availability (KP)	KP06.1	Is the ability to store knowledge and learn from experience within the individual as an expert (expert).
		KP06.2	
		KP06.3	
		KP06.4	
		KP06.5	

Second, the 9-component Framework of the "Know-House Consulting Firm" in partnership with Dunamis Indonesia, namely "The 9 Competencies to Built Knowledge Sharing Capacity" (see Table bellow, Framework Knowledge Sharing Competencies for managing knowledge), among others; expert locater, CoI, peer Assists, share learning, project retrospectives, CoP, Technology Enable, and Change Management.

Table 4.2.   **The 9 Competencies to Built Knowledge Sharing Capacity**

No	Competency	Indi-cator	Definition
1	Expert Locator (EL)	EL08.1	Build a talent pool and infrastructure for networking (Enterprise 2.0). The talent pool in question is a kind of expert directory per competency field within the company.
		EL08.2	
		EL08.3	
		EL08.4	
		EL08.5	
2	Communities of Interest (COI)	CI09.1	Build the habit of sharing knowledge and improve communication within the organization or community.
		CI09.2	
		CI09.3	
		CI09.4	
		CI09.5	
3	Peer Assists (PA)	PA10.1	Is learning before acting (learning before doing) or accessing and using expert opinion (organizational expertise) before carrying out an activity or before a project is implemented to reduce/mitigate risk, including Turn Around (TA) projects.
		PA10.2	
		PA10.3	
		PA10.4	
		PA10.5	
4	Shared Learnings (SL)	SL11.1	Publish and share knowledge and experience/skills (know-how) and best practices from business interactions or daily activities. Sharing learning while doing (sharing learning while doing) as the basis for career success. APO calls it "Learning Reviews".
		SL11.2	
		SL11.3	
		SL11.4	
		SL11.5	

5	Project Retrospectives (PR)	PR12.1	Review the results and impacts of activity or initiative as well as the lessons learned. APO calls it After Action Review (AAR) which is a technique for evaluating and capturing lessons learned or lessons learned from each delivery cycle as the third important outcome of any initiative.
		PR12.2	
		PR12.3	
		PR12.4	
		PR12.5	
6	Communities of Practice (COP)	CP13.1	Build CoPs for strategic matters and validate organizational knowledge assets.
		CP13.2	
		CP13.3	
		CP13.4	
		CP13.5	
7	Technology Enablement (TE)	TE14.1	Determine the technology that encourages the creation of knowledge sharing.
		TE14.2	
		TE14.3	
		TE14.4	
		TE14.5	
8	Change Management (CM)	CM15.1	Aligning factors such as Performance Management System, Human Capital and Leadership that encourage knowledge sharing.
		CM15.2	
		CM15.3	
		CM15.4	
		CM15.5	
9	Corporate Strategy (SP)	SP07.1	The process of determining a leader's plan that focuses on the long-term goals of the organization or work unit, accompanied by the preparation of a method or effort so that these goals can be achieved.
		SP07.2	
		SP07.3	
		SP07.4	
		SP07.5	

All 9 components are knowledge sharing components, so when combined with the first 6 components, it can be done as "Analysis of the Capabilities of Knowledge Sharing Practices at the PT Pusri Palembang Factory in Supporting the Implementation of the 70:20:10 Learning and Development Model".

Dissemination of questionnaires to see from the perspective of the staff of each department who has carried out knowledge sharing on their capabilities to carry out knowledge sharing. The importance of this questionnaire is to see the readiness of employees if the knowledge sharing model that is built can be applied, in other words, this questionnaire is used as supporting data in developing a knowledge sharing model.

The questionnaires and the results of the answers to the questionnaires were distributed, collected, and analyzed with simple statistics before data processing was carried out to measure the size of knowledge sharing capabilities. Of these components and to facilitate the weighting of the average score of the standard Likert scale, each component consists of 5 questions (attachment 1) so that the total number of questions that the respondent must answer is 75 questionnaire questions. Following are some analyzes of knowledge sharing components, from the slice of informal learning to 70:20:10 components of learning and development and knowledge management, which have met the T-test (as attached).

Capabilities Analysis of Knowledge Sharing Practices at PT Pusri Palembang Factory in Knowledge Sharing & Informal Learning Capability Design

Of the 6 competencies to build knowledge sharing and informal learning capabilities after simple statistical calculations are carried out, namely validity and reliability tests, the following can be obtained.

Table 4.5. Recapitulation of Validity Test Results in 6 Knowledge Sharing Components.

No	Competency to build Knowledge Sharing Capability	Strongly Disagree	Disagree	Avarage	Agree	Strongly Agree
1	Knowledge sharing (KS)	0,749	0,807	0,779	0,590	0,714

2	Tacit Knowledge Capacity (TK)	0,579	0,488	0,418	0,622	0,465
3	Individual Innovation Capability (KI)	0,613	0,663	0,703	0,504	0,644
4	Job Rotation: Rotation-Mutation-Promotion (JR)	0,785	0,890	0,830	0,735	0,766
5	Employee performance (KK)	0,922	0,933	0,946	0,929	0,683
6	Individual Knowledge Availability (KP)	0,791	0,742	0,758	0,709	0,658
	Average Validation	0,739	0,754	0,739	0,681	0,655

The results of observations in the R-Table obtained the value of the sample (N) = 45 equal to 0.248. Referring to the results of the validity test, it was found that all instruments starting from 6 Knowledge Sharing (KS) variables, all of which resulted in R-Count > R-Table > 0.248. So it can be concluded that the knowledge sharing instrument in this study can be categorized as valid. This means that the questionnaire is filled out by employees who do share knowledge.

Table 4.6. Knowledge Sharing Component Reliability Test Results.

No.	*Competency to build Knowledge Sharing Capability*	*Cron-bach's Alpha*
1	Knowledge sharing (KS)	0,794
2	Tacit Knowledge Capacity (TK)	0,205
3	Individual Innovation Capability (KI)	0,710
4	Job Rotation--Mutation-Promotion (JR)	0,866
5	Employee performance (KK)	0,932
6	Individual Knowledge Availability (KP)	0,775
	Average Reliability	0,714

From the results of the reliability test of 6 components of knowledge sharing competence, 5 values were obtained from the results of these variables or 5 values of Cronbrach's alpha > 0.6. So it can be concluded that the instrument only 5 components of knowledge sharing and informal learning capabilities in this study are reliable or consistent. The results of the Tacit Knowledge Capacity (TK) Component Reliability Test result with cronbrach's alpha value of 0.205 or cronbrach's alpha value <0.6, so it was decided that the TK instrument in the study was still included in the analysis, even though the respondents' answers were less consistent. Tacit knowledge is the capacity of knowledge stored in the human mind, for example, ideas, perceptions, ways of thinking, insight, expertise/skills, and others that are obtained from years of work experience so as to produce creativity and innovation.

Table 4.7. Results of the Questionnaire on the Capabilities of Knowledge Sharing Practices, Design of Knowledge Sharing & Informal Learning Capability.

| Knowledge Sharing Capability Components | Question Code | Answers Total 45 Respondents | | | | | Average (AV) | Capabilities Criteria Per Question | Graphics of each Component |
		1 SD	2 DA	3 AV	4 AG	5 SA			
Knowledge Sharing (KS)	KS01.1	0	1	1	17	26	4,51	Highly capable	
	KS01.2	0	1	2	24	18	4,31	Highly capable	
	KS01.3	0	0	4	26	15	4,24	Highly capable	
	KS01.4	0	1	4	29	11	4,11	Capable	
	KS01.5	0	0	4	24	17	4,29	Highly capable	
							4,29	**Highly capable**	
Tacit Knowledge Capacity (TK)	TK02.1	0	1	12	30	2	3,73	Capable	
	TK02.2	0	3	8	23	11	3,93	Capable	
	TK02.3	1	5	18	17	4	3,40	Sufficiently Capable	
	TK02.4	0	0	4	33	8	4,09	Capable	
	TK02.5	0	0	2	25	18	4,36	Highly capable	
							3,90	**Capable**	
Individual Innovation Capability (KI)	KI03.1	0	0	2	15	28	4,58	Highly capable	
	KI03.2	0	0	1	18	26	4,56	Highly capable	
	KI03.3	0	0	5	24	16	4,24	Highly capable	
	KI03.4	0	0	6	30	9	4,07	Capable	
	KI03.5	0	0	6	28	11	4,11	Capable	
							4,31	**Highly capable**	
Job Rotation: Rotation-Mutation-Promotion (JR)	JR04.1	2	3	23	8	9	3,42	Capable	
	JR04.2	0	0	11	18	16	4,11	Capable	
	JR04.3	0	1	11	19	14	4,02	Capable	
	JR04.4	1	0	11	26	7	3,84	Capable	
	JR04.5	0	0	6	29	10	4,09	Capable	
							3,90	**Capable**	
Employee performance (KK)	KK05.1	0	0	3	16	26	4,51	Highly capable	
	KK05.2	0	0	3	29	13	4,22	Highly capable	
	KK05.3	0	0	4	24	17	4,29	Highly capable	
	KK05.4	0	0	3	23	19	4,36	Highly capable	
	KK05.5	0	0	2	24	19	4,38	Highly capable	
							4,35	**Highly capable**	
Individual Knowledge Availability (KP)	KP06.1	0	0	11	27	7	3,91	Capable	
	KP06.2	0	0	12	27	6	3,87	Capable	
	KP06.3	1	10	20	13	1	3,07	Sufficiently Capable	
	KP06.4	2	8	19	13	3	3,16	Sufficiently Capable	
	KP06.5	0	2	9	31	3	3,78	Capable	
							3,56	**Capable**	

Table 4.8. The value of Capability to build Knowledge Sharing & Informal Learning.

No.	*Capability build Knowledge Sharing & Informal Learning*	Score	Capability
1	Knowledge sharing (KS)	4,29	Highly capable
2	Tacit Knowledge Capacity (TK)	3,90	Capable
3	Individual Innovation Capability (KI)	4,31	Highly capable
4	Job Rotation: Rotation-Mutation-Promotion (JR)	3,90	Capable
5	Employee performance (KK)	4,35	Highly capable
6	Individual Knowledge Availability (KP)	3,56	Capable
	Average	4,05	Capable

4.3. Capabilities Analysis of Knowledge Sharing Practices at PT Pusri Palembang Factory in the Framework of The 9 Competencies to Build Knowledge Sharing Capability

Of the 9 competencies to build knowledge sharing capabilities with the Framework The 9 Competencies to Build Knowledge Sharing Capability and after simple statistical calculations are carried out, namely validity and reliability tests, it can be concluded that employees at PT Pusri Factory generally have these competencies, even though this framework built by means of "self-assessment" -or they self-assess the capability in the practice of knowledge sharing- through a questionnaire.

Table 4.9. Recapitulation of Knowledge Sharing Component Validity Test Results.

No.	*Competency to build Knowledge Sharing Capability*	StrDis	Dis	Ave.	Agr.	Str. Agr.
1	Corporate Strategy (SP)	0,775	0,783	0,831	0,834	0,757
2	Expert Locator (EL)	0,467	0,506	0,616	0,509	0,597
3	Communities of Interest (CoI)	0,888	0,900	0,853	0,954	0,924

4	Peer Assists (PA)	0,898	0,901	0,953	0,949	0,924
5	Shared Learnings (SL)	0,932	0,950	0,942	0,944	0,908
6	Project Retrospectives (PR)	0,956	0,947	0,974	0,945	0,914
7	Communities of Practice (CoP)	0,930	0,921	0,942	0,880	0,938
8	Knowledge Enable (KE)	0,912	0,961	0,952	0,970	0,967
9	Change Management (CM)	0,919	0,922	0,903	0,923	0,867
	Avarage Validation	0,767	0,779	0,793	0,786	0,782

The results of observations in the R-Table obtained the value of the sample (N) = 45 equal to 0.248. Referring to the results of the validity test, it was found that all instruments starting from 9 Knowledge Sharing (KS) variables, all of which resulted in R-Count > R-Table > 0.248. So it can be concluded that the knowledge sharing instrument in this study can be categorized as valid.

Table 4.10. Knowledge Sharing Component Reliability Test Results.

No.	*Competency to build Knowledge Sharing Capability*	*Cron-bach's Alpha*
1	Corporate Strategy (SP)	0,849
2	Expert Locator (EL)	0,822
3	Communities of Interest (CoI)	0,944
4	Peer Assists (PA)	0,962
5	Shared Learnings (SL)	0,964
6	Project Retrospectives (PR)	0,973
7	Communities of Practice (CoP)	0,955
8	Knowledge Enable (KE)	0,974
9	Change Management (CM)	0,945
	Avarage Reliability	0,932

From the reliability test results of the 9 components of knowledge sharing competence, all the values from the results of these variables or the entire value of Cronbrach's alpha > 0.6. So, it can be concluded that the instrument of the 9 components of knowledge sharing competence in this study is reliable or consistent.

Table 4.11. The results of the Knowledge Sharing Practice Capabilities Questionnaire, in the Framework of the 9 Competencies to Build Knowledge Sharing Capability

Knowledge Sharing Capability Components	Question Code	Answers Total 45 Respondents					Average (AV)	Capabilities Criteria Per Question	Graphics of each Component
		1 SD	2 DA	3 AV	4 AG	5 SA			
Corporate Strategy (SP)	SP07.1	0	0	3	29	13	4,22	Highly capable	
	SP07.2	0	2	4	30	9	4,02	Capable	
	SP07.3	0	1	5	28	11	4,09	Capable	
	SP07.4	0	1	5	30	9	4,04	Capable	
	SP07.5	0	3	11	25	6	3,76	Capable	
							4,03	**Capable**	
Expert Locator (EL)	EL08.1	0	0	8	29	8	4,00	Capable	
	EL08.2	0	3	7	29	6	3,84	Capable	
	EL08.3	0	2	10	29	4	3,78	Capable	
	EL08.4	0	3	15	24	3	3,60	Capable	
	EL08.5	0	1	7	27	10	4,02	Capable	
							3,85	**Capable**	
Communities of Interest (CoI)	CI09.1	0	1	11	29	4	3,80	Capable	
	CI09.2	0	2	5	32	6	3,93	Capable	
	CI09.3	0	1	6	29	9	4,02	Capable	
	CI09.4	0	1	7	30	7	3,96	Capable	
	CI09.5	0	2	8	28	7	3,89	Capable	
							3,92	**Capable**	
Peer Assist (PA)	PA10.1	0	2	8	26	9	3,93	Capable	
	PA10.2	0	1	10	27	7	3,89	Capable	
	PA10.3	0	0	8	29	8	4,00	Capable	
	PA10.4	0	1	11	25	8	3,89	Capable	
	PA10.5	1	0	11	25	8	3,87	Capable	
							3,92	**Capable**	
Shared Learnings (SL)	SL11.1	0	1	12	25	7	3,84	Capable	
	SL11.2	0	1	9	29	6	3,89	Capable	
	SL11.3	0	0	8	28	9	4,02	Capable	
	SL11.4	1	0	11	30	3	3,76	Capable	
	SL11.5	0	0	12	26	7	3,89	Capable	
							3,88	**Capable**	
Project Retrospectives (PR)	PR12.1	0	0	10	29	6	3,91	Capable	
	PR12.2	0	0	4	33	8	4,09	Capable	
	PR12.3	0	0	11	28	6	3,89	Capable	
	PR12.4	0	0	8	29	8	4,00	Capable	
	PR12.5	0	1	13	19	12	3,93	Capable	
							3,96	**Capable**	
Communities of Practice (CoP)	CP13.1	0	1	7	31	6	3,93	Capable	
	CP13.2	0	1	5	31	8	4,02	Capable	
	CP13.3	0	1	7	30	7	3,96	Capable	
	CP13.4	0	3	8	26	8	3,87	Capable	
	CP13.4	0	2	6	27	10	4,00	Capable	
							3,96	**Capable**	
Technology Enable (TE)	TE14.1	0	0	8	26	11	4,07	Capable	
	TE14.2	0	0	7	26	12	4,11	Capable	
	TE14.3	0	0	9	26	10	4,02	Capable	
	TE14.4	0	0	6	26	13	4,16	Capable	
	TE14.5	0	0	6	29	10	4,09	Capable	
							4,09	**Capable**	
Change Management (CM)	CM15.1	0	0	6	29	10	4,09	Capable	
	CM15.2	0	0	7	29	9	4,04	Capable	
	CM15.3	0	0	6	30	9	4,07	Capable	
	CM15.4	0	1	11	24	9	3,91	Capable	
	CM15.5	0	1	8	29	7	3,93	Capable	
							4,01	**Capable**	

Table 4.12. *The value of Capability to build Knowledge Sharing in the 9 Competencies to Build Knowledge Sharing Capability Framework.*

No.	*Capability build Knowledge Sharing*	Score	Capability
1	Corporate Strategy (SP)	4,03	Capable
2	Expert Locator (EL)	3,85	Capable
3	Communities of Interest (CoI)	3,92	Capable
4	Peer Assist (PA)	3,92	Capable
5	Shared Learnings (SL)	3,88	Capable
6	Project Retrospectives (PR)	3,96	Capable
7	Communities of Practice (CoP)	3,96	Capable
8	Technology Enable (TE)	4,09	Capable
9	Change Management (CM)	4,01	Capable
	Avarage	3,95	Capable

The following is a complete chart of Capability to build Knowledge Sharing in The 15 Competencies to Build Knowledge Sharing Capability Framework.
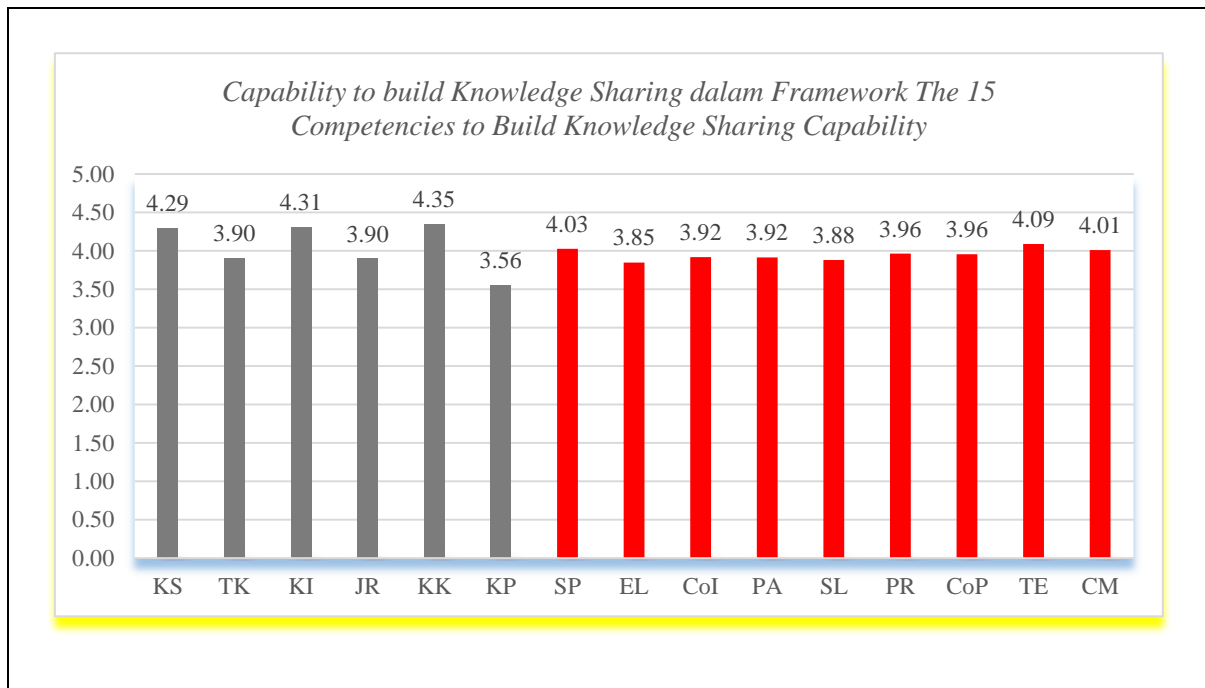

Figure 4.4. Capability to build Knowledge Sharing in the Framework The 15 Competencies to Build Knowledge Sharing Capability.

Criteria	Score
Highly capable	4,2 >
Capable	3,4 >
Sufficiently Capable	2,6 >
Less Capable	1,8 >
Not Capable	0 >

Figure 4.5. Knowledge Sharing Capability Criteria.

The level of knowledge sharing practice capability at the PT Pusri Palembang factory is in the "Capable" category with 12 components and "Highly Capable" with 3 components, which indicates that all indicators (components) in the Framework The 15 Competencies to Build Knowledge Sharing Capability are very supportive for implementation of continuous knowledge sharing at PT Pusri Palembang.

It is hoped that PT Pusri Palembang will continue to improve the 15 capabilities above, especially those that are still relatively low compared to other competencies, namely the Individual Knowledge Availability (KP) competency = 3.56 (the ability to store knowledge and learn from experience within the individual as an experts), and Expert Locator (EL) competence = 3.85 (is building a talent pool and infrastructure for networking (Enterprise 2.0). The talent pool in question is a kind of expert directory per competency field within the company).

The results of the survey and research analysis show; a) the score of Capability to build Knowledge Sharing & Informal Learning is 4.05 (Capable) and the score of Capability to build Knowledge Sharing in The 9 Competencies to Build Knowledge Sharing Capability is 3.95 (Capable). While the average total score is 4.00 (Capable). This shows that the capability to build knowledge management is supported by all factory employees. This condition must be improved continuously or can be maintained, lest it decrease in the next assessment period.

Conclusions And Recommendations

This study analyzes the implementation (practice) of knowledge sharing at the PT Pusri Palembang factory. The results of the analysis of the capability of knowledge sharing practices with the equipment "Capability to build Knowledge Sharing in Framework The 15 Competencies to Build Knowledge Sharing Capability" whose assessment is based on a Likert scale of 1-5, obtained an average value = 3.99 "Capable".

The results of the study show that the level of knowledge sharing practice at PT Pusri Palembang's factory is in the "High" category, which indicates that all indicators in the Framework for The 15 Competenencies to Build KM Capability strongly support the implementation of knowledge sharing at PT Pusri Palembang.

In general, the framework instrument The 15 Competencies to Build Knowledge Sharing Capability can be used to measure organizational competence/capabilities in creating a knowledge sharing infrastructure to gather knowledge and competencies that exist in the company and disseminate it to all employees.

From the survey and analysis conducted, it can be concluded that the practice of Knowledge Sharing at the PT Pusri Palembang factory runs optimally in accordance with the company's vision and mission and it is recommended that every year it is necessary to conduct a survey and carry out the analysis of knowledge sharing practice capability on a regular and periodically basis so that management can feel the impact of the implementation of systems and strategies carried out by management during the company's performance appraisal period, especially related to maintaining the optimal condition of company memory and company intelligence.

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