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Theoretical Foundations on Relationship Between KM and Territorial Planning

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Abstract: This paper aims to present the progress of the theoretical foundations that articulate the concepts involved in a knowledge management model design for higher educational institutions. The research problem of this paper is based on this question: which are and how are the theoretical foundations articulated for a Knowledge Management Model (KMM) in order to be applied to higher educational institutions (HEI), and be focused on the Territorial Planning Approach (TPA)? The methodology used corresponds to a qualitative research of analytical type, which is supported on three work methods: data analysis, symbolic interactionism and hermeneutic interpretation. Due to the participative nature of this research, these methods were incorporated to facilitate the comprehension of the diversity of perspectives about the articulation between KMM-TPA. The partial findings are classified in three sections: a) TPA Reference variables selected; b) variables required for TPA design; and c) Theoretical articulation proposal between KMM-TPA variables. The conclusions show that the most relevant KMM design difficulty is the scarcity of the theoretical foundations about KM consolidated for HEI, which implied establishing procedures for supporting the analysis of organic functions, in order to line up conceptually the model with the institution and the context. Once this difficulty is solved, in the perspective of setting the bases for strengthening various HEI aspects: organizational culture, work in equipment, intellectual capital, strategic knowledge and knowledge transference.

Keywords: knowledge management, higher education institutions, territorial planning approach, KM model

1. Introduction

The dynamic role of the universities is an imperative in contemporary society (Beecher & Streitwieser, 2017) because of the growing complexity of the substantive functions in teaching, research and social projection require to be focused on three key knowledge management (KM) aspects: learning, creation-transformation and diffusion. About *learning*, universities need to incorporate to its academic and administrative management a representative part of which is taught, as a way to strengthen the pertinence of the knowledge offered in order to develop institutional skills that contribute to improve management inside them. Regarding to the creation - transformation and diffusion, the university practices need to be wider from the traditional explicit knowledge approach based on the combination-externalization, to another based on the tacit knowledge whose emphasis is the internationalization-externalization (Nonaka & Takeuchi, 1995; Rivera, 2000). This implies whether the universities decide to reach a superior level of social and academic pertinence in its substance functions, so they require to develop skills to make explicit the tacit knowledge, based on: the coherence demanded with the objectives defined institutionally; with the pedagogical means to use in each area of knowledge; and with the incorporation of new technologies that support the materialization of its educative function. For universities to move forward and achieve this new stage, it is required the transformation of traditional structures by others emerging that focus on the current signals. For achieving it, it is necessary to use KM basic concepts that will be applied to the HEI´s field.

The KMM design acquires a relevant complexity when it is articulated with some environment aspects such as TPA, in this case. This decision represents a higher difficulty grade, because of TPA is localized in a higher complexity context, being a theoretical concept and an empiric referent at the same time. Therefore, this research is delimited about the aspect related to *economic development*, which is part of TPA in the cities where the HEIs belong to. It is important to keep in mind that TPA is part of the own institutional context, that is why the KMM design must be articulated incorporating different variables related to creation, retention and transference of knowledge, which should be analyzed since three basic properties: each organic unit, the relation between such units, and the intellectual capital that such units possess.

As consequence, the research problem is proposed by means of the next question: Which are and how are the theoretical foundations articulated for a Knowledge Management Model (KMM) in order to be applied to higher educational institutions (HEI), and be focused on the Territorial Planning Approach (TPA)?

2. Literature review

The specialized literature review about KM in HEI was carried out for identifying high impact material published during the last three years (2015-2016-2017), indexed at SCOPUS. Its aim was to establish a theoretical framework pertinent for KMM and the research objective proposed. The results showed that production is not representative in the university field, contrasting with the high density it has in the corporate field.

The main tendencies found show that literature focus is oriented to two huge perspectives or approaches: *development* and *evaluation*. About the *development*, the literature is addressed to diverse functional and mission aspects of HEIs such as: quality, economy, innovation, strategic management, empowerment, conceptual models, educative technology, social networks, social responsibility, teaching and research. Regarding evaluation, the most relevant aspects are: teaching-learning, projects, research groups, strategic management, institutional management, teaching management, management factors, work methods and knowledge transference. This suggests that the current interest about KMM in HEI is still in diagnosis and evaluation phase, and it has not made incursions yet in the proposal constructions. Even some exceptions are registered, particularly about university KM model design (Asma & Abdellatif, 2016), KM systems for research (Dachyar, Alam & Pratama, 2016), and KM computer systems (de Freitas & Yáber, 2015), confirming our argument about the lack of strength in this kind of proposals.

The 37 findings from the analyzed literature were classified as follows: Q2 (4 registers); Q3 (13 registers); Q4 (4 registers); and other publications as conferences and proceedings (16 registers). Below the classification of the registers are shown in Table 1, where each author´s perspective or approach is indicated. The information was ordered combining the next criteria: recent publication year, higher H index, and author´s last name in alphabetic order. Explication: the quartile (Q) is an indicator or measure of position of a magazine in relation to all of its area. If we divide into 4 equal parts a list of ordered magazines, from highest to lowest impact factor, each of these parts will be a quartile. The journals with the highest impact factor will be the first quartile (Q1), the middle quartiles will be the second (Q2), the third (Q3) and the lower quartile will be the fourth (Q4).

Table 1: Category: KM/sub-category: Universities or higher education institutions/ Quartiles: Q2, Q3, Q4 and others (conferences and proceedings)

QUARTILE Q2			QUARTILE Q4		
PERSPECTIVE OR FOCUS	AUTHORS	H Index (publication)	PERSPECTIVE OR FOCUS	AUTHORS	H Index (publication)
Performance of knowledge economy	Stamou (2017)	32	Assessment of strategic management	Barbón & Fernández (2017)	7
Design a new model	Asma & Abdellatif (2016)	12	Assessment of medición methods	Sauza-Bedolla, Rosso, D'Antonio, Chiabert & Romagnoli (2016)	22
Assessment of teaching	Marouf & Agarwal (2016)	12	Performance of research system	Upadhyaya & Pillai (2016)	2
Assessment of project	Dukić, Kozina & Milković (2015)	12	Performance and assessment of research system	Gómez-Vargas & Alsina (2015)	1
QUARTILE Q3			OTHERS: Conferences - Proceedings		
PERSPECTIVE OR FOCUS	AUTHORS	H Index (publication)	PERSPECTIVE OR FOCUS	AUTHORS	H Index (publication)
Performance of quality	Budiastuti & Prabowo (2017)	14	Performance of using social networks	Corcoran & Duane (2016)	6
Performance of employee empowerment	Hasani & Sheikhesmaeili (2016)	26	Performance of knowledge transfer	Martins, Silva & Silva (2016)	6
Performance of conceptual model	Ojo (2016)	13	Assessment of research	Panikarova & Vlasov (2016)	6
Assessment of innovation in research groups	Páez, Zamora & Velez (2016)	13	Performance of strategies	Stefferud & Vold (2016)	6
Performance of library management	Sudarshan (2016)	4	Performance of research	Almudallal, Muktar & Bakri (2016)	-
Performance of virtual education	Muñoz, Lopez, Lagos, Vásquez, Hidalgo & Vera (2015)	177	Design of research	Dachyar, Alam & Pratama (2016)	-
Performance of educational tecnology	Jing, Yahui, Ning & Jingxia (2015)	14	Assessment of management factors	Du (2016)	-
Assessment of institutional management	Namdev (2015)	13	Performance of research	Arias & Collazos (2015)	6
Assessment of medición methods	Al-Oqaily, Hassan, Al Dala'ien & Rashid (2015)	12	Assessment of teaching-learning	Benítez, Questier & Pérez (2015)	6
Assessment of medición methods	Rashid, Hassan & Al-Oqaily (2015)	12	Performance of the narrative strategie	Leon & Madalina (2015)	6
Performance of teaching innovation	Qi & Zhang (2015)	4	Assessment of teaching management	Puntillo & Veltri (2015)	6
Design and performance of management systems	de Freitas & Yáber (2015)	3	Performance of social responsability	Reis, von Schwedler & Gomes (2015)	6
Performance of model management implementation	Baradaran & Nodehi (2015)	2	Performance of functional focus	Abdellatif & Asma (2015)	-
			Assessment of tacit transfer	Chugh (2015)	-
			Performance of research-practice	Dalkir, Bedford & Miller (2015)	-
			Performance of management strategie	Gourova, Todorova & Dragomirova (2015)	-

Source: Based on SJR Scimago – SCOPUS 2017

3. Methodology

It is a qualitative research, descriptive-type, whose aim is to approach to the phenomenon from a hermeneutic-comprehensive framework (Gadamer, 1977; Berstein, 1985; Vatimo, 1995; Herrera, 2009) and symbolic interactionism (Rizo, 2004) that allows to access to the possible comprehensions presented in the above mentioned concepts, variables and aspects to be studied in order to disclose the construction meaning as social interaction product of the participants (Blumer, 1982). In other words, this methodology looks for understanding both the

individual construction and the sense production that is shaped in the different concepts and meanings (Geertz, 1996). This is needed because people carry out actions about objects in their world and interact with others based on the meanings that such objects have for them (Bauman, 2002), through their symbols.

4. Partial findings

4.1 Reference variables: TPA

The external reference selected for KMM design is in "Plan de Desarrollo Municipal de Envigado (PDM), 2016-2019", which proposes the specific TPA guidelines. The referent is located in the strategic line No. 5 from PDM addressed to "Economic development with competitive and regional integration". From this line, it is proposed a program oriented to "Strengthen of the strategic management for territorial competitiveness by means of the alliance Education-Corporate-State and the cooperation management for the local economic development". In the same way, this program is taken as a key project and a specific referent: Strategic route for powering the local economic development. In Table 2, some variables and aspects established as referents for the model design are given.

Table 2: Reference variables selected since TPA

STRATEGIC LINE	PROGRAM	PROJECT	INDICATORS	VARIABLES	ASPECTS
Economic development with competitiveness and regional integration	Strengthening strategic direction for territorial competitiveness, through the Education-Business-State alliance, and the management of cooperation for local economic development	Strategic route to boost local economic development	Updated study of the economic vocation of the Municipality	Economic sectors	Primary; Secondary; Tertiary
				Human resource	Studies; Work experience
				Infrastructure	Urban; Rural; Roads; Communications; Public services; Living place
				Transport	Aerial; Land; Public; Private
				Work	Population of working age; Level of employment; Sectors; Level of income
				Economy	Economic sectors; Economic activities; General GDP; GDP per capita; Sectoral diversification; Gross production
			Implementation of strategic alliances for cooperation and international relations	Strategic alliances	Regional and international articulation; Transfer of technology and knowledge; Leadership; Mobility; Certification
				Cooperation	Technological and scientific; Educational; Financial; Humanitarian; International organizations
				International relations	Regional and global political system; Public and private institutions; Regional and global economy; Management of public policies
			Projects executed from the Education-Business-State alliance	Policy and support structure (State)	Public politics; Financial contributions for the promotion of R & D & I
				Production structure (Business)	Innovation; Competitiveness; Cooperation; Opening to the academy; Social and environmental responsibility
				Scientific and technological infrastructure (University)	Applied research; Innovation; Technological and scientific transfer

Source: Based on PDM Envigado (2016-2019), Schutte & Barkhuizen (2015), Alí & Avdic (2015)

4.2 Required variables: KMM

Due to the fact that TPA is the external referent for KMM design at Institución Universitaria de Envigado (IUE), the variables identified correspond to IUE´s intern processes and some external process es too. The variables were separated following the general aspects that they have, in terms of: *explicit knowledge* and *tacit knowledge*.

During the research development, it will be needed to pass to another analysis level: to emphasize on the content of the identified aspects to establish which IUE´s organic units are responsible for each of them. In the Table 3, the analysis advances are synthesized:

Table 3: Required variables for KMM design

DIMENSION	PROCESS	VARIABLE	GENERAL ASPECTS OF KNOWLEDGE	
			Explicit	Tacit
Internal	Missionary	Teaching	Pedagogical supports	Pedagogical practices
		Research	Protocols and standards	Know-how and products
		Extension	Protocols and standards	Capacity of negotiation
	Support	Administration	Organizational structure Administrative procedures and practices	Organizational culture Management know-how
		Technological	ICT platforms and technical equipment	Use of ICT and technical equipment
	Strategic	Addressing	Design of plans and strategies	Individual and group performance
		Communication	Protocols and standards	Organizational culture
		Evaluation	Self-evaluation standards Design of plans of improvement	Individual and group performance Individual and group performance
External	Government regulation	Legality	Adjustment to standards Design of plans, programs and projects	Interpretation of norms Interpretation of needs and opportunities
	Dynamics of the private sector	Relevance	Design of plans, programs and projects	Interpretation of needs and opportunities
	Education Trends	Innovation	Design of plans, programs and projects	Interpretation of needs and opportunities

Source: Based on MDP-IUE (2017), PDI-IUE (2017-2020), Asma & Abdellatif (2016), Dachyar et al (2016), De Freitas & Yáber (2015)

4.3 Proposal of articulation between variables: KMM-TPA

For the research development, a KMM systemic design is proposed. This is composed by four parts: 1. The income variables corresponding to the TPA external referent; 2. The income variables corresponding to KMM internal requirements; 3. The KM process in three parts: a) KM in HEI organic units, b) SECI process (socialization,

externalization, combination and internalization), and c) Knowledge capitalization process; 4. Knowledge transference to the environment.

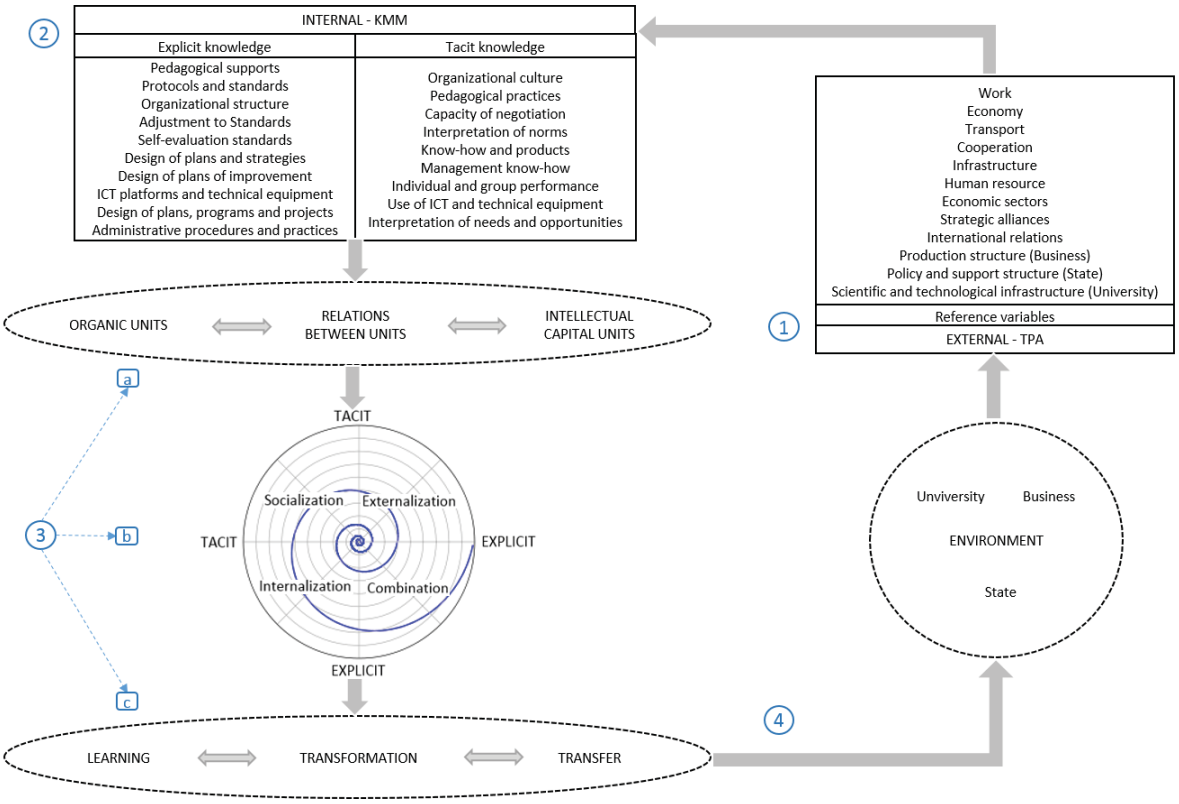

Figure 1: Articulation design: KMM-TPA

5. Conclusions

This work in progress shows the advances of a project, whose results will be applied in three years. Due to the complexity of KMM design, it was decided to carry out this pilot or basic design, which will help to perfect the model by means of the established time; this is the main reason for having delimitated the internal and external design referents.

Even the theoretical foundations for KMM design applicable to HEI are not deeply consolidated yet, but some exceptions, we have decided to try a design that probably will be useful for our institution IUE; especially, for the interest we have on getting articulated with the territorial development in our region. Likewise, we pretend that the scientific community find interest points for the academic debate and the reflection about the different cultural visions of the KM in HEIs in other places in the world. The center of the debate, is probably in the different conceptions of the development of the HEIs.

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Performance Impacts of Knowledge Management Practices Exploration and Exploitation

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Abstract: This research examines the impacts of knowledge management (KM) practices exploration and exploitation on employee's job performance in organizations. KM practices exploration represents the number of KM practices employed by the organization, while KM practices exploitation represents the average years of experience with the use of these KM practices. This research is expected to have theoretical and practical contributions. Theoretically, it contributes to KM practices exploration and exploitation literature. Practically, our findings have significant implications for policy makers. The results provide empirical evidence on the impact of KM practices exploration and exploitation antecedents on employee's job performance.

Keywords: knowledge management, knowledge management practices, exploration, exploitation, job performance

1. Introduction

Knowledge is increasingly seen as the critical driving force for improving and sustaining organizational competitiveness (Wong, 2005). Organizations are increasingly becoming knowledge intensive and their performance highly pertains to knowledge-related issues (Kianto et al., 2014). Organizations need to be aware of the necessary important factors that will influence their efforts to realize KM initiatives full benefits.

The aim of this research is to investigate how the introduction of KM practices exploration and exploitation can enable employee's job performance to improve in organizations.

KM practices refer to "management practices which support the efficient and effective management of knowledge for organizational benefit" (Andreeva & Kianto, 2012). Accordingly, KM can be seen as an organizational innovation that catalysts changes in strategy and traditional management practices (Marque & Jose, 2006).

Further, KM practices exploration refers to the spread or the number of KM practices applied by the organization. Therefore, we seek to investigate the effects of the organization's ability to explore and employ a large array of KM practices. The introduction of KM practices creates an appropriate environment for developing some distinctive competences and thus enhances the performance in organizations (Marque & Jose, 2006). Exploitation, on the other hand, captures the longevity or the degree of experience with employing specific KM practice. Previous literature has noted that organizations can gain significant business values from adopting and deploying more KM practices and from the exploitation of these practices into the ongoing work processes in organizations (Gray, 2001; Purvis, Sambamurthy, & Zmud,, 2001). Missing from these investigations, however, are studies that empirically test the effects of KM practices exploration and exploitation on performance. Therefore, our focus is on filling this gap and examining how KM practices exploration and exploitation impact employee's job performance in organizations.

The rest of this paper is organized as follows. In the next section, we present the research background and research hypotheses. Next, we discuss the details of our methodology to conduct this research. Conclusion and future work are presented in the final section.

2. Background

2.1 Knowledge management practices

Knowledge is being seen as one of the most important strategic asset in organizations, a primary source of competitive advantage (Stewart & Ruckdeschel, 1998) and long term sustainability and success of organizations (Nonaka & Takeuchi, 1995). Knowledge management is about managing organizational knowledge and exploiting knowledge creation and sharing as a key for organizational capabilities (Nonaka & Takeuchi, 1995).

The goals of KM are the improvement of organizational processes. This includes: innovation, decision making, individual performance. These, as a result, leverage the organizational performance (King, 2009).

The success of KM within organizations is largely affected by the organizational practices or systems through which KM's goals can be achieved. These practices can be in the form of motivating people to participate in achieving KM's goal or support creating the appropriate environment that would enable KM success (King, 2009).

The literature classifies KM practices into two main categories: technological practices and human-related practices (Andreeva & Kianto, 2012; Hansen, Nohria, & Tierney, 1999). Technological practices for KM are an essential part of knowledge management success. Basically, these practices include technological information systems that concerns with facilitating communication and information processing (Andreeva & Kianto, 2012). Examples include: information technologies that support management decisions and knowledge work, KM systems and tools, knowledge sharing tools, and knowledge repository.

Human-related practices for KM, on the other hand, mostly related to manage employees as the essential source of knowledge (Andreeva & Kianto, 2012). Examples of human-related KM practices include: reward system for motivating knowledge sharing and creation, and workforce retention.

In this vein, there is a growing recognition of KM contributions to organizational performance. Andreeva and Kianto (2012) stated that the literature interpreted and measured performance very differently ranging from innovativeness, employee improvement, product improvement, customer intimacy and operational excellence, and competitiveness.

Kianto et al. (2014) argued that KM practices moderate the link between intellectual capital represented by human and organizational performance. In particular, certain KM practices positively moderate the effect of intellectual capital assets on organizational performance. Chena and Huangb (2009) studied the effect of knowledge management capacity on the relationship between strategic human resource practices and innovation performance. The results indicated that knowledge management capacity mediates the link between strategic human resources practices and innovation performance.

Several studies also investigated the relationship between KM practices and performance (Andreeva & Kianto, 2012; Darroch, 2005; Gloet & Terziovski, 2004; Kianto et al., 2014; Marque & Jose, 2006). The overall conclusion derived from these studies is that KM significantly affects performance. However, we noted that while there is a vast amount of literature on the relationship between KM practices and performance in organizations, there is a neglect of the effects of KM practices spread and longevity and their impact on performance.

3. Hypotheses development

In this research, we consider two constructs: exploration and exploitation. Exploration is defined as the exploration of new possibilities of knowledge management practices while exploitation refers to the assimilation of existing knowledge management practices in organizations (Gray, 2001).

Both exploration and exploitation are essential for organizations and help them compete (Gray, 2001; Purvis et al., 2001). Voss, Sirdeshmukh and Voss (2008) stated that exploration is a tool for introducing radical innovations in organization and help extends existing product competencies. A higher level of KM practices employed in organizations cumulatively would enhance employee performance. For example, a higher spread of KM practices such as good work practices database, lessons learned, manuals of training etc. could support timely access to information, support internal communication and collaboration between employees, prompt feedback, and thus enhance stimulating ideas and learning. The employing of more human-related KM practices could also promote knowledge sharing, improve worker retention, and thus enhance worker skills and knowledge.

In contrast, exploitation reflects greater assimilation focus (Setia et al., 2011) and includes things such as "refinement, choice, production, efficiency, selection, implementation, and execution" (March, 1991). Beyond exploring new KM practices, extended periods of employing these practices are needed to change the existing work settings., this point shed light on the importance of considering not only employing many KM practices but

also on developing higher level of KM practices exploitation to warrant improvement in performance. With time, workers gain experience, develop competence, and are able to excel these KM practices effectively. Greater KM practices exploitation could also contribute to the internal learning of workers, enhance their ability to share knowledge and create new knowledge. As a result, greater KM longevity likely enables superior performance and encourage innovation by employees. Therefore, our hypotheses are as follows:

H1: Higher level of KM practices exploration in organization will be positively associated with employee performance.

H2: Higher level of KM practices exploitation will be positively associated with employee performance.

4. Method and study variables

A two-dimensional survey will be conducted with employees in higher education as a study sample. One dimension addresses which KM practices were implemented in their business units and the length of experience with specific KM practices, and the second dimension is a self-assessment of the universities' employees as to their perception of the impact of KM practices implementation on their job performance. Statistical analysis will be conducted to determine if a positive relationship exists between KM practices exploration and exploitation and employee's job performance.

4.1 Study variables

The dependent variable in this study is employee's job performance. This study will use self-rated performance to assess employee's job performance (Hoffman, Nathan, & Holden, 1991). Using self-evaluation report, employees will be asked to rate their performance. The report includes items such as quality of the task completed, job knowledge, amount of work performed, etc. (Viswesvaran, Ones, & Schmidt, 1996; Greenhaus, Parasuraman, & Wormley, 1990). KM exploration and exploitation represent the independent variables. The operationalization of KM practices exploration and exploitation utilized the approach of Setia et al. (2011). KM practices exploration represents the number of KM practices available for an employee in his/her work domain. KM exploitation, on the other hand, represents the overall average experience or average number of years with all KM practices available for an employee in the work domain.

5. Conclusion and future work

This research extends the analysis of KM practices impacts on performance in organizations to investigate the extent to which KM practices exploration and exploitation impact employee's performance. We assume that organizations will realize greater benefits in terms of job performance from KM practices if they are combined with higher level of exploration and exploitation. Future work involves empirically testing this assumption in higher education context comprising of universities' employees as a study sample.

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Methodological Framework Regarding Knowledge Innovation Matrix Development

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Abstract: Worldwide economic current context change the organization's approach regarding "knowledge". Organizations realize that without an effective knowledge management cannot handle the change; that's why their new actual orientation is to knowledge based view approach. Therefore knowledge could be considered as the most valuable asset for organizations that can bring value and success; it can be seen as the foundation of all management processes. Likewise it must be mention that actual competitive environment boosts organizations orientations towards innovation – the engine of growth and organizations development. The organizational innovation process can be considered to be a very important competitive leverage that could bring many benefits. It's consequently necessary that organizations must possess various management tools that could improve the innovation process based on its required knowledge; so it can be observed the need for different innovation knowledge matrixes customized per various fields. This paper aims to present a developed methodological framework that could investigate the possibility to design a knowledge innovation matrix (KIM) for textile industry organizations. The development of such a matrix properly designed and properly understood can lead to a substantial improvement of the organizational innovation process. However this developed theoretical framework, which will present essentially different stages, objectives and a research model, have a broad spectrum, and therefore it can be used by any organizational managers, or by other researchers. Consequently this paper wishes to present a simple and effective managerial tool, which could bring a theoretical and practical contribution in the field of knowledge management and innovation management.

Keywords: knowledge matrix, innovation process, (research) methodological framework

1. Introduction

Today business environment is extremely complex. Thus "organizations are increasingly confused due to the deep economic and financial changes at the local, regional and worldwide level; however these changes cause frequent and rapid progress of organizations" (Istrate and Herghiligiu, 2016).

Knowledge management (KM) could be consider as a framework that integrates people, processes and various technologies in order to achieve sustainable results by maximizing organizational performance through knowledge acquisition (Wang, 2015; Seleim and Khalil, 2011). Knowledge reprezents a major resource for competitiveness, and KM is a solid foundation for any organizations, but also a criterion for organizational developement. It is important for an organizations to implement (new) knowledge through a well-established strategy. Therefore organizations must focus on developement of viable knowledge. This concept brings to light the importance of linking the knowledge strategy with the business strategy. Only viable strategic knowledge can be important for company assets. Thus, an organization do not act wrongly if it uses its scarce resources to boost its viable resources, because determination of strategic assets offers unique challenges (Luca, 2016; Luca et al., 2016a; Luca et al., 2016b).

Likewise it must be mention that the engine of growth and organizations development is innovation; in the actual competitive environment the innovation process boosts organizations orientations towards new limit. The main objective of this work is to present a (research) methodological framework that could investigate the possibility to design a knowledge innovation matrix (KIM) for textile industry organizations.

This paper is organized as follows: in Sect. 2 we present the methodological framework regarding knowledge innovation matrix – (a) the general research methodology (Figure 1) and (b) (research) methodological framework regarding KIM ((research) methodology regarding KIM – Figure 2). In the Sect. 3 it's presented the conclusions.

2. Methodological framework regarding knowledge innovation matrix

This (research) methodological framework offers essentially the posibility to design a knowledge innovation matrix (KIM) for textile industry organizations. The development of such a matrix properly designed and properly understood can lead to a substantial improvement of the organizational innovation process. However this developed theoretical framework, which will present essentially different stages, objectives and a research model, have a broad spectrum, and therefore it can be used by any organizational managers, or by other researchers.

2.1 General researched methodology

The general researched methodology used in order to develop/ design a (research) methodological framework regarding KIM could be observed in Figure 1.

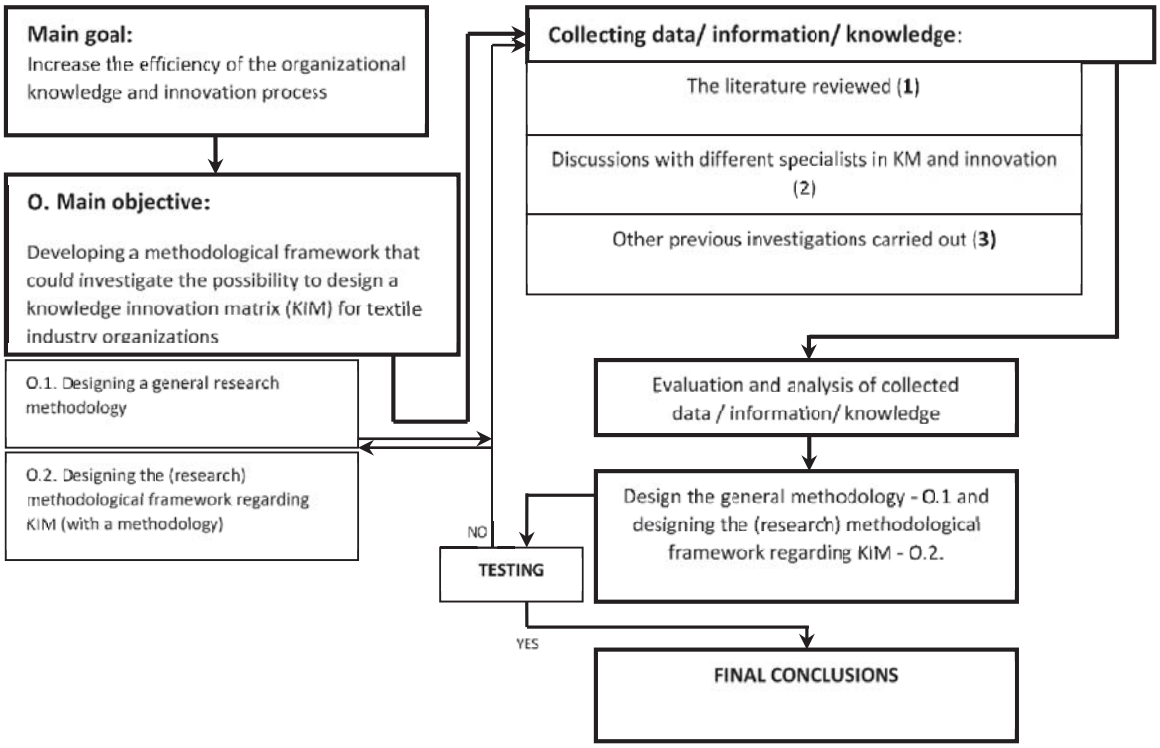

Figure 1: General research methodology

2.2 **Methodological** framework regarding KIM

Firstly when it's considered/ approached the expression **KIM** (knowledge innovation matrix) it necessary to define synthetically the correlation of knowledge and innovation. Therefore "Herkema (2003) defines innovation as a knowledge process aimed at creating new knowledge geared towards the development of commercial and viable solutions. Innovation is a process wherein knowledge is acquired, shared and assimilated with the aim to create new knowledge, which embodies products and services. …….. innovation is the adoption of an idea or behavior that is new to the organization. The innovation can be a new product, a new service or a new technology. Innovation is related to change, which can be radical or incremental" (du Plessis, 2007).

In the literature regarding various knowledge innovation matrices (as Gregor and Hevner, 2014) are few studies, and that is why more explanations/ approaches are needed. Therefore was developed a (research) methodology regarding KIM (Figure 2).

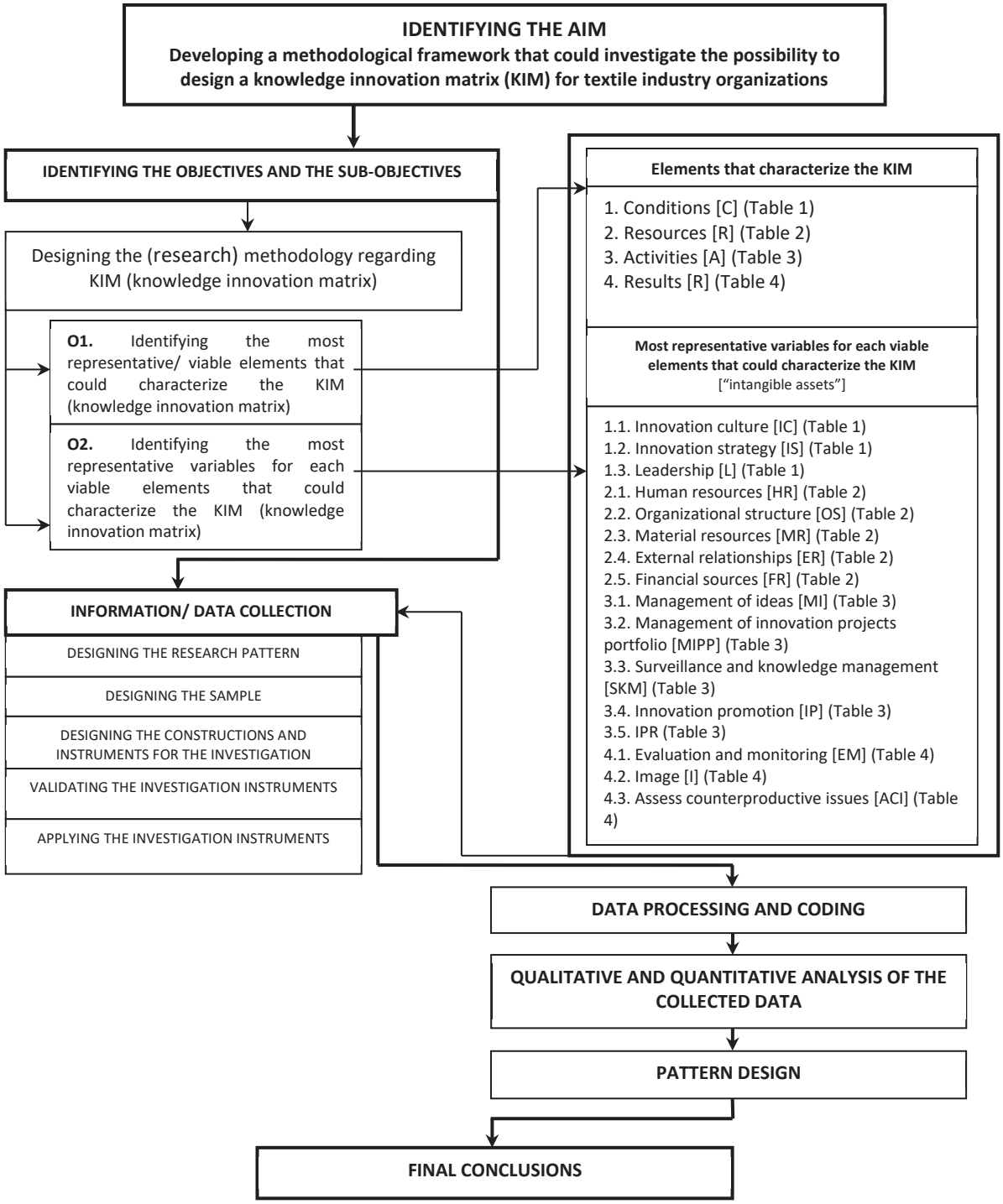

Figure 2: The (research) methodology regarding KIM

Table 1: Structure of proposed knowledge matrix for innovation in textile enterprises – element conditions

No.	Elements	Dimensions	General proposed variables (selection)
1.	C	IC	Existence of organizational technological surveillance associated to innovations; Organizational internal environment is flexible to continuous improvements/ changes; Existence of well structured organizational knowledge sharing mechanisms; and so on.
		IS	Existence/ communication of innovation policy to the organizational employees; Relationship between innovation strategy and organizational goals/ resources;

No.	Elements	Dimensions	General proposed variables (selection)
			Existence of evaluation/ analysis and sharing process for organizational innovation plan; and so on.
		L	Relationship between organization's strategy and innovative vision; Correlation between leadership structures and organizational innovative activities; Existence of a budget line for innovation activities; and so on.

Source: developed/ agreed by all partners of TexMatrix project

Table 2: Structure of proposed knowledge matrix for innovation in textile enterprises – element resources

No.	Elements	Dimensions	General proposed variables (selection)
2.	R	2.1. HR	Existence of organizational HR policy/ training policy which enhance innovation process; The role of employees in the innovation process; Organizations are orientated to different improvement programs; and so on.
		2.2. OS	Organizations stimulates through its structure the creation of innovative ideas; Organizational orientation to various external stakeholders in order to enhance innovation; Organizational methods and techniques for KM; and so on.
		2.3. MR	Organizations orientation to innovative materials; Existence of an organizational technological improvement plan; Access of textiles organizations to the latest information resources; and so on.
		2.4. ER	Existence of various relations between organizations and research centres/universities; Textile organizations involvement in different international initiatives; and so on.
		2.5. FS	Organizations orientation to various external financial resources in order to develop innovation process; and so on.

Source: developed/ agreed by all partners of TexMatrix project

Table 3: Structure of proposed knowledge matrix for innovation in textile enterprises – element activities

No.	Elements	Dimensions	General proposed variables (selection)
3.	A	3.1. MI	Organizational mechanisms to identify new creative ideas; Organizations implements new ideas; and so on.
		3.2. MIPP	Existence of a organizational innovation asset; Organizations analyze the financial effect of new ideas implementation; and so on.
		3.3. SKM	Existence of organizational benchmarking process; Existence of organizational market analysis process; and so on.
		3.4. IP	Organizational innovation image;; Existence of partnerships regarding implementation of new innovative ideas; and so on.
		3.5. IPR	Organizational relations between intellectual property and innovations process; Existence of organizations registered patents; and so on.

Source: developed/ agreed by all partners of TexMatrix project

Table 4: Structure of proposed knowledge matrix for innovation in textile enterprises – element results

No.	Elements	Dimensions	General proposed variables (selection)
4.	R	4.1. EM	Organizational evaluation and analysis regarding the influence of various stakeholders in innovations process; Organizational evaluation and analysis regarding implementation of various innovative technologies; Evaluation and analysis regarding innovation impact on organizational performance; and so on.

No.	Elements	Dimensions	General proposed variables (selection)
		4.2. I	Organizational evaluation and analysis regarding the innovation impact on product brand; Organizational evaluation and analysis regarding the innovation impact on company market visibility; and so on.
		4.3. ACI	Organizational evaluation and analysis regarding innovation disturbing factors; and so on.

Source: developed/ agreed by all partners of TexMatrix project

Concluding the organizational innovation process can be considered to be a very important competitive leverage that could bring many benefits. Therefore organizations must possess various management tools that could improve the innovation process based on its required knowledge; so it can be observed the need for different innovation knowledge matrixes customized per various fields.

3. Conclusions

KM has an extremely important role in organizational innovation process. So it can be said that KM (1) enhance in creating various processes and tools for tacit knowledge creation, dissemination and leverage, which has an important role in the innovation process, (2) sustain the conversion of tacit knowledge into explicit knowledge, (3) facilitates various collaboration in the organizational innovation process, (4) sustain the accessibility of tacit and explicit knowledge in the organizational innovation process, (5) ensures the knowledge flow in the organizational innovation process, (6) enhance building competencies necessary in the organizational innovation process, (7) ensure a knowledge-driven culture for organizational innovation process (du Plessis, 2007). Consequently KM is not only a passing fad, but a new aspect of management, and a new form of expertise; it's a continuous process of improving organizational performance by providing at the right time the necessary knowledge for those who need it so that they can act effectively (Huang, 2011).

Likewise this paper aimes from a practical approach to bring to organizational managers a simple and effective managerial tool, and hope to bring a theoretical contribution in the field of KM and innovation management. Also it should be stressed again that the development of such a matrix (KIM) properly designed (foundations made in this article) and properly understood can lead to a substantial improvement of the organizational innovation process.

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