

## KNOWLEDGE CREATION THAT REQUIRES REPOSITIONING IN LEARNING AND INNOVATION

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**Abstract.** *Having the advantage to acquire knowledge when one needs it, gives employees (experts, professionals, or people within the communities of practice) a degree of flexibility in innovation and also a degree of power, while “knowledge flow is fundamentally embedded in power relations” (Soenen & Moingeon, n.a.). The true nature of a successful and powerful company lies in continuous knowledge creation, in the form of providing value throughout learning and innovation and re-shaping not only the business, but also the core dimensions of knowledge management (KM). Knowledge management tools require a repositioning of innovation and learning in order to provide a unique perspective on today’s fast changing and developing organisations. The contribution of knowledge management research over the last 20 years brings into the spotlight the idea that innovation and learning are critical resources for value creation and this paper aims to investigate how knowledge management practices impact value creation in terms of creation through innovation and learning within the Romanian financial and banking institutions (referred to as Financial Sector Organisations, FSOs). Recent research identifies that there are several factors influencing knowledge management, namely: (1) performance indicators and measurable benefits; (2) planning, design, coordination, and evaluation systems; (3) skills; (4) culture; and (5) organizational structure. This paper investigates how the five above-mentioned factors influence knowledge creation within the reviewed industry, and provides practical advice for businesses in Romanian FSOs. Our research aims to take a learning and innovation approach to knowledge creation, an approach that requires repositioning of the Romanian FSOs towards new ways of boosting knowledge. In a rapidly-changing environment, every business aspect, and especially those factors that influence knowledge creation, must take a new turn in order to stimulate the communities of practice, the experts, and the professional networks, to adapt to and adopt new realities. As the knowledge management tools evolve and, at the same time, there are more complex views on how true value is created, we need to take a closer look at key factors that influence knowledge creation. Our research aims to analyze strategic themes in today’s business environment, especially how they influence value creation in the form of learning and innovation. All key factors influencing knowledge management have deep implications in practice and therefore a critical analysis of the knowledge management initiatives is essential. By disseminating newly-created knowledge throughout the Romanian FSOs, new knowledge flows will be created and thus innovation and learning outcomes will be easier to access.*

**Keywords:** *knowledge management; knowledge creation; learning; innovation; value creation.*

### Introduction

Knowledge creation in today’s fast changing organizations need a framework in which knowledge is advanced and transformed into individual and organizational value. Organizational knowledge creation, seen as a continuous process, is strongly influenced by the day-to-day achieved experiences, by an individual’s skills, as well as by organizational culture, which are all contributing to acquiring and enhancing individual values. In order to create value, employees will need to be able to access and disseminate information, to combine knowledge and to create new knowledge, while considering an individual’s skills and competencies and, overall, leadership guidance. Creating knowledge in an organization means to undertake organizational learning processes and to support knowledge initiatives, as well as to implement key knowledge management factors into the organizational backbone.

## Literature review

### *Knowledge creation*

As Skyrme (2011) observes, “Knowledge management [means] creating, managing and enhancing our knowledge to develop more competitive and sustainable economies, businesses and lifestyles.” In other words, KM is nothing else but creating knowledge. Knowledge can further be created through action, cooperation, teamwork, and learning, while both explicit and tacit knowledge are shared and converted one to another. According to Nonaka’s KM dynamics model (Nonaka, 1995), the epistemological dimension of creating knowledge is achieved through a spiral channel, which points out the socialization - externalization - combination - internalization sequence and conversions between these elements. Knowledge, in order to be created, needs a Ba platform as a framework in which individual and collective knowledge are advanced, and then we have the knowledge assets that create company-value: experimental, conceptual, routine, and systemic knowledge assets (Nonaka, 1995). Brătianu (2010) has extrapolated the two-dimensional knowledge model into a three-dimensional model by introducing the ‘reusable knowledge’ notion. This means that knowledge passes several times, during its flow process, through the spiral channel, generating new types of knowledge. Jelavic (2011) considers that in processes like knowledge creation, knowledge transfer or management, the social differences between individuals must be taken into consideration, while these are dependent on the subjective value unit of each and every person: “the matching of the individual and the organizational epistemology to this [knowledge initiative] system will yield a more effective implementation” (Jelavic, 2011). In addition, Brătianu and Orzea (2012) explain the ontological dimension of knowledge creation, which in fact is a knowledge transfer from individual knowledge to group knowledge, and from group knowledge to organizational knowledge, where the knowledge vision acts as a ‘driving force’, which puts knowledge onto the right path: “Organizational knowledge creation is a continuous process moving upward on the knowledge spiral, where the horizontal field of forces is generated by the epistemological nature of the individual learning process, and the vertical field of forces is generated by the ontological nature of the organization.” (Brătianu, & Orzea, 2012, p.18).

Firestone (n.a.) distinguishes three different KM theories, i.e., The Old Knowledge Management theory (TOKM) assuming that KM already exists and has to be only managed and facilitated, the Second Generation Knowledge Management (SGKM) specifying that KM is shaped by different adaptive organizational needs, and The New Generation of Knowledge Management (TNKM). According to TNKM (Firestone & McElroy, 2012), knowledge becomes a compound of conceptual or methodological dimensions, which characterizes the organization as being ruled by transparency, sustainable innovation, accountability, etc., in the form of ‘The Open Enterprise’ (Firestone & McElroy, 2012).

Simply put, knowledge is created when an “interpretative framework (incorporated within the head of an individual, or embedded into an artifact)” (Grundstein, n.a.) is combined with relevant information, data that emerges also from knowledge.

### *Value creation*

Frost (2014) identifies five factors influencing knowledge management in a 21st century organization: the first one encompasses performance indicators and measurable benefits; the second one comprises planning, design, coordination, and evaluation systems within the organization; the third factor includes the existing skills; the fourth one is the organizational culture; and the fifth factor is assumed by the organizational structure. The degree to which an employee contributes to knowledge acquiring, knowledge communication, and knowledge enhancement, is directly proportional to his or her value for the company: “Senior managers, middle managers, and frontline employees all play a part. Indeed, the value of any one person’s contribution is determined less by his or her location in the organizational hierarchy than by the importance of the information he or she provides to the entire knowledge-creating system” (Nonaka, 2007). Therefore, the leadership’s role becomes a key

organizational knowledge element that provides guidelines and targets to be reached by the employees, in the form of transmission from one to another, which gives the organisation a clear vision of its limits and improvement needs: “Another way top management provides employees with a sense of direction is by setting the standards for justifying the value of the knowledge that is constantly being developed by the organization’s members. Deciding which efforts to support and develop is a highly strategic task.” (Nonaka, 2007). In order to create valuable employees, who are able to access and disseminate information, to combine knowledge and to create new knowledge, today’s organizations must consider the subjective nature of people, while “the concept of truth depends on values, ideals, and contexts” (Brătianu & Orzea, 2012).

Therefore, “the knowledge creation process cannot be described only as a normative causal model” (Brătianu & Orzea, 2012). The human capital is very much depending on contexts and frameworks, therefore the same knowledge is used differently by individuals in different circumstances. The outcome, using the same information, is very much different from one employee to another, generating different knowledge depending on each and every individual’s personal filters, experiences and perceptions. But knowledge, “Once constructed it cannot be considered as an object independent from the individual who built it, or the individual who appropriates it to make a decision and to act [...]. The sustainable innovation goal is more dynamic. It is concerned with organizational learning that is creation and integration of knowledge at the organizational level.” (Grundstein, n.a.). Creating knowledge in an organization means to undertake organizational learning processes and to support knowledge initiatives, “to reinforce competencies, and to convert them into a collective knowledge through interactions, dialogue, discussions, exchange of experience, and observation.” (Grundstein, n.a.). In order to create knowledge, the 21st century organizations have to facilitate a knowledge ground, where there is the possibility to making knowledge accessible, then to communicate it and share knowledge, while “knowledge processes produce knowledge” (Firestone & McElroy, 2012). Brătianu (2010) further explains the knowledge “flow” process in an organization using a knowledge dynamics model, where the water flow is an analogy for knowledge within a pressure field. Moreover, the same author suggests that tacit knowledge can be transformed into explicit knowledge only in the field of externalization that forms ‘cognitive work’: “Cognitive work means any rational process done in decision making” (Brătianu, 2010). Therefore, the decision-making process becomes critical to the knowledge management field, and, as Ibarra (2015) suggests, any manager must “act first and then change [his/her] way of thinking – new rules for success.”

## **Methodology**

Our research is structured in open-ended questions related to factors influencing knowledge management in the Romanian FSOs, considering that our questions have an exploratory nature, aimed to develop conceptual themes. Therefore, the methodology used herein is a qualitative one, gathering new information on employee and management experiences within the field of organizational learning and innovation. Our open-ended questions help the researcher gain insight into institutional issues, such as performance indicators and their influence on the decision-making processes, different systems in place and their influence on organizational procedures and culture, employees’ skills and organizational structure.

Seven units of analysis were built for this questionnaire, then they were structured in key-components of research questions. In order to make the mapping process easier, the questions were further arranged into ten units in the form of codes, where the employees were asked to scale their own views on the topic against their ideal level on the same topic. Participants were given instructions to give each question a score from 1 (the lowest level) to 10 (the highest level) that they thought most accurately matched their statements in an ideal framework. In addition, the respondents were encouraged to point out important features of the phenomenon and to reveal key aspects of their experiences, by openly explaining their point of view.

The first unit investigated the existence of Key Performance Indicators (KPI), and their influence on decision-making strategies and the need to make this instrument perform better. The second unit aimed to ascertain if the analyzed organizations use/employ different instruments to implement learning and development processes in order to increase profitability. The third unit put forward the issue of how present are planning-, design-, coordination-, and evaluation systems in the analyzed organization's procedures. The fourth and fifth units investigated what skills respondents consider to be key to the business and what skills are further needed to be developed and trained in the organization. The sixth unit made an objective comparison of the existing culture, specific to an organisation (related to decision-making, communication, response to members' needs, success attained, the way people/departments help each other and collaborate, how the information circulates within the organization, barriers, and management styles) versus the desired culture, and what level of culture is represented on a scale from 1 to 10. The last unit looked at the extent to which participants consider the organization's structure a way to increase productivity and profitability.

The study further analyses participants' responses based on cumulative personal perception of responses, by finding similarities in responses. We created a matrix for each of the ten units, which helps to understand whether or not a statement is situated within the majority of statements, creating a cluster of the most relevant and similar statements. The analysis combines the similarities of responses, by incorporating all the individual matrices of the ten units in order to determine the most appropriate statement of the analyzed group.

It is the study's aim that participants develop their own individual views on topics related to knowledge management and especially how they perceive different factors of knowledge management versus their own ideal standards and values.

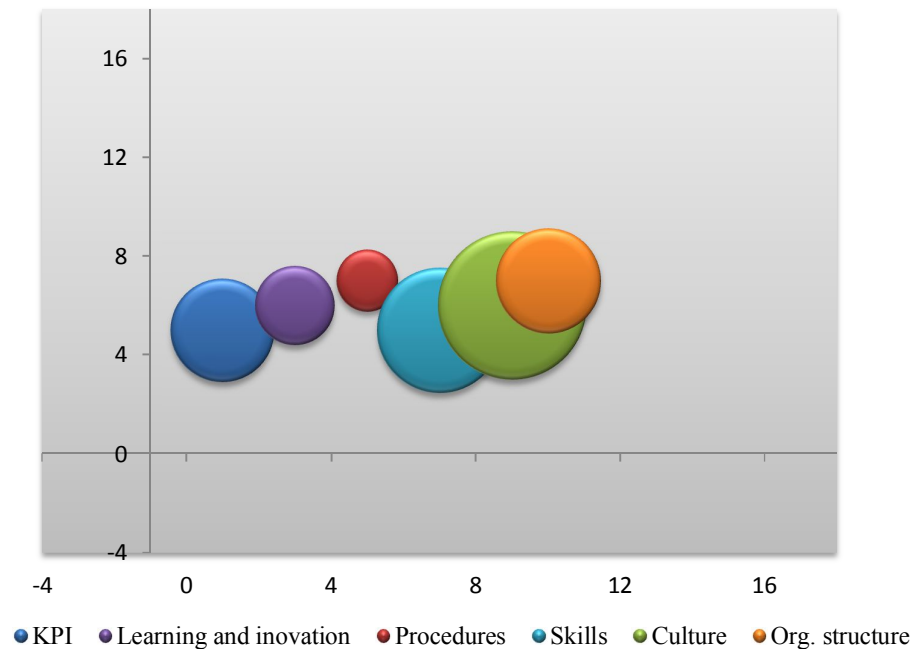
The research work investigated eight organizations from among Romanian FSOs by interviewing a representative sample of 28 employees, comprising both managers and experts, on key factors influencing knowledge creation in their organizations. The validity of the analysis is assessed by research participants, who compare the results to the original information in order to obtain feedback and correction.

### **Findings and discussions**

Considering the five above-mentioned factors found by Frost (2014), which influence knowledge creation and help create a genuine value in any organization, our analysis aims to tackle first whether managers and employees, experts and professionals use specific information based on the KM elements in order to create new knowledge, based on each and every person's own experiences and perceptions.

FSOs use KPIs mainly for business decision-making and improving operational, market and financial performance. The interviewed experienced people note that the use of KPIs on learning and innovation is getting momentum, and typical KPIs for learning and development would be the number of employees trained, the number of training days and programs per year, the percentage of performance appraisals completed on time, turnover (attrition) rate, cost per hire, etc. FSOs in Romania are increasingly aiming to build focused KPIs to assess their talents based on competencies and link these KPIs to development programs, such as career programs, promotion, etc. There is valid discussion on using ROI (return on investment) on learning programs, but whilst this is still declared, the Romanian FSOs do not yet have a consistent method to measure it. Thus, KPIs tend to focus more on "inputs" rather than "outputs". Most of the analyzed organizations are also using the "Engagement Index" as a KPI that reflects the commitment and engagement level of employees. In accordance with the interviewees, the next step should be, for these organizations, to link the Engagement Index to productivity and business outcomes. Regarding Innovation, most of the Romanian FSOs are using KPIs like new product development, but they do not have a consistent method to measure the "innovation mind-set", which relates more to culture and behavioral patterns of employees. There are

in place some indicators for measuring a certain array of skills, but continuous learning is compulsory, as well as certification of that learning process. The strategic decision-making to maintain operational performance, enhance it and develop services, includes learning as a process and as a necessary expense.

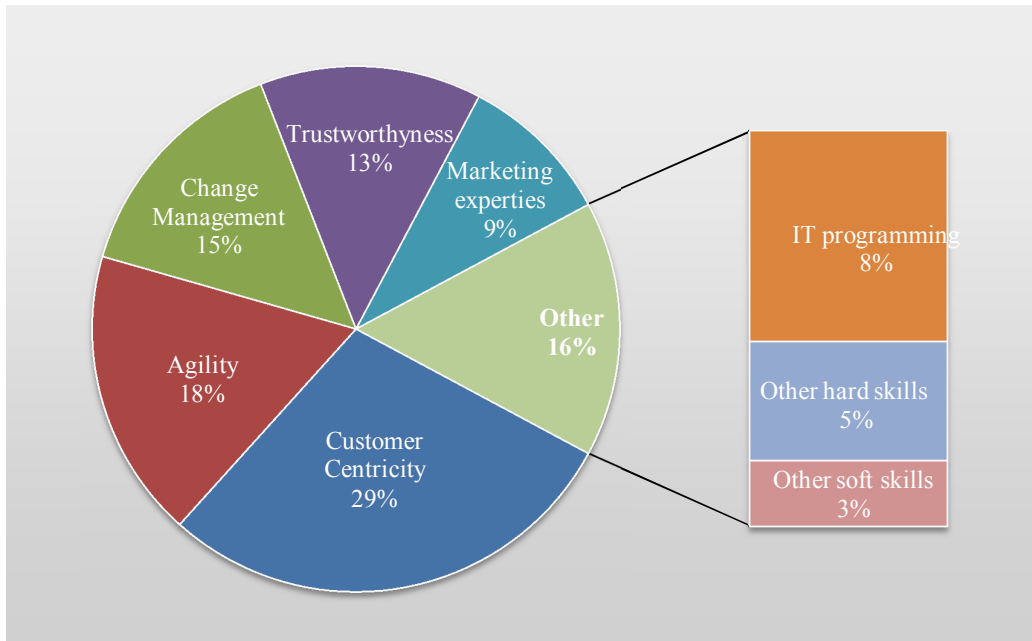


*Figure 1. Aggregated Matrix*

In this respect, the first analyzed unit, which considers the KPI level within the reviewed institutions, is at a rank of 5 out of 10 (Figure 1).

The second unit looks at whether or not the Romanian FSOs use various instruments to implement learning and development processes in order to increase profitability. Generally speaking, Performance Management systems are viewed by the Romanian FSOs as critically important, but they need to be more efficiently understood and implemented by the management of these organizations. In fact, a profitability system is considered compulsory, but much as a framework of stability for running the infrastructure. There are profitability targets in place, and employees are evaluated not necessarily in relation to that, but in relation to the objectives that contribute to the company's overall performance. For example, within some Marketing units, there are targets related to sales, but the sales process of the services is rather limited by management strategy, hence correlations between the entity's achievements (which are measured and accounted for) and its overall profitability are rather weak. There are annual training plans in place, with an obligation for each employee to enhance her or his skills and knowledge. The scoring for this unit is an average of 6 (Fig. 1), given the correlation between the existence of performance indicators and the implementation or efficient use of these systems.

The third investigated area refers to how present are planning systems and procedures in the analyzed industry's organizations. The research reveals that even if planning systems are currently in place, the fulfillment of these needs should be improved, especially in areas such as target setting, interim evaluation, links to incentives/pay, links to development and coaching. The level of procedures is therefore at a score of 7, on average (Figure 1).



**Figure 2. Existing and needed key skills**

Investigating the existing and needed skills (Figure 2), two areas are identified, namely hard skills and soft skills. As for the soft skills, Customer-Centricity is a key skill (including segmentation management, ability to build and maintain win/win relationships, move away from push-and-go to a pull strategy starting with what customers really need, taking a longer-term view of the relationships, etc.), Agility (including strategic, organisational and learning agility) and Change Management (ability to make fast changes in operating models, resilience, ability to win hearts and minds in engaging people) being highly regarded. The analysis reveals that the organizations need to move to a culture of Authentic People Care and Compassion and Ethics, which includes integrity, diversity and trust building, and therefore our analysis on people skills is becoming strictly related to the organizational culture analysis (unit six). As part of the hard skills, there are IT programming, database administration, network engineering, communications engineering, business analysts, and financial analysts still key skills that these organization need to improve in the framework of a changed culture. Nevertheless (Figure 2), Customer Centricity becomes the most valued skill, as opposed to product focus, therefore our research has found 29% of similarities in responses; Agility has brought up 18% of similarities (in the form of flexibility, continuous learning, fast response and freedom within frameworks, as opposed to controlling hierarchy) and Manage Change 15% of the responses, in the form of alignment to new frameworks and new realities, close to Trustworthiness, accounting for 14% of the responses. In terms of technology, the communication tools are critical within the analyzed industry in Romania, i.e. web publishing, file sharing, forums and conferences, but collaborative management tools are also required, such as group activities, workflow systems, and others. Both soft and hard skills are gaining momentum when considered as key items for gaining a competitive advantage.

The research featured an average of 5 points for needed skills (Figure 1) versus an ideal organization with all the key skills aligned, and a level of 6 for the organizational culture (Figure 1).

The last analyzed unit has found that not only the formal structure has a bearing on KM systems, but also the informal rules, team norms, the culture and also how performance is measured, or what success means in the organization (e.g. team versus individual) also play an even more important role (as they tend to reflect what is acceptable and what is not, how much sharing is encouraged, how knowledge creation/learning/innovation are rewarded, if learning is seen as a critical enabler for business results, etc.) Therefore, a structure has a crucial influence on the knowledge management systems and particularly on knowledge transfer. Moreover, the value of an employee's contribution is

determined more by the importance of the knowledge the employee provides rather than the hierarchical position in the organization, but bureaucratic FSOs hinder the establishment of learning frameworks, which eventually impede on FSOs productivity, competitive advantage achievement, and new skills development. Our research has found an average of 7 points out of 10 for the influence organizational structure has on productivity and profitability in the framework of a learning organization (Figure 1).

### **Recommendations and discussions**

Knowledge sharing within the Romanian FSOs is becoming essential in order to increase intellectual potential and create knowledgeable capital. The intangible resources comprising the individuals working in the analyzed industry are steadily adopting new ways of learning that provide ideas for innovation and new solutions to customers. When opportunities are missed, knowledge management is not enough to boost the organization. The FSOs may suffer from not implementing procedures, indicators or technological systems in a timely manner, which in other framework could be used to access valuable information and thus people can contribute to new achievements. A critical mass of talented people must be formed within any Romanian FSO, consisting of an adequate share of employees contributing to learning traits and knowledge creation and transfer. Considering that “the key metrics for measuring the value of new knowledge are similarly hard and quantifiable - increased efficiency, lower costs, improved return on investment” (Nonaka, 2007), our study has found that all these are current concerns of the FSOs. The main knowledge management objectives come in the form of removing barriers to change and implement new routines such as development and learning programs. A defensive attitude is preventing the organization from moving towards change, therefore the Romanian FSOs need to develop new ways to foster apprenticeship in order to shift employees’ way of thinking to a constructive approach.

In the Romanian FSOs, knowledge is created through action and practice, but also through training programs and different types of collaboration and interaction between individuals and departments. Knowledge is shared and converted into new ideas, and supported by relevant information that can spur decision-making and improve learning and innovation.

Moreover, managers are aware that performance indicators and measurable benefits, different systems and procedures, skills, organizational culture, and the organizational structure can enable and encourage knowledge sharing. Insofar as the management identifies key people who are able to provide the adequate forms of knowledge, and at the same time to share this knowledge, both informal communication and technology systems will play a critical part in developing strategic and tactical decisions. Considering the strategic part of the decision-making process, managers are expected to create the appropriate frameworks, processes, and environment to help employees share their experiences, to encourage innovation and to create new knowledge.

When teams are created to establish a learning organization, teams which are formed by a critical mass of talented people, unhindered by bureaucracy, the organization will increase its productivity and profitability, and new skills will be developed.

In investigating how knowledge management practices impact value creation in terms of creation through innovation and learning within the Romanian FSOs, our study has found that knowledge creation is perceived as the core of a competitive advantage. Considering that knowledge is continuously transferred and combined, Cook and Brown (1999) are referring to knowledge creation as a connection between knowledge and knowing, therefore the shift between holding knowledge and acting as a person who “knows” - that is somebody who creates, owns, retains and transfers knowledge - is critical in creating new knowledge. The organizational structure becomes very important if this transfer is about to happen in the Romanian FSOs, while innovation and creativity must be placed in areas where structured work is not strictly formed.

Therefore, the Romanian financial and banking industry is called to provide various systems that support working processes and facilitate communication in order to get connected to innovative processes and the communities of practice. In today's fast-paced working environment, employees must be provided with relevant and efficient data stored and organized in IT systems, and enhance communication through formal and informal communication.

Considering that "much of talent is trading value rather than creating it" (Martin, 2015, p.19), Jesuthasan et al. (2015) is bringing into discussion the idea of talent loans, instead of buying or developing new talented employees. In this context, our study reveals the need for mentors and coaches, who are able to willingly acquire, store, and transfer knowledge, which leads us to the conclusion that such talent loans are none other than people who want to teach others in the framework of a learning organization. They can be either insiders or outsourced individuals, members of the community of practice that hold hard-to-duplicate know-how and skills. On the other hand, this point of view is supported by Dewurst et al. (2013), who note "that by 2020 the worldwide shortage of highly-skilled, college-educated workers could reach 38 million to 40 million, or 13% of demand."

Thus, FSOs need to reconsider their approach towards knowledge creation and value creation, in the form of programs developed towards learning schemes, innovation advancement, cultural and behavioral patterns, customer centricity and trustworthiness.

## Conclusions

Knowledge creation depends on different knowledge mechanisms that help FSOs (1) to support interaction between members, (2) to create an environment that puts knowledge into practice, and (3) to adhere to creative processes, which foster the implementation of effective and critical knowledge rules. By integrating continuous learning processes, the analyzed organizations will boost their business value and define their strategy in both areas of knowledge management, i.e. managerial roles and technological roles.

The organizational culture plays a critical part in understanding and managing organizational knowledge, in terms of various elements, such as decision-making processes, communication, response to members' needs, success attained, the way people and departments help each other and collaborate, the way information circulates within the organization, the barriers encountered, and management styles. By tracking employees' skills and competencies, managers are able to identify different organizational needs, especially performance gaps of individuals that contribute to organizational performance. Our study reveals how knowledge can flow in different directions within Romanian FSOs and how each employee can become a participant in knowledge sharing and creation. In a competitive environment, there are several knowledge methodologies and tools which help Romanian FSOs to tap into high-level expertise, thus prioritizing value creation in the organization.

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