Implementation of a Knowledge Management Strategy: Reflections and Critical Success Factors

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Abstract

Nowadays, knowledge is considered a key strategic resource for organizations, crucial for obtaining long-term sustainable competitive, and many organizations are making efforts toward the implementation of knowledge management (KM) initiatives. Although companies are increasingly competing based on their ability to effectively manage knowledge, there are still numerous challenges for organizations that intend to implement KM practices. This paper presents the results of a case study conducted in a multinational company implementing a KM initiative, describing the implementation approach and investigating the critical factors for its success. In general, the results indicate the importance of the people-processes-technology trio in the implementation of KM, with greater focus on the organization and people, with some factors such as organizational culture, top management support and leadership, KM strategy and performance measurement. It is expected that these results can contribute as a consultative tool to support the preparation of strategies in this area by organizations wishing to implement KM initiatives.

Keywords
Knowledge Management, Critical Success Factors, Case Study and Implementation.

1. Introduction

In recent decades, there has been a growing interest in the area of knowledge management (KM) by organizations. Knowledge is considered a key strategic resource for organizations, essential to their success (Bitkowska, 2015; Obeso et al., 2020). In order to avoid that knowledge is retained in only employees' minds, organizations are increasingly seeking to convert individual knowledge, which is the combination of information, personal experience and understanding, into organizational knowledge (Obeso et al., 2020). According to Paliszkiewicz (2011), to obtain a competitive advantage, a company must create and acquire new knowledge, transfer it to the right parts of the organization, interpret and integrate it with existing knowledge, to finally be used and achieve better performance.

The interest in organizational knowledge has led to the implementation of knowledge management in many organizations (Alavi & Leidner, 2001). According to Abubakar et al. (2019), knowledge management is a meticulous approach to optimizing a company's knowledge. Although companies are increasingly competing based on their ability to effectively manage knowledge, there are still numerous challenges for organizations that intend to implement a knowledge management system. Some of the most significant challenges facing organizations adopting knowledge management initiatives are related to people and culture, such as the lack of a "sharing" culture and understanding of KM benefits (Yang et al., 2010). Thus, for a successful implementation of knowledge management, it is crucial to

understand which factors are critical for the effectiveness of knowledge management processes and lead to competitive advantage.

The work reported in this article is part of an ongoing project regarding a knowledge management strategy developed for a multinational wood-based panel organization, henceforth known as Company A. The organization was facing problems related mainly to the loss of organizational knowledge that could be critical for the company's future. Therefore, the goal of the practical project was to implement a KM strategy in the organization in collaboration with its management and staff. In doing so, the authors also wanted to investigate the CSFs identified in the existing literature and contribute to this field with an empirical example. The identification of CSFs is very important to organizational success in any organization, in the sense that, if the objectives associated with these factors are not achieved, it is very likely that the organization will fail (Yang et al., 2010). The work was developed under the support of a team responsible for the implementation of a knowledge academy. As a team member, it was possible to interact directly with the staff and develop several initiatives in order to capture, document and transmit knowledge within the organization.

The main objective of this research is to contribute to the area of knowledge management (KM) with a practical experience of implementing a KM strategy in a multinational organization. Therefore, this research was designed to address two questions. First - "how can Company A implement a KM strategy to improve knowledge sharing and minimize the loss of organizational knowledge?". Second - "what are the critical success factors of implementing KM strategies for those involved in similar projects?".

This paper has the following structure: the next section presents a theoretical background about knowledge management in organizations and critical success factors, before moving on to specify the methodology approach and practical case. After a presentation of the problem contextualization and KM strategy carried out in the practical case, the remain sections include a discussion based on critical success factors identified and concluding remarks.

2. Theoretical Background

2.1 About Knowledge Management in Organizations

Knowledge is one of the main instruments of competition in current and future markets (Nazarizade & Azizi, 2018), contributing to an increasing number of organizations that are implementing knowledge management initiatives (Alavi & Leidner, 2001). The main objective is to capture existing tacit knowledge and encourage workers to share and communicate knowledge among themselves. In this way, an organization can better leverage its intellectual assets, as well as position itself to respond quickly to its customers, creating new markets, developing new products and mastering emerging technologies (Awad & Ghaziri, 2004). Additionally, KM creates numerous benefits from knowledge as employees learn from it and help to improve business processes (Awad & Ghaziri, 2004).

Despite all the benefits, the decision to move to a knowledge management implementation is very important for any organization and requires a major shift in organizational culture and a commitment at all levels (Gupta et al., 2000; Smuts et al., 2009). It is crucial that all aspects of KM implementation are well considered, since the success or failure of an organization may depend on this decision (Nazarizade & Azizi, 2018). Although currently there is no universal standard for implementing knowledge management, organizations have developed multiple approaches and frameworks to design, implement and measure knowledge management initiatives, in order to meet their objectives (Smuts et al., 2009). A KM framework should have a basic understanding of knowledge operations and infrastructure in order to support the organization's operations (Abubakar et al., 2019). For Awad & Ghaziri (2004), the implementation of knowledge management is seen as a life cycle that begins with a justification and a master plan, ending with a structured system to meet the KM needs of the organization. This system should be composed of a knowledge team, that represents the organization's thinking, and of an expert in knowledge capture, design and implementation, also known as knowledge developer.

In general, to achieve a successful outcome, any knowledge management practice must be based on three fundamental and interdependent elements: people, processes and systems (Igbinovia & Ikenwe, 2018). Knowledge management involves people, also known as human resources, and the way they interact and share knowledge (Awad & Ghaziri, 2004). People are the main conveyor of knowledge (Igbinovia & Ikenwe, 2018). Processes are another important component, corresponding to the methods by which knowledge management initiatives are achieved. Igbinovia & Ikenwe (2018) state that people firstly design and then operate processes, while processes define the roles and knowledge needed by people. Last, systems or technologies are devices that support the implementation of knowledge

management, in particular people and processes involved, providing new opportunities and enabling environments for sharing knowledge (Igbinovia & Ikenwe, 2018).

2.2 About Critical Success Factors to implement Knowledge Management initiatives

As previously stated, the implementation of KM in organizations is not an easy process. Frost (2014) indicates some of the main issues that hamper the implementation of KM in organizations:

- Lack of performance indicators and measurable benefits;
- Inadequate management support;
- Improper planning, design, coordination and evaluation;
- Inadequate skill of knowledge managers and workers;
- Organizational culture problems.

This way, understanding the critical success factors (CSFs) of KM implementations can be very advantageous, reducing the risk of failure (Othman et al., 2018). According to Othman, Ismail, Yahya, & Ahmad (2018), many researchers defined critical success factors (CSFs) as "the keys in which acceptable outcomes would result in accomplished competitive performance". In this area, the success factors are activities and actions necessary to implement KM successfully (Ghomi & Barzinpour, 2018). The CSFs approach helps managers to identify what is most important for adopting KM and to ensure the organization's success and survival (Altaher, 2010).

According to Othman et al. (2018), several researchers indicate leadership, resources, information technology (IT) and culture as vital factors for a successful implementation of KM. In the study of Ghomi & Barzinpour (2018), which was taken in an university, the authors found the following critical success factors of using KM tools: human-motivational factors such as employees' motivation, resources and human resource management; information technology; education; leadership and management support; processes and activities; structure; culture; measurement; organizational infrastructure, strategy and goal; communication. Based on existing frameworks and models, the study of Theriou et al. (2011) outlines the five most important factors the authors believe to be critical for an effective KM implementation: leadership (top management support); culture (collaboration, trust), technology, KM strategy (should be integrated with the business strategy) and people (e.g. motivation). Through a literature review, Yang et al. (2010) presented a summary of CSFs that consists of 4 main categories: organizational factors, individual factors, knowledge and KM capability and organizational performance.

Table 1 summarizes critical success factors in adopting KM practices studied by several authors in literature.

Table 1. Summary of Critical Success Factors of KM implementation identified in literature

Papers	Critical Success Factors of KM implementation
Lin & Lin (2006)	- Establishment of a Reward Strategy; - Willingness to Share Knowledge; - Mechanism to Approve Activities; - Friendly System to Exchange and Reuse Knowledge; - Top Management Support.
Akhavan et al. (2006)	- Knowledge architecture, knowledge identification, knowledge sharing, knowledge storage and knowledge strategy; - Reengineering, organizational structure, training programs, pilot; - CEO support, culture, transparency, trust.
Jafari et al. (2007)	- Management: support and commitment of CEO, strategic planning and money spending; - Organizational structure, transparency, decentralization, centers of knowledge; - Human resources, that include knowledge committees, network of experts, conferences and knowledge sharing; - Culture: trust, transparency, alignment of knowledge strategies by organizational strategies and knowledge sharing; - KM architecture; - Others: pilot, information technology, training programs, Business Process Reengineering (BPR).
Yang et al. (2010)	- Organizational Factors: management support, technology support, organization structure, training, reward, leadership; - Individual Factors: learning attitude, trust, openness, incentive, adaptability, people-related factors;

	- Knowledge: knowledge structure, knowledge source; - KM Capability: sharing/transferring/dissemination, creation, application; - Organization Performance: financial index, management index.
Theriou et al. (2011)	- Leadership: top managers support; - Culture: collaboration, trust; - Technology; - KM Strategy (should be integrated w/ the organization's business strategy); - People (e.g. motivation).
Arif & Shalhoub (2014)	- Senior leadership support for KM initiatives; - Managing and motivating employees; - Organization culture; - Structural construction of knowledge; - Training and learning; - Knowledge strategy; - Communications between employees in the organization; - Infrastructure of IT; - Performance Management.
Al-Hakim & Hassan (2016)	- Human Resource; - Information Technology (IT); - Leadership; - Organizational Learning; - Organizational Strategy; - Organizational Structure; - Organizational Culture.
Ghomi & Barzinpour (2018)	- Employee motivation; - Financial and credit resources; - Human Resources Management; - Information Technology; - Training; - Leadership and management support; - Processes and activities; - Structure; - Culture; - Measurement; - Organizational infrastructure; - Strategy and goal; - Communication.
Ganapathy et al. (2019)	- Readiness to accept the new system; - Reward and recognition from Human Resources; - Individual participation and commitment toward KM practices; - Top management support and encouragement.
Heryanto et al. (2020)	- Leadership; - Culture: time, appreciation, general perspective, communication; - Structure, roles and responsibilities; - Technology: user friendly system, adequate infrastructure, knowledge base.
Yap & Toh (2020)	- Capability and capability improvement: Employees training, employees' empowerment, employee's participation, knowledge sharing, centralization; - Long-term commitment and innovation: reward policies, trust, supporting top management, knowledge strategy, formalization; - Synergetic working culture: collaboration, open communication climate, learning from mistakes, access to network infrastructure and hardware.

In general, it is possible to conclude that people are very important for KM implementation, since many of the critical success factors identified in table 1 are person-related, such as culture, top management support and leadership, employees training and motivation systems. The use of technology information (IT) is also widely mentioned, as well as a well-defined KM strategy.

3. Methodology Approach

For this research, a case study was carried out, where the authors were involved in the project implementation team and had the opportunity to conduct research, capture and share new knowledge. According to Rashid et al. (2019), a case study consists of a detailed investigation with empirical material collected from a well-defined case, providing an analysis of the context and processes. It is a good strategy when the focus is on contemporary phenomenon within some real-life context.

As members of the implementation team, the researchers were able to interact directly with different types of people from Company A, being involved in the various stages of the project. The methodology used for the research was mainly participant observation, since the researchers have been immersed in a "setting" of research and could experience and observe at first hand a range of dimensions in and of that setting (Mason, 2002). Participant observation occurs when a researcher participates in the daily activities and interactions of a group of people, learning aspects about their routines and culture (DeWalt & DeWalt, 2011). For several months, the researchers were in the organization on a daily basis, participating in meetings with different stakeholders, organizing initiatives and workshops, both related to knowledge processes and project management. Additionally, the researchers visited several plants of Company A, where they could also observe specific practices and procedures. As participant observers, the authors have taken notes throughout their experience, in order to fundament and develop the research on the KM critical success factors.

4. Practical Case: Implementation of a Knowledge Academy

4.1 Problem Contextualization

The case study was conducted within a multinational wood-based panel organization, referred here as Company A. Currently Company A has 23 industrial and commercial units in 9 locations spread over 2 continents and around 3000 employees, where more than 1600 work in operational areas. The organization was facing some challenges regarding the loss of organizational knowledge that could be critical for the company's future, since knowledge was mostly resident in key peoples' minds and spread along the organization. In addition, the organization did not have adequate training programs to transfer knowledge between employees.

For the reasons above, Company A considered essential that senior employees who leave the company have the opportunity to teach and share their knowledge with younger generations. Therefore, the organization decided to implement a Knowledge Academy with the main purpose of identify, collect and standardize its core and critical knowledge, aiming to retain and transmit it. With the purposed solution, Company A aimed to design more effective training programs and development plans and minimize the loss of organizational knowledge, in order to improve competitive advantage and align talent management with the business.

4.2 Knowledge Management Strategy

The process of implementing KM is an extensive procedure that requires a great commitment from the organization in order to achieve results (Smuts et al., 2009). The resultant information solicited from the Knowledge Academy implementation is organized into three key topics: identification of knowledge areas, organizational roles and responsibilities and the overall implementation approach.

Identification of Knowledge Areas

One of the first tasks that Company A conducted in its KM program was to identify the areas of critical knowledge that should be captured and organized. In this sense, six knowledge pillars were identified, aligned with the organization's Product Lifecycle: i) Onboarding, ii) Product & Applications, iii) Production, Technology & Equipment, iv) Market, v) Sourcing and vi) Safety, Environment & Risk Management.

Besides the identification of knowledge areas and main contents to address, the type of information that is out of scope of the Knowledge Academy was also identified. Thus, knowledge that can be obtained outside Company A (e.g. soft skills training) as well as location-specific business knowledge (e.g. work instructions for each plant) was not included.

In addition, three levels of knowledge detail were created: fundamentals, advanced and on-the-job. These detail levels determine the respective depth of information, as well as its applicability for each function. While fundamentals level aims to share basic knowledge regarding each knowledge pillar, applicable to any employee that needs this kind of information to perform his/her job, advanced level deals with detailed and deep knowledge, only applicable to employees that work directly with this kind of information. On-the-job training level is even more detailed and specific, but is out of scope of the Knowledge Academy since, as mentioned above, location-specific business knowledge was not included in the initiative initially.

Organizational Roles and Responsibilities

Another step that was also conducted in the Knowledge Academy implementation was the creation of roles and respective responsibilities. First, a department was created in Company A with a team focused only on topics of the Knowledge Academy. The main responsibilities of this team are to plan, coordinate and implement the initiative according to the established plan.

Then, for each knowledge pillar, an owner has been identified. The pillar owners are the ultimate accountable for the respective knowledge pillar. They are influential people, with several years of experience at Company A, and have the responsibility to define the scope and structure of their pillar, choose contents and priorities, as well as ensure commitment and availability from everyone involved in the project. In turn, pillar owners also must identify topic owners, who are experts in more specific topics to be addressed, to provide know-how and relevant information and support this pillar on the development of the training modules. In addition, a steering committee was also defined,

with an executive committee member, in order to provide strategic guidance and global program coordination. Figure 1 summarizes the main structure of the Knowledge Academy.

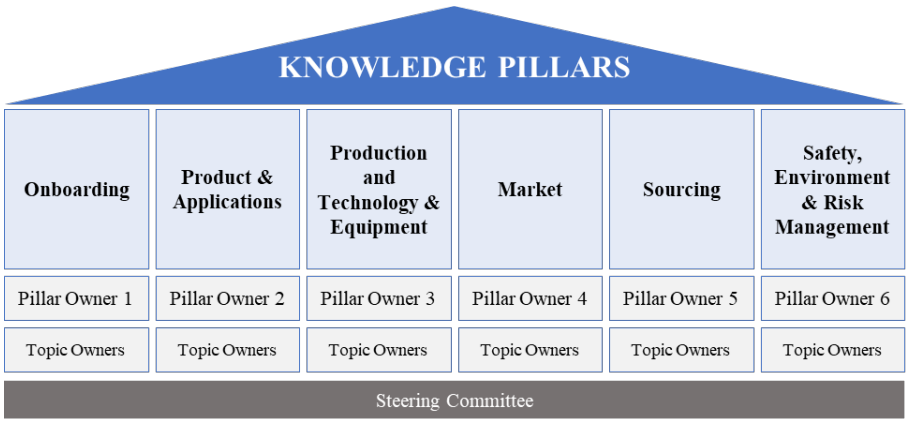

Figure 1. Knowledge Academy main Structure

Implementation Approach

This section describes the overall implementation approach, focusing on a methodology used to capture and share knowledge. The implementation of the Knowledge Academy in the organization was based on a plan with the precedence of the activities to be performed, which was updated over time. In this way, the macro plan contained which training modules were to be developed and when. This planning and prioritization of tasks was done with the support of the various stakeholders involved and was managed through frequent follow-up meetings during the project.

The development of training modules by the implementation team was based on a methodology for capturing and sharing knowledge, divided into six main steps, as shown in figure 2.

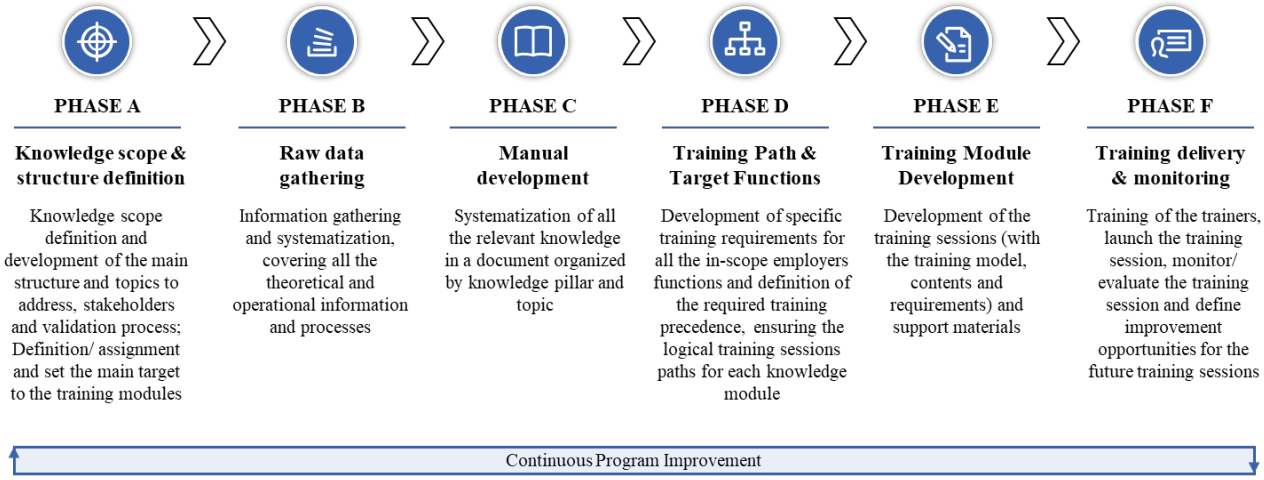

Figure 2. Knowledge Capture and Sharing Methodology

For each knowledge pillar, the implementation team met with the pillar owner to define the scope of the knowledge to be captured and the structure of the pillar (Phase A). Thus, it was possible to plan the important training modules to be developed for each knowledge pillar, according to the various themes and knowledge levels. In addition, each pillar owner identified topic owners to help the implementation team with the knowledge capture process, as well as with the knowledge validation process and approval of training materials. For each module, the target audience, topic owners and a validation committee were also identified.

After defining the structure of the knowledge to capture, the implementation team organized data gathering sessions. For the data gathering phase (Phase B), the most used method was workshops with topic owners, sometimes accompanied by plant visits, especially in the case of training modules belonging to the "Production, Technology and Equipment" pillar, where it was crucial to observe the production processes. However, since Company A has factories in several geographies worldwide, many data gathering meetings were performed online, even though face-to-face method was more effective.

With data collected, for a given training module, the implementation team proceeds to its systematization in a global manual, which must ensure transversal contents across all geographies, and its validation (Phase C). After validating the manual with the knowledge to be used in the training module, the implementation team must analyze with the pillar owner what are the target functions for each level of content, systematizing the training goals, the target audience and the precedence of training for each function (Phase D). In this sense, an excel table was created to summarize the level of knowledge required per function, for all the trainings to be developed.

After systematize the training goals, audience and path, the training module can be developed (Phase E). During the authors' experience in the project, the most used format for the training modules was e-learning, especially for fundamental training level. E-learning is an appropriate method for teaching fundamental theoretical knowledge to a large number of people. In order to gather feedback from the training sessions (Phase F), a reaction survey was created for the employees to fill out, evaluating its usefulness, ease of use and impact of the instruction methodology. In addition, some advanced training modules containing face-to-face learning and live observation were also developed. However, although trainers had been identified, it was not possible to carry out the delivery and monitoring of these trainings, due to COVID-19 situation.

It should be noted that the implementation team used Microsoft Teams platform as a form of collaboration, including all documents used in the various phases of the knowledge capture methodology. Regarding the delivery of training modules, it has been done through the online platform SAP SuccessFactors, which is a cloud-based human resource information system, where each training is assigned to employees according to their function.

5. Discussion based on Critical Success Factors

In the first two years after the launch of the Knowledge Academy, Company A developed and validated 20 training modules and impacted 220 trainees from younger generations, according to the target functions covered by the trainings. A total of 8830 hours of training received by eligible employees is estimated. During this time, the knowledge data gathering and training development processes involved 159 senior employees, who together with the core team developed 13 manuals and identified 57 potential improvement opportunities in Company A's processes.

Figure 3. Critical Success Factors of the Knowledge Academy Implementation

With the implementation of KM in the organization, it was possible to design more effective training programs and develop employees with the right skills. Throughout their experience in the project, the authors observed a number of factors that they considered critical to the success of the KM initiative, also based on the CSFs identified in the existing literature, presented in figure 3 and explained below.

CSF 1: Organizational Culture

The methodology used to capture and share knowledge in the Knowledge Academy is based on interaction with knowledge specialists from various areas. Therefore, it is essential to have a culture of trust, openness and collaboration in order to share knowledge more efficiently (Akhavan et al., 2006; Jafari et al., 2007; Theriou et al., 2011; Yang et al., 2010; Yap & Toh, 2020). Throughout the various meetings with experts, the authors never felt there was any opposition or apprehension of knowledge sharing. In fact, employees had always been very interested in the project, knowing its main goals and benefits, and they were always receptive and motivated to share the knowledge they knew and give suggestions, leaving the implementation team at ease to ask questions, which contributed positively to the success of the Knowledge Academy.

It is also important to reinforce that the involvement and inclusion of the senior and younger generations, only possible due to the inclusive culture of Company A, was of paramount importance for the success of the Academy, allowing the organization to ensure a sustainable approach to its knowledge management, while reinforcing the sense of purpose of the employees.

CSF 2: KM Strategy

There seems to be common agreement in the literature that one of the critical factors for KM implementation is to have a clear and well-planned strategy (Akhavan et al., 2006), as also concluded by the authors during this project. In fact, the strategy was planned right at the beginning of the project, where the main objectives and the activities to be carried out in order to achieve these objectives were defined, both in a short- and long-term vision. In this phase of strategy planning, it was crucial to understand the initial status of Company A in terms of KM processes and initiatives, in order to analyze the requirements and understand where the organization would like to be after the implementation of the Knowledge Academy, aligning the KM strategy with the vision of the organization.

In addition, it was also important to communicate the strategy of the Knowledge Academy and its benefits to the organization, so that employees realize its importance and are motivated to participate in the initiatives (Arif & Shalhoub, 2014; Ghomi & Barzinpour, 2018; Yang et al., 2010). For this, several approaches were used. First, during the different phases of the knowledge capture methodology, the implementation team always made an introduction of the project to participants during meetings (in case they were not yet aware of the project), explaining the objectives of the Knowledge Academy and thus why the organization was pursuing a KM strategy. Then, there were also some presentations within the organization to explain the KM strategy, as well as interviews with core team members which were shared across the various geographies of Company A.

CSF 3: Performance Measurement

The performance measurement of the program was an essential factor for the successful implementation of Knowledge Academy, also identified by other authors (Arif & Shalhoub, 2014; Yang et al., 2010). The tracking of the project, done either through weekly follow up meetings or meetings with the Steering Committee, with less frequency, allowed to perceive the status of the training modules in development and to make a better management of the project, controlling the defined milestones and prioritizing activities, in order to meet the objectives of the project and the organization. In addition, several KPIs (e.g. number of training modules, training hours, impacted employees) were created to evaluate and identify the main outputs and impacts that the initiative is creating in the organization.

CSF 4: KM Organization

This CSF is related to the fact that Company A has created an infrastructure that favors KM practices, namely the creation of specific roles (Heryanto et al., 2020). Some authors are of the opinion that an independent team for carrying out KM activities is essential for KM implementation (Ghomi & Barzinpour, 2018; Nazarizade & Azizi, 2018). The creation of a specialized department and an implementation team was fundamental for the implementation of the

Knowledge Academy. This way, it was possible to have people focused only on activities related to the KM project, without other distractions nor the concern of having to prioritize independent activities.

On the other hand, the appointment of knowledge pillar owners was also very beneficial for the project. Besides being responsible for defining the scope of their knowledge pillar and monitoring activities, they also acted as a bridge between the implementation team and experts, who are spread across various geographies. In addition, because they are respected people with influence in the organization, pillar owners also helped to ensure the commitment and availability of everyone involved in the process, being facilitators of the KM system.

Lastly, the steering committee was also crucial in providing strategic guidance for the entire project and in making important decisions. During the project, meetings with the steering committee and the core team took place on a quarterly basis.

CSF 5: Top Management Support and Leadership

The support of top management is a critical factor for the successful adoption of KM practices, highly mentioned in the literature (Arif & Shalhoub, 2014; Ganapathy et al., 2019; Heryanto et al., 2020; Lin & Lin, 2006; Theriou et al., 2011; Yang et al., 2010; Yap & Toh, 2020). As mentioned before, a steering committee was assigned to coordinate the global project and provide strategic guidance, composed of senior stakeholders. The support of top management was crucial to make several strategic decisions, such as the creation of an exclusive department for Knowledge Academy. In addition, top management showed their support for the project in several presentations, such as in meetings for presenting results and presenting strategic plans, which contributed positively to the motivation and participation of employees in the initiative.

CSF 6: Human Resource Management (HRM)

The main goal of HRM is to hire, train and retain human resources (Ghomi & Barzinpour, 2018). One of the major goals of the Knowledge Academy is to design more effective training programs and develop employees to be fully equipped with the appropriate technical and behavioral skills. Thus, HRM plays an important role in the development of employees' careers, since the training modules developed must be aligned with the employees' functions.

CSF 7: IT Application

Many researchers have identified the use of information technology (IT) as a critical factor for KM implementation (Al-Hakim & Hassan, 2016; Arif & Shalhoub, 2014; Ghomi & Barzinpour, 2018; Heryanto et al., 2020; Jafari et al., 2007; Theriou et al., 2011; Yang et al., 2010). Most of the developed training modules were launched on SAP SuccessFactors platform, as previously mentioned. Considering the size of Company A, with several plants spread over several continents, the use of IT has greatly accelerated the sharing of knowledge, since it has been stored and available on a single platform with fast access for most employees. Without the use of IT, the organizational knowledge would not be so accessible. However, the use of IT has also brought challenges, since not all employees have access to the Internet (e.g. functions as factory worker). In these cases, it was necessary to rethink how to make knowledge accessible, namely by providing computers in the plants where employees could access and perform the training modules.

In addition, the use of the technological and collaborative tool Microsoft Teams was a crucial factor for the implementation of the Knowledge Academy. First of all, this tool was chosen to store all the files used during the knowledge capture, allowing the simultaneous collaboration of several people in the documents. In addition, all online meetings were held through Microsoft Teams, facilitating knowledge sharing among the various stakeholders involved.

CSF 8: Knowledge Structure and Quality

Some authors revealed that having an appropriate knowledge structure and map is another critical success factor for KM implementation (Arif & Shalhoub, 2014; Yang et al., 2010). The creation of a structure and map for organizational knowledge has contributed to a greater understanding of the existing content in the organization and the experts in various subjects. Indeed, one of the major problems experienced by employees was the fact that knowledge was "spread" throughout the organization and employees often did not know who to turn to for certain information. In this way, the creation of knowledge pillars and the respective pillar owners and topic owners made it possible to identify

the areas of critical knowledge that should be captured and who were responsible for the areas. This factor also contributed to the capture of current and relevant content, which is fundamental to the success of the KM project (Othman et al., 2018).

In short, the CSFs identified above are the ones the authors considered most critical to the success of the Knowledge Academy during their experience in the project. Compared to the results found in the theoretical background, there were some factors often cited in the literature, such as training and rewards, which the authors did not consider in the practical project, however, it does not mean that in the future they won't be crucial for the initiative. In fact, this project is in progress and still at an early stage, where there is uncertainty regarding the future and maintenance of the Knowledge Academy. Indeed, the authors believe that incentives may be needed to motivate employees to participate in KM initiatives in the future, since rewards and incentives are considered essential and indispensable to the success of KM by many authors (Ganapathy et al., 2019; Lin & Lin, 2006; Yang et al., 2010; Yap & Toh, 2020). For the moment, no incentive system related to KM has yet been implemented in Company A, since the Knowledge Academy is a recent project and many initiatives for employees have not yet been launched. The same can be said for trainings, also widely cited in the literature (Akhavan et al., 2006; Arif & Shalhoub, 2014; Ghomi & Barzinpour, 2018; Jafari et al., 2007; Yang et al., 2010; Yap & Toh, 2020) and important for employees to understand how the KM program works and also the technology based system (du Plessis, 2007). This aspect has not yet been fully considered necessary, but in time it may become essential to the success of the Academy.

6. Conclusion

Knowledge management is a complex and important activity, increasingly sought by organizations that want to improve processes and ensure the use of useful knowledge in order to gain long-term competitive advantage. This research aimed to study the implementation process of a KM strategy for a multinational organization, Company A, and to identify what were the critical factors for the success of the initiative.

Company A decided to implement a Knowledge Academy to address the problem of critical knowledge loss, as it was spread throughout the organization and there were no formal methods of knowledge sharing between employees, including training programs. For the development of this project, it was necessary to define new roles, such as the creation of a specific team responsible for KM initiatives and the Steering Committee, as well as to make an analysis of the main areas of critical knowledge to be captured. Following a methodology to capture and share knowledge, the implementation of the Knowledge Academy contributed to build a knowledge transmission path according to the necessary skills of each function in Company A, ensure uniformity of knowledge and leverage knowledge to a variety of areas within the organization. They key elements of the initiative, as well as the implementation approach have been described and can help other organizations to prepare and implement a similar strategy.

To date, this research has been able to confirm a number of CSFs of KM identified in the literature. In general, the results indicate the importance of the people-processes-technology trio in the implementation of the Knowledge Academy in Company A, with greater focus on the organization and people. In fact, people is the greatest driver of knowledge and it is essential to adopt mechanisms and procedures that support and motivate human resources to participate in these initiatives. This way, it was crucial to have a positive organizational culture and the involvement of top management to support the KM program. If people are not motivated and do not believe in the benefits of these practices, the project will surely fail. In addition, having a clear strategy for the project, aligned with the organizational strategy, and performance measures to monitor it, as well as a specialized team and knowledge owners, also contributed to the success of the project.

Besides, the use of technology through collaborative tools was also crucial for the Knowledge Academy, facilitating the capture and sharing of knowledge. Considering the amount of information and the geographical distribution of sources in Company A, it becomes quite complicated to implement a KM strategy without the use of technology, since it strongly contributes to improving access to knowledge and collaboration among employees. However, technology cannot be seen as a single facilitator to KM, as it will never work by itself. Therefore, it serves as a support to people and processes involved, as perceived by Igbinovia & Ikenwe (2018).

Although knowledge management is a very comprehensive area and there is no single integrated approach to implement KM that works for all organizations, it is expected that these results can contribute as a consultative tool to support the preparation of strategies in this area by organizations wishing to implement KM initiatives. In fact, considering the complexity of KM programs, a good practice for such organizations is to look at what other companies have done, their main results and what led to their success. In this way, after reflecting on their current state and the objectives they intend to achieve with KM, organizations can adapt a KM strategy that fits their reality. Although the

findings of this study are relevant for all organizations pretending to implement KM initiatives, the information presented cannot be generalized to other organizations since it is a single case study.

Even though two years have passed since the beginning of the project, it should be noted that the implementation of the Knowledge Academy is still at an early stage. Considering the macro plan, there are still many training modules to develop. In addition, due to the pandemic situation of Covid-19, it has not yet been possible to implement any face-to-face training, and therefore the last phase of the knowledge capture and sharing methodology – Training delivery & monitoring – has not yet been fully explored. Therefore, it becomes pertinent to continue studying the implementation of the Knowledge Academy in scope of this organization. In the future there will certainly be more feedback from employees regarding the training modules performed, which may lead to changes in the methodology used. Additionally, the CSFs identified in the case study refer to an earlier phase of the project and therefore can be completed in a more mature phase. The project is in progress and there is still uncertainty regarding the maintenance of the Knowledge Academy.

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