

## Conceptual Knowledge Sharing Model to Support Organizational Performance Development

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### Abstract

*Knowledge is a key factor for competitive advantage and for a successful business it is a prerequisite to establish the vision, attract qualified human resources, allocate resources to complete the mission and set a positive-productive culture. In this context, the proposed article will describe a conceptual knowledge sharing model together with its implication in the case of a big multinational production company which aimed to support performance improvement. The presented comprehensive study will show how the company identified the critical capabilities for success and how their description was made in relation with specific behavioral indicators. Aligned with the KM strategy, an extensive learning curriculum have been built and it has implemented a standardized coach role for the competency development process to support human resources development.*

**Keywords:** knowledge management, knowledge sharing, competency development, coaching

### INTRODUCTION

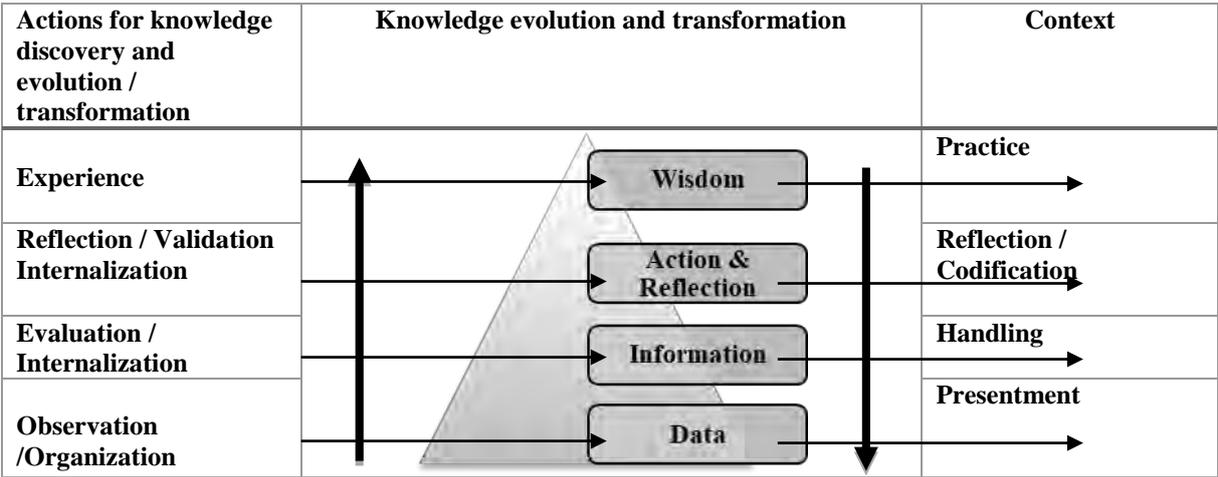
Researchers all over the world have recognized that the knowledge management (KM) in organizations has become increasingly popular in the literature, with knowledge being recognized as

the most important resource of organizations. Knowledge has been stated as an important factor in organizations, in the last decade been considered the primary source of competitive advantage (Draghici & Draghici, 2008) and critical to the long-term sustainability and success of organizations (Nonaka & Takeuchi, 1995). Consequently, the recognition of knowledge as the key resource of today’s organizations affirms the need for processes that facilitate the knowledge creation process based on leveraging of individual and collective knowledge. More and more organizations are attempting to set up KM systems and practices to more effectively use the knowledge they have, and to increase their performance and competitiveness management. In this context, the article aims to contribute to a better understanding of the knowledge sharing process within an organization. Drawing on literature from several fields of study, a model of knowledge sharing (KS) model in organizations is developed and described. Furthermore, using the case of a multinational company, the proposed KS model will be implemented into organizational practices; the focus of this article is to demonstrate how the KS model can influence the process of performance management.

As showed by studies and literature, KM is the process of accessing the knowledge, experience, and expertise that produces new skills, ensure high performance, encourages innovation and creates value for customers (Gloet & Terziovski, 2004). The KM topic has been studied by many researchers for some decades. Due to intangible nature of knowledge and because it is so individualized, definition of knowledge it is quite difficult. There are many approaches and definitions depending on the perspective: organizational or considering individual aspect, as a process or a discipline. As presented by

(Magnier-Watanable & Senoo, 2010), knowledge is an evolutive cycle, based on observations and inputs from the organization, it starts as a learning process of specific, particular topic and data belonging to a working place and it is developing by internalizations of those isolated data, gaining experiences until the stage of mastering a role and wisdom (Picture 1).

**Picture 1: Stages and evolution of the knowledge dimension**



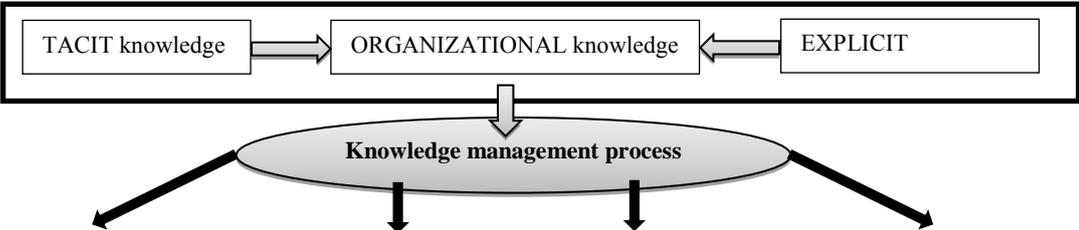
Adapted from (Magnier-Watanable & Senoo, 2010).

From the KM point of view, topmost of production are intangibles it is focused on human capital, i.e., the skills, experiences, competences, motivation for work and the manner in which they use the skills for the benefit of organization (Crook at al., 2011; Harpan & Draghici, 2014; Gogan et al., 2014). According to (Lee et al. 2015) organization that cares about leveraging the facilitation of knowledge, benefit both on individuals and the organizations performance by increasing the collective knowledge,

innovation and by the employees' knowledge acquisitions and development. Thus, research in these field has shown that KS is promoted when employees have interest, motivation and opportunities for KS. In addition, the research of (Obeidat et al., 2016a) emphasizes that when employees are encouraged to share and disseminate knowledge within the organization, this amplifies their ability to generate new ideas and be innovative. In this context the study is structured in the following chapters: (1) A literature review; (2) Presentation of the methodological framework; (3) The NWW use case; (4) Conclusions and final discussion.

**METHODOLOGICAL FRAMEWORK**

The proposed theoretical framework of the KS model has been inspired by the work of Kakabadse et al. (2003). They considered that the chain of knowledge incorporates tacit and explicit knowledge in a process of four stages: knowledge creation, knowledge storage, knowledge deployment and knowledge usage (as depicted in Picture 2)



**Picture 2: Theoretical - Conceptual KM process model**

<b>Knowledge creation</b>	<b>Knowledge storage</b>	<b>Knowledge development</b>	<b>Knowledge use</b>
<ul style="list-style-type: none"> <li>- Knowledge acquisition</li> <li>- Knowledge transformation</li> <li>- Organizational learning</li> </ul>	<ul style="list-style-type: none"> <li>- Individual</li> <li>- Organizational</li> <li>- Information technology</li> </ul>	<ul style="list-style-type: none"> <li>- Social contact</li> <li>- Coaching</li> <li>- Facilitation</li> </ul>	<ul style="list-style-type: none"> <li>- Form of use</li> <li>- Knowledge recovery and transformation</li> <li>- Dynamic capacity</li> </ul>

Adapted from (Kakadabdse et al., 2003).

In the first stage of KM several subprocess included refers to the search, identification, selection, collection, organization and mapping of information and/or knowledge (Pinho et al., 2012). Tiwana (2000) defined the acquisition of knowledge as the process of developing and creating insights, skills and relationships. Since knowledge creation is a complex process, the main role of the organization is to provide the appropriate strategy to facilitate team activities, as well as the creation and development of knowledge at the individual level and is offering the context to learn and innovate. Thus, “knowledge creation refers to the ability of an organization to develop new and useful ideas and solutions for different aspects of organizational activities, from technological products and processes to managerial practices” (Kianto et al., 2016).

The second stage of KM refers to knowledge storage. During this phase, the focus is on benchmark and capture best practices, and collect them in the organization Knowledge library, database. The knowledge storage stage refers to the process of enriching and securing organizational memory, in which formalized knowledge is preserved in physical memory systems and kept informally as values, rules and beliefs associated with organizational culture and structure (Alavi & Leidner, 2001). Even if information technology (IT) plays an important role the KM storage, research in the last years

attenuate the importance of the IT systems impact on KM sharing and underline the role of organizational learning culture and creation of the organization memory (Razmerita et al., 2016).

Knowledge deployment (corresponding to the third stage of KM process) is the key to manage tacit knowledge. The power of knowledge is enhanced by its sharing through the dissemination and use of what is already known. Sharing knowledge is recognized as an important social asset for organizations that improve workplace performance and increase organizational success (Obeidat & Tarhini., 2016b; Razmerita et al., 2016). Thus, organizations should encourage and facilitate direct informal communication and new learning experiences, coaching and mentoring program in order to support a KS culture (Dalkir, & Liebowitz, 2011). Research in the field have proved that a positive organizational culture is key to promote learning and sharing skills and knowledge. Furthermore, there have been observed a great need to create a socialization space that fosters knowledge creation and sharing, and that has been defined as the “Ba-Space” (Nonaka & Takeuchi, 2007). Therefore, KS is successful when the organization is characterized by trust, ownership and openness in regards of knowledge creation and development. It is supported by policies and managerial actions, like coaching and mentoring, vision and strategies to create and deploy the knowledge.

Finally, knowledge usage refers to the way knowledge are affecting performance level and it is basis to use as a primary knowledge in new knowledge creation or an innovative solution. Knowledge use is associated with the ability of employees to store, transfer and retrieval knowledge. As human knowledge, skills and intelligence are tacit and individually centered, they are not easily captured and processed for the benefit of the organization. Therefore, an important challenge it is to identify the future need of competency development and asses the gap in order to prioritize topics in the KM strategy. The organization’s culture has to encourage collaborative work and learning, and knowledge generation, too” (Draghici & Draghici, 2008).

## **THE CASE OF KNOWLEDGE MANAGEMENT APPROACH AT NWW COMPANY**

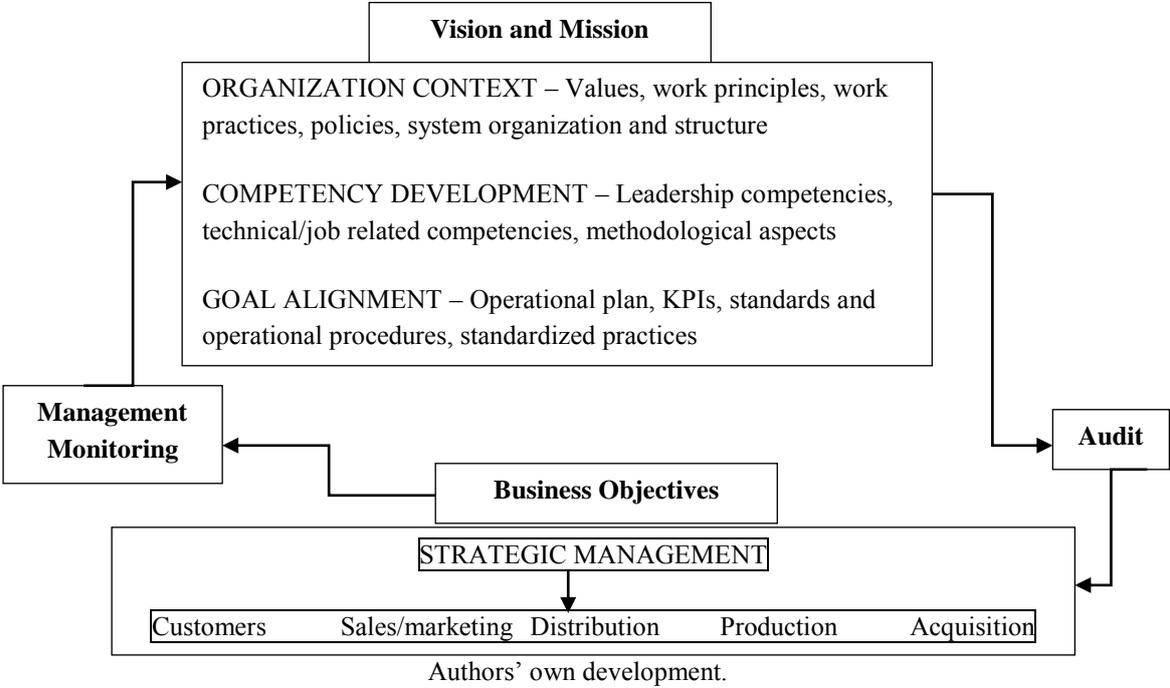
NWW is a large multinational production company with over 500 factories worldwide. From the company management perspective, knowledge has been a mix of framed experience, values, contextual information, and expert insights that provides a frame for evaluating and incorporating new experiences and information. At NWW company knowledges are linked to both the hard and soft aspects of the business, as the mission and vision are giving the frame for value setting and are linked to objectives and strategic directions of company competitiveness development (Picture 3).

The context is defined in relation with values of the company that all employees needs to prove, like respect for diversity, safety, innovation and customer satisfaction. In a comprehensive study, NWW company identified the critical capabilities for success and described each as specific behavioral indicator, so all employees know what they need to deliver day to day. To support people development in these capabilities, NWW company have built an extensive learning curriculum using a 70/20/10 KS model and defined the KM strategy.

The model argues that hands-on experience (70%) is the most beneficial because it enables people to discover and refine their job-related skills, make decisions, address challenges and interact with influential colleagues within work settings. They also learn from mistakes, receiving immediate feedback on performance. Learning from others (20%) is achieved through activities such as social learning, coaching, mentoring, collaboration, and peer-group support. This provides participants with

encouragement and feedback. The remaining 10% of professional development, coursework, and training comes from formal and traditional instruction, which are amplifiers, aiming to clarify, support, and boost individuals' learning.

**Picture 3: Frame of the strategic decisions based at NWW company**



At the company level competencies reflect a collection of competencies describing how organization expect its employees to report to work and accomplish their role. As already mention, organization start by identifying competency that already exists and compare it to its competency needs. All job requirements in terms of what do I have to do, how do I have to do, what do I need to know in order to be able to accomplish my goal, what is the level of autonomy in my area of responsibility, and what is the behavior expected are directly linked with the role in the organization and are captured and codified in a Job Success Profiles (JBSP). A list of technical and leadership competencies is identified and captured in each JBSP together with a behavioral description about expected level of autonomy for each competence.

Competence concept is used to list those attributes that motivate employees and support work performance, a collection of knowledge, skills, abilities and other characteristics that are necessary for effective job performance. Competencies are behaviors that are shown from employees who have the potential to work consistently and effectively compared with working average in order to full fil the role in organization. Competence is considered at NWW company as an attribute required by any position owner to perform well, because employees who are competent with the appropriate level set are fast, work autonomous and they are conformable with the role in organization delivering constant a high level of performance. An important factor at NWW company's culture is the alignment of individual responsibilities with a clear and ambitious set of company-level priorities, so that each employee is aware of the impact their work has on the company's results. It is a holistic process, which refers to both the behavior and the individual objectives, as well as to the contribution and involvement in other projects, with an impact on the performance of the team or the company. Thus, a

competency is considered as the individual dispositional ability and readiness to act successfully and self-organized when facing novel, unstructured or complex situations or tasks and the ability to develop solutions for future situations.

In order to track KM effectiveness in the context of NWW company, a model based on Kirkpatrick’s training evaluation model from 1959 (as discussed by Srivastava & Walia, 2018) have been adapted to the research context. Original model encompasses four levels (reaction, learning, impact, results) and in addition, the results of the Return of Investment (ROI, NWW analytics) calculations have been added as level 5. Level 1 provides useful information about how the audience has reacted to the training, in terms of quality of the material, facilitation and relevance for their job. From this evaluation you can build an action plan to improve for the next time, or to reinforce the practice if it has been a Good Example. Level 2 of evaluation ensures that participants have retained the necessary content to address their competency gaps. Level 2 evaluation can take place during the training (quizzes) or as a pre-work (baseline) and post-session activity (result), to assess the level of improvement achieved. Line managers will observe how their team members have changed their behavior after being trained, and these observations can be registered through Coaching and Assessment activities. Change in behavior can be measured by accessing Coaching and Assessments reports and may consider the use of running 360 evaluations when applicable. Level 4: is about understanding how much the training has resulted in a positive impact to the business. To measure this, it’s needed to select the Key Performance Indicators (KPI) that are supposed to be impacted – productivity gained, reduction of rework, speed increase, increase the time between breakdowns, reduce the time of repairs or adjustments, waste reduction etc. Level 5: Return of Investment (ROI) did the training payed off? This KPI is translating KPI tracked at level 4 into money - savings, costs avoidances, income increasing.

Through KM activities, managers from the NWW company could assess the correlation between the knowledge solutions created and deployed, competency developed and business results. Target Score positive showed correlation between KM and Performance improvement on the Business Results. To benefit from the tacit knowledge transfer, and not just the explicit once formalized in the training materials, an important role is playing the coaching activities, and the way competence development is guide until the full development. The role of coaches is changing during de competency development, according to the need of employees from the trainer – transferring the information and theoretical knowledge, to guide role encouraging the knowledge usage until the moment when a knowledge is fully deployed, internalized, transformed and shown through behavior and dynamic capacity. Coaching it is implemented in this organization as a managerial activity and behavior aimed to unlock the real potential of an employee.

**Table 1: Coach roles in different stages of competency development**

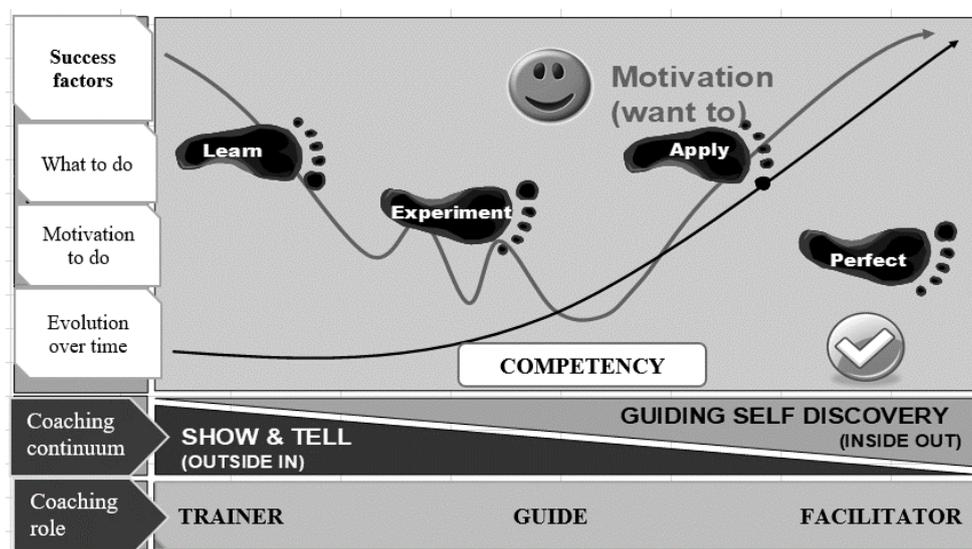
<b>Coach roles</b>	<b>Trainer</b>	<b>Guide</b>	<b>Facilitator</b>
<b>Description of coach roles</b>	Knowledge creation, knowledge capture and transfer of theoretical knowledge, deployment of expected observable behaviors, and attitude, establish the autonomy level expected from an employee depending of the	Acting as a constant source of encouragement, independent advice, support and inspiration. Sharing wisdom and experience. Encourage the practice of the new transferred competence	Drawing out employees’ views and ideas and their understanding of the content. Helping people to make their own choices, solving problems and making decisions. Challenge employees to perform and become autonomous and

	role	in a safe manner. Guide the acquisition.	even to create new knowledge and competences
<b>Stage of competency development / Training assessment</b>	LEVEL 1, 2	LEVEL 3	LEVEL 4, 5

Authors' own development.

From trainee perspective, success factors for a competency development, in short can be explained as a process in four steps (Picture 4): Learn – with support from trainer that is showing “what to do”, Experiment and Apply - with support of the guide, Apply and Perfect with support of the Facilitator employee. Motivation, the willingness to acquire knowledge is giving the employee the energy to progress and reach “perfect” level, the wisdom one, when the knowledge is already translated into behavior and employee can be autonomous. In a visual manner, the Learn – Experiment – Apply - Perfect (LEAP) model can be exposed like a journey, as depicted in Picture 5.

**Picture 4: LEAP model in NWW**



Authors' own development.

## CONCLUSIONS AND FINAL DISCUSSIONS

By promoting a learning culture in organization and supporting it by coaching activities, NWW company aims to be prepared for a sustained business development. The knowledge is incorporated into the company through dynamic KM systems and supported by the organizational structure, the management of all levels and to be consistent learning culture. Because it is a large, multidisciplinary theme, each of these phases of the KM process comprises several steps. This study achieves its goal, to describe the KM sharing, conceptualizing the process and link with the assessment category of each, by describing a deployment model adopted in a production company. The vision, mission and values set the work context and are closing strategy loop, including the KM Strategy presented. For a successful business it is a prerequisite to establish the vision, attract qualified human resources, allocate resources to complete the mission and set a positive culture to achieve the goals. We believe that focus must be on knowledge utilization and discovering the differences between how KS between employees is used to create a positive business impact. Knowledge is a powerful asset if it is leveraged and deployed in the entire organization in a sustainable manner and continuously.

For the further researches it is still open the question how technology is considered for the purpose of the KM strategy in the case of production organizations and how often organizations are able to run a complete competency assessment need to ensure that focus is still on the competencies with high impact in the business. A standard competency framework for the fourth industrial revolution may not be possible.

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