REVISTA ESPACIOS

A holistic perspective on knowledge sharing in the cultural and creative industries

Una perspectiva holística sobre compartir conocimiento en las industrias culturales y creativas

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ABSTRACT:

This study analyzed the holistic view of knowledge sharing based on the organizational culture, nature of knowledge and characteristics of the knowledge sharing in the cultural and creative industries of the city of Bogotá of 132 executives. The results indicate that a small percentage of the companies of cultural and creative industries practice activities of knowledge sharing through factors such as trust, teamwork, informal communication and the informal use of ICT. Aspects such as written communication, incentives, and flexibility in the organizational structure are less considered, and contrast with the experts and the studies in companies from developed countries.
Keywords: Knowledge sharing; innovative culture; creative and cultural industries

RESUMEN:

Se analizó la visión holística del compartir conocimientos basada en la cultura organizacional, la naturaleza del conocimiento y las características del intercambio de conocimientos en la industria de las empresas creativas y culturales con 132 ejecutivos de Bogotá. Los resultados indican que un pequeño porcentaje de industrias culturales y creativas practican actividades de intercambio de conocimientos a través de la confianza, el trabajo en equipo, la comunicación informal y el uso informal de TIC. Aspectos como la comunicación escrita, los incentivos y la flexibilidad en la estructura organizativa son menos considerados y contrasta con estudios de países desarrollados.
Palabras clave: Compartir conocimiento; cultura; industrias creativas y culturales

1. Introduction

According to Gian-Casimir, Lee & Loon (2012, p. 740): "the exchange of knowledge has received immense attention in the last decade due to the recognition of its value in organizational learning, the creation of knowledge and innovation" and, for Denning (2006), the fundamental problem faced by organizations is the low desire of many employees to share their knowledge with other members of the organization.

For Suppiah & Singh-Sandhu (2011), the knowledge sharing is gaining increasing recognition from researchers because of its potential benefits for both people and organizations and for being a critical factor for the success of companies. On the other hand, in knowledge processes, effectively sharing everything that is relevant and specialized plays a fundamental role in competitive advantage and sustained performance (Henttonen, Kianto & Ritala, 2016).

The knowledge sharing is the process by which employees transfer mutually their tacit and explicit knowledge (Nonaka, 2008) to create new knowledge with them. Tacit knowledge can be found in subjective perceptions, intuitions, forebodings and know-how, and frequently can only be acquired through experience. Explicit knowledge is that which has been registered in manuals or guides to be shared, or communicated to other employees, within the same organization, in order that they will also possess that knowledge without having had the same experiences.

According to Seow-Wei & Hakim (2006), knowledge management emphasizes the importance of the culture of sharing to support and encourage this approach. For these authors, to create and share knowledge, people should have the possibility to interact by exchanging their ideas. And they add that the knowledge sharing refers to the activities of transfer or dissemination of knowledge from one person, or organization to another. In this regard, for Ferreira-Peralta & Saldanha (2014), the culture centered on knowledge is a set of organizational values, basic beliefs, norms and social rules, which act as a common reference for workers when they create, record, share and apply the knowledge.

Organizational culture has been considered as the most significant contribution to effective knowledge management and organizational learning (Janz & Prasarnphanich, 2003). In this way, people from an environment in which they can create, share and use knowledge to achieve the benefit and success of the organization. For Schein (2010), the organizational culture is characterized by the coherence between individuals and units in terms of sharing assumptions, attitudes, beliefs, habits, values, products and services. According to Stoddart (2001), to share knowledge at work, organizations must first have a culture that accepts participating, collaborating, helping, etc. In this way, the knowledge sharing can only work if the culture of the organization promotes it.

According to Gurteen (1999, p. 2), "culture is the integrated pattern of human behavior that includes thought, speech, action, products and services, and depends on the ability of man to learn and transmit knowledge to future generations. "For the author, this definition is adequate, since the increase of our capacity for learning and transmitting knowledge is one of the main objectives to achieve by what is understood as its management.

For the aforementioned, in this study, attention is focused on the variables of the organizational culture, nature of knowledge (tacit-explicit knowledge), and characteristics of knowledge sharing from the different concepts, focusing the analysis in the sector of creative and cultural companies in the city of Bogotá. In this sense, the objective is to contribute to making visible the dimensions and factors of the different variables in the cultural and creative companies located in the city of Bogota. In this way, we will have a better knowledge of the reality of these organizations that day by day gain more importance in the economy of the country. The information was collected from a probabilistic sample that included 132 companies, with a confidence level of 95% and a sampling error of 5%. The information was processed using multivariate models, factor analysis and discriminant analysis. The results indicate that 30% of the cultural and creative companies in Bogotá are carrying out processes of knowledge sharing, especially of tacit knowledge, sharing informally (Goyette et al., 2015). The main factors that favor the knowledge sharing in these companies are informal communication regarding labor issues, trust and the informal use of information technologies.

1.1. Organizational culture

According to the research carried out by Davenport & Prusak (1998), Alavi & Leidner (1999), Demarest (1997), Nonaka & Takeuchi (1995), Alavi & Leidner (2001), since the 90's the

studies that promote and they support the approach to knowledge management, highlighting the importance of the culture that favors sharing it within organizations. For Swan, Langford, Watson & Varey (2000), the mobilization of knowledge depends on the culture of the organization, which causes different behaviors to be promoted through the exchange of information and experimentation. In this regard, for Al-Alawi, Al-Marzooqi & Mohammed (2007), knowledge management should aim to create an environment in which to share it, instead of just maintaining it.

According to Chennamaneni (2006), the knowledge sharing can be defined as the process of its dissemination among people, groups, and organizations, made from different communication channels, in which the behaviors of different people are present. According to Lin (2007) at the organizational level, the knowledge sharing can be understood as its capture, its organization, its reuse and its transmission based on the experience that resides within the organization, and thus achieving that knowledge is available for all the employees. Ferreira-Peralta & Saldanha (2014), define the sharing as the process by which people swap and discuss their tacit and explicit knowledge about procedures, doing so with the aim of creating new ones and expanding the value of using them exchanged.

For Al-Alawi et al. (2007), the knowledge sharing requires that a person or a group cooperate with others to share their own, thus achieving mutual benefits. Seow-Wei & Hakim (2006) affirm that in order to make knowledge sharing visible in the organization, teamwork is a strategy that allows members to share skills, abilities and values. In summary, with the above statements, it is essential to mention five features of the organizational culture that promote and facilitate the knowledge sharing (trust, communication, organizational structure, reward and incentives, and ICT):

Trust, according to Al-Alawi et al. (2007), is an important feature in the organizational culture and has a significant influence on the knowledge sharing. For Politis (2003), interpersonal trust is understood as an individual or group expectation based on the reliability of the promise or the actions of other individuals or groups. In the opinion of Gruenfeld et al. (1996), team members require the existence of mutual trust to share their knowledge openly.

Razmerita, Kirchner & Nielsen (2016) define trust as the belief that the other party will behave as expected and will not take advantage of the situation. For Chow & Chan (2008), this value influences the interaction between employees, the level of what they want to learn from each other, and the intensity of the knowledge they share.

Seow-Wei & Hakim (2006) consider that trust is a factor that makes the knowledge sharing a more cooperative environment and adds that good long-term relationships provide employers and employees with incentives to invest in trust put in the organization. Finally, in the opinion of Ellis (2001), most people do not risk sharing what they know without a good reason or a deep-rooted sense of trust.

 Wang & Noé (2010) say that a culture that accentuates trust serves to help alleviate the negative effect of the perceived costs of sharing. Trust has also been linked to the implementation of intranet use by society in general - a widespread social phenomenon in which strangely high levels of trust are created between people who do not know each other personally, but that gives rise to the sharing of individual knowledge- and the ability of companies to sharing and combine knowledge (Chiu, Hsu & Wang, 2006; Collins & Smith, 2006; Liao, 2006). Similarly, an organizational climate that emphasizes the perceptions of the cooperative team helps build trust, a necessary condition for sharing knowledge (Schepers & Van den Berg, 2007, Willem & Scarbrough, 2006). In this same orientation, Zamantılı Nayır & Uzunçarşılı (2008). consider that a high level of trust in an organization is an essential condition to encourage the will of cooperation.

With respect to the feature of communication, it can be said that it is the process by which information is exchanged between people through a common system of symbols, signs or behaviors (Amster & Böhm, 2016). As an essential variable for the sharing of knowledge, Seow-Wei & Hakim (2006) affirm that written communication is the most lasting, official and formal form that exists. On the other hand, telling stories or stories are used as a technique to share knowledge, because people spend more time making others share their tacit

knowledge. This form of knowledge sharing is of vital importance because people are more able to listen critically to stories than to do so with narrative forms of communication.

Similarly, Bruce et al. (2003) states that face-to-face interaction is one of the oldest, and still one of the most effective means when sharing relevant and current information. In addition, face-to-face interaction with the right people, who have relevant skills and knowledge, is considered the best source of value for the development of a company.

Al-Alawi et al. (2007) consider that communication refers to human interaction through oral conversations and the use of body language while interacting. De Vries, Van den Hooff & de Ridder (2006) examined the team's communication styles, pleasant and extroverted styles, and found that they were positively associated with the knowledge sharing, as well as the will and attitudes.

The organizational structure is considered important another feature in the knowledge sharing since according to Syed-Ikhsan & Rowland (2004) they found that knowledge sharing thrives in those structures that support and facilitate the flow of information, that is, where there are fewer boundaries between areas or divisions.

Wang & Noé (2010) affirm that a functionally segmented structure usually inhibits the knowledge sharing between functional areas and communities of practice. In this sense, Kim & Lee (2006), Jones (2005) and Yang & Cheng (2007) have shown that the knowledge sharing can be facilitated by having a less centralized organizational structure, creating a work environment that encourages interaction between employees using an open workspace, the rotation of jobs, and the promotion of communication between departments. In general, these authors suggest that organizations should create opportunities, considering their rank, position in the organizational hierarchy, and seniority, which should be decentered to facilitate knowledge sharing.

Seow-Wei & Hakim (2006) suggest that one way to encourage knowledge sharing is to redesign the structure and processes to make teamwork the means by which skills, abilities, and values are shared. as The same can be said of flexibility, freedom and cooperative work, which will surely foster creativity and innovation. For these authors, the degree to which employees have the freedom and authority to participate in decision making, and in the resolution of problems, determines the level of empowerment. This is because according to the degree to which employees have the freedom to participate in their work, they will exert their effort to learn and share. In conclusion, we will say that the authors affirm that the structure of the organization is to help people manage their knowledge, their information, their capacities, and their productive attitude. It is widely recognized that increasing the responsibility of employees leads to higher quality.

On the other hand, the feature of reward and incentives has been considered an important element of knowledge sharing. In this sense, Wang & Noé (2010) see the lack of incentives as a major obstacle of the knowledge sharing between cultures and affirm that incentives that include recognition and rewards interventions facilitate the knowledge sharing and help build a culture of support. Similarly, Kankanhalli, Tan & Wei (2005) found in their studies that organizational rewards such as promotion, bonus and higher salary have been shown to be positively related to the frequency of knowledge contribution made to management systems, especially when employees identify with the organization.

Al-Alawi et al. (2007), state that managers should consider the importance of collaboration and share best practices when designing reward systems. The idea is to introduce processes in which the exchange of information and horizontal communication are encouraged and effectively rewarded. These rewards should be based on a group and not individual performance (Goh, 2002).

Razmerita et al. (2016), highlight the role of intrinsic and extrinsic motivation in the process of knowledge sharing and clarify that intrinsic motivation refers to the interest, the enjoyment that a task produces on its own, or that obtained from the fact of helping others, and exists within the individual instead of depending on any external pressure or the reward that is obtained. People who are intrinsically motivated are more likely to participate in the task, as well as work to improve their skills, which will increase their capabilities, as well as

the productivity of the organization. And extrinsic motivation refers to the performance of an activity that leads to a desirable result. It focuses on reasons such as monetary rewards and career advancement. Extrinsic motivation is typically based on the effort and reward associated with sharing knowledge. If the perceived benefits exceed or equalize the effort, the knowledge sharing will occur. As a result, organizations have introduced reward systems to motivate employees to share knowledge. Intrinsic and extrinsic motivation has been used as drivers or determinants of behavior aimed at sharing knowledge (Amster & Böhm, 2016; Wang & Hou, 2015).

Finally, information technology (IT) is related to organizational culture and the knowledge sharing. According to Seow-Wei & Hakim (2006), they state that IT is closely associated with the management of knowledge and its sharing. Therefore, in order to materialize the concept of sharing culture in terms of knowledge, the organization must place emphasis on its IT infrastructure and tools such as telephone, facsimile, Internet, intranet, e-mail with image reference, videoconferences, and so on.

According to Seow-Wei & Hakim (2006), companies with an effective Internet and Intranet structure have a positive effect on the knowledge sharing. This is because by using the Internet and Intranet to communicate and exchange ideas, the possibilities of knowledge sharing will be improved. In this sense, Razmerita et al. (2016) confirm that technology has been recognized as an important factor for knowledge management.

With respect to the previous statements, and in this line of thought, Wang & Noé (2010) and Großer & Baumöl (2017) affirm that virtual communities are positively related to the quantity and perceived usefulness of shared knowledge.

1.2. Nature of knowledge

The link between tacit and explicit knowledge suggests that only people with a required level of shared knowledge can truly knowledge sharing. An understanding of these concepts is important because the theoretical developments in the area of knowledge management are influenced by the distinction between the different types that exist from its Liyanage et al. (2009). The knowledge sharing is the process by exchange it in a gesture of reciprocity, whether tacit or explicit (Nonaka, 2008) in order to create new knowledge.

For Zhou Siu & Wang (2010), the tacit condition is always associated with knowledge that is difficult to express, in general, through codes, words, numbers, programming languages, etc. Tacit knowledge resides in the minds of employees and consists of the know-how and skills that people have acquired from visible experiences in a given context. Tacit knowledge is difficult, and sometimes impossible, to capture and disseminate, however, compared to the explicit, it adds more value to the organization (Liyanage et al., 2009).

Tacit knowledge can be found in subjective perceptions, forebodings, and know-how, and often can only be acquired through experience. Nature of tacit knowledge can be derived from technical processes (personal skills and know-how) or it can emerge from cognitions, which are more difficult to express and, therefore, to share with others (ideals, values and mental models). In essence, tacit knowledge exists only because of people and their ability to understand others' experiences through a common language (Canestrino, 2004).

Explicit knowledge is documented in manuals or guides to be shared or communicated to other employees in the organization (Newell et al., 2009). In addition, it is easy to express and is associated with facts and know-what (Zhou, Siu & Wang, 2010). In contrast to tacit knowledge, the explicit can be defined as that which is encoded, so it is transferred through a language: words, symbols, and numbers (Polany, 2009). This is the reason why it can be found in manuals, contracts, and licenses, or incorporated into products. Explicit knowledge can be stored in a database that allows its contents to be transmitted in a conventional and easy way within the organization.

1.3. Characteristics of knowledge sharing

Razmerita et al. (2016) affirm that knowledge sharing is considered an important process of

social interaction in organizations. And they consider that the sharing process occurs at the individual, group or organizational level. At the individual and group level, the knowledge sharing includes both your donation and your collection. The donation implies the existence of a motivation in the employees that facilitates and facilitates an active communication with their colleagues, as well as the realization of consultations in order to learn from them (that is, the gathering of knowledge). At the organizational level, the knowledge sharing is defined as capturing, organizing, reusing and transferring knowledge based on the experience that resides within the organization and making it available to all employees.

According to Tangaraja et al. (2015: p.659): "knowledge sharing uses unidirectional or bidirectional perspectives. The unidirectional perspective states that knowledge sharing only involves the dissemination of knowledge in one direction only; from the provider to the recipient. This perspective is characterized by being a behavioral attribute whose accent is a reflective construction ".

The bidirectional perspective, on the other hand, affirms that knowledge sharing implies an exchange of knowledge between individuals through the actions of donation and collection that take place in both. This perspective is characterized because the active sources are both the provider and the recipient since both share knowledge when dealing with a sharing, therefore, they are gestures that can have a dimension that goes beyond the individual level, which involves, at least, to two people.

For this author, the knowledge sharing is a subset of the personalized transfer. However, in knowledge transfer (coding), the knowledge sharing is not one of the immediate processes during the actual transfer of knowledge, because the actual coding process has taken place at an earlier time. The researchers present several concepts related to the forms in which the knowledge sharing takes place.

For Tohidinia & Mosakhani (2010), Suppiah & Singh-Sandhu (2011) and Tangaraja et al. (2015), the common denominator of concepts related to forms is that it is a process in the sharing of ideas, information, and Knowledge-based on experiences, where donation and knowledge gathering is visible.

2. Methodology

The population under study is made up of companies characterized as creative and cultural industries based in Bogotá. The sample is 132 companies, randomly selected through a probabilistic sampling process with a confidence level of 95% and a sampling error of 5%.

Based on the theoretical foundation presented in the literature review, the authors of the research designed the instrument used to collect the information. His reliability test provided a Cronbach's Alpha of 0.893 and was put to the judgment of three experts. The instrument consists of 50 items organized on a Likert scale of seven points (1 = never, and 7 = always) and includes the evaluation of knowledge sharing processes in three aspects: role of the organizational culture for the transfer of knowledge evaluated through 26 items; nature of knowledge (tacit and explicit) evaluated through 15 items and characteristics of knowledge sharing evaluated through nine items. This survey was applied during the period from March to October 2018, in a personal way by the researchers with the support of a group of students, of last semester of the professional career, of the International School of Economic and Administrative Sciences of the University of La Sabana, who were previously trained for that purpose.

The processing and analysis of the collected information was carried out in two stages, in the first, by means of a factorial design with varimax rotation, the concepts were identified that in an aggregate way contain the variables that characterize the organizational culture and explain the process of knowledge sharing in the companies and in the second stage, by means of a design of discriminant analysis, the differentiation criteria were established between the companies that make exchange and those that do not, as well as the order of importance of the variables identified above. In this way, it was possible to identify, quantify and characterize the companies that have advanced processes of knowledge sharing.

The KMO test (contrast in the factorial model) resulted in 0.79 and that of Bartlett (variance

homogeneity) presented a level of significance of 99%. In this way, the relevance of the factorial analysis for the processing of the information obtained through the surveys was established. With respect to the discriminant analysis design, the calculated Wilks Lambda (comparison of variance) was 0.305 with Sig. (P-value) < 0.05 and the function correctly classify 90% of the cases.

3. Results

After processing the information, it was found that 30% of the companies surveyed carried out knowledge sharing activities. This group of companies has an average of 15 years of operation, occupy six executive workers and 84 non-managers. In contrast, companies that do not share knowledge have an average of 20 years of activity and employ nine managerial and 69 non-managerial workers. In relation to this behavior, it is observed that younger companies recognize and value the knowledge sharing as a critical factor for the success of their organization, precisely because the sharing has an impact on the socialization of tacit knowledge. This result contrasts with that posed by Suppiah & Singh-Sandhu (2011) and Henttonen, Kianto & Ritala (2016) by stating that effectively sharing all that knowledge that is relevant and specialized, plays a key role in competitive advantage and sustained performance. Similarly, knowledge helps create innovation and has an impact on economic growth and development. It also helps to establish the long-term sustainability of the organizations' capacities and performance, thus improving the well-being of individuals and communities (Howells, 2002).

As a result of the factor analysis, the original set of the 50 items led to the formation of eight factors, made up of groups of highly correlated variables, with self-image greater than unity and that explain 53.9% of the total variance. Table 1 presents the factors found for each dimension under study.

Table 1
Main factors of organizational culture

1.1. Teamwork informal Communication		1.2. Trust		1.3. IT support	
Ítems	Load Factorial	Ítems	Load Factorial	Ítems	Load Factorial
Participation in the decision-making.	0.694	Confidence to share knowledge and achieve objectives	0.772	Internet and Intranet in the knowledge sharing.	0.823
The organizational structure facilitates communication between people.	0.679	Trust to cooperate between people	0.769	Technologies for the knowledge sharing.	0.809
The hierarchy facilitates the knowledge sharing.	0.635	Confidence in the teamwork	0.746	Virtual communities for knowledge sharing	0.619
Teamwork facilitates sharing skills, abilities and values and encourages innovation.	0.544	Trust in people	0.718	IT widely used for knowledge sharing	0.577
Workspaces allow for the interaction and	0.521	Trust to learn from one another	0.625		

knowledge sharing.					
Explained variance	**7.07%**	**Explained variance**	**8.17%**	**Explained variance**	**7.49%**
Cronbach's α	**0.805**	**Cronbach's α**	**0.832**	**Cronbach's α**	**0.803**

Also, the discriminant analysis allowed establishing for the organizations that promote and carry out the knowledge sharing from the characteristic factors of the three dimensions of the study: the organizational culture, nature of tacit and explicit knowledge and characteristics of knowledge sharing.

In relation to the organizational culture of the companies that perform knowledge sharing it was found that the factor 1.1 respect to teamwork informal communication of is very relevant factor in these organizations and marks a significant difference with respect to companies that do not share of knowledge, so companies value the average factor of 6.3 (in the scale of seven) and companies that they do not, they value it in 5.4 (in the scale of seven). The statistical test of difference of means indicates that the companies that knowledge sharing and those that do not are statistically different with $p < 0.01$. This factor allows us to observe that in companies that perform knowledge to share communication flows freely between people, is kind, flexible and spontaneous. This result agrees with the contributions De Vries, Van den Hooff & de Ridder (2006), by stating that communication styles in teams that are pleasant and extroverted are positively associated with the knowledge sharing. In conclusion, the contributions related to the knowledge sharing are carried out face to face, through oral conversations and the use of body language, where tacit knowledge is shared as a result of experience. The findings are in accordance with the contributions of Seow-Wei & Hakim (2006) and Al-Alawi et al. (2007).

The organizational structure supports the flow of knowledge and people have the freedom and authority to make decisions. The behavior of companies in this regard is consistent with the findings found in the works of Syed-Ikhsan & Rowland (2004). Similarly, Seow-Wei & Hakim (2006) found that an organizational structure where employees have the freedom and authority to participate in decision-making will have a positive impact on the knowledge sharing and will help learning, creativity, and innovation.

Additionally, it was found that the item corresponding to the written communication is not associated with the eight factors found, has one of the lowest scores, 70% of the observations scored below five and its average does not discriminate between the companies that knowledge sharing and those that do not. It is clear then that written communication has a low presence in this type of companies and has no relevance in the processes of knowledge sharing. This result is striking because written communication presents a low score because communication is carried out more face-to-face, through oral conversations and the use of body language, which agrees with the contributions of Al-Alawi et al. (2007). On the other hand, although in the literature it is still asserted that written communication is the most durable, official and formal form that exists, the behavior of the analyzed companies distorts this type of behavior and at the same time a form of communication.

The Trust is the most important factor, its presence is perceived as high and generalized in all the companies where the knowledge sharing is made, however, the discriminant analysis allowed establishing that trust is necessary, but not enough for the knowledge sharing. knowledge, because two of the five items that make up the factor were not significant, and in the ordering of variables the significant items of this factor occupy a secondary place. The results of the most important items agree with the contributions Gruenfeld et al. (1996) because the teams require the existence of the confidence to respond openly and share their knowledge. Similarly, the contributions of Chow & Chan (2008), validate the findings, given that trust influences the interaction between employees and the interest they want to learn from each other and share their knowledge. Likewise, the results agree with the contributions of Seow-Wei & Hakim (2006) citing Goman (2002), emphasizing that trust is a

factor that makes the knowledge sharing a more cooperative environment in the organizational culture.

The use of information technology (IT) is the third main factor in the knowledge sharing. The results show their use and ability to differentiate between the two groups of companies, but they are used in a simple and informal way (Goyette et al., 2015), that is how the conformation of virtual communities is practically not presented. The findings that relate to the most important items of this variable are consistent with contributions Seow-Wei & Hakim (2006) and Ellis (2001), stating that IT has been closely associated with knowledge management and the knowledge sharing along with tools such as mail, telephone, facsimile, Internet, intranet, email with image reference, video conferencing, and telephone conferences, having a positive impact on the knowledge sharing and information.

Regarding the practice of using external motivation, such as prizes, money or promotions to encourage the of knowledge sharing, it was demonstrated that it is a practice that employs 50% of the companies that knowledge sharing, and 47% of them that they do not, but the variables that make up this factor explain less than 0.005% of the total variance and the mean difference test did not allow to verify that there are statistically significant differences with $p < 0.05$, therefore the external stimuli do not generate an impact between the workers and does not constitute a difference between companies where knowledge is shared and those that do not. This evidence contradicts the findings found in the studies of Wang & Noé (2010) when affirming that recognition and rewards facilitate the knowledge sharing and help to build a culture of support. Similarly, Kankanhalli, Tan & Wei (2005) found in their studies that organizational rewards such as promotion, bonus, and higher salary have been shown to be positively related to the frequency of knowledge contribution made to management systems, especially when employees identify with the organization.

With respect to nature of knowledge (tacit and explicit), the following two factors were identified as the main components: the knowledge that arises from the value judgments, experiences, and facts in the work, it is a knowledge that it arises preferentially from the experience and is sharing informally and the knowledge that arises preferentially from the perceptions and forebodings. The results agree with contributions of Zhou Siu & Wang (2010), and Goyette et al. (2015), stating that tacit knowledge resides in the minds of employees and consists of the know-how and skills that people have acquired from the experiences visible in a determined context. This knowledge adds value to the organization through the knowledge sharing as expressed by Liyanage et al. (2009), Canestrino (2004) and Nonaka (2008).

In relation to the sharing of explicit knowledge, it was found that resources of knowledge such as the intranet and social networks are used more than tools such as online technical libraries or the acquisition of licenses. The result that is in accordance with the findings of Newell et al. (2009), Polanyi (2009) and Saenz, Aramburu & Blanco (2012). Table 2 presents the main factors found of tacit and explicit knowledge in the knowledge sharing.

Table 2
Main factors of nature of knowledge (tacit and explicit knowledge)

2.1. Knowledge that arises from the perceptions and feelings about work		2.2. Resources of knowledge		2.3. Knowledge that arises from value judgments, experiences and facts at work	
Ítems	Load Factorial	Ítems	Load Factorial	Ítems	Load Factorial
Personal perceptions about your work	0.804	Blogs and online discussion forums are used	0.814	Job value judgments are shared based on criteria	0.700

Feelings about your work	0.773	News is consulted in various media	0.640	They share the experiences and facts at work	0.686
		The links (social networks) are used	0.615	You share know-how of your work	0.507
Explained variance	**6.25%**	**Explained variance**	**6.16%**	**Explained variance**	**5.99%**
Cronbach's α	**0.833**	**Cronbach's α**	**0.801**	**Cronbach's α**	**0.803**

Source: own elaboration

On the forms of the knowledge sharing, the results indicate that in the companies where knowledge sharing takes place, there is an awareness on the part of the workers of the existence of this sharing process (average score 6.8 of 7 in the scale) in contrast to those that do not (average score 5.3 of 7 in the scale), thus the statistical test shows that the mean differences are significant with $p < 0.05$. For organizations, it is vital that people are aware of their actions when they find the courage to share their knowledge. This understanding related to the context and the person makes knowledge have value in the creative processes (Swan et al., 2000). Table 3 presents the main factors found of characteristics of knowledge sharing.

Table 3
Main factors of characteristics of knowledge sharing

3.1. Perception of the existence of the process		3.2. Perception of assimilation of the process of knowledge transfer	
Ítems	**Load Factorial**	**Ítems**	**Load Factorial**
Share knowledge with another member of the company	0.791	Knowledge available to others within the organization	0.770
Share knowledge with other partners of the organization	0.775	Mutual sharing process	0.672
Culture of social interaction	0.598	People share their knowledge	0.658
		Importance of sharing knowledge	0.546
Explained variance	**6.60%**	**Explained variance**	**6.17%**
Cronbach's α	**0.829**	**Cronbach's α**	**0.804**

Source: own elaboration

Additionally, in companies where knowledge sharing is done, workers perceive that the knowledge sharing occurs regularly and is part of their organizational culture. The result agrees with the contributions of Lin (2007), by stating that the knowledge sharing is a culture of social interaction, which involves the knowledge sharing, experiences, and skills of employees throughout the company. This is because for these companies the workers registered an average score of 6.1 (in the scale of seven), in contrast to those that do not, which was 5.0 (in the scale of seven). The difference in means for these two groups of companies is statistically significant with $p < 0.01$.

4. Conclusions

In this holistic investigation, only a small percentage of the companies of cultural and creative industries have manifested to practice activities of knowledge sharing. This result leads us to reflect because this is a knowledge-intensive sector and of great relevance for national economies, and more when in the Colombian case, this sector considered one of the strategic sectors of the national economy for its great potential to attract international tourism to the country.

On the other hand, the holistic analysis of the activities related to organizational culture in knowledge sharing, by the companies studied, indicates that, the fundamental factors for this purpose are trust, teamwork, informal communication (especially face-to-face, the recognition of experience of people about the relevant activities of the sector and the importance of learning from those experiences) and the informal use of information and technologies. While, aspects such as written communication, incentives, and flexibility in the organizational structure are less considered, which contrasts with what was found by scholars of the subject, especially in the studies carried out in companies from developed countries.

Regarding the nature of knowledge (tacit and explicit), it was obtained that the factors of perceptions and feelings, knowledge resources, and judgments and experiences, are significant factors in the exchange of knowledge. In this context, it should be mentioned that perceptions, feelings, judgments, experience and know-how obey primarily the tacit knowledge of the company, and not in the explicit knowledge that lies in the organizational structure.

Regarding the characteristics of knowledge sharing, it was found that the perception of existing processes and the perception of knowledge transfer processes are significant factors for knowledge sharing. From the above, it can be specified that the members of the organization must have the ability to interact and share knowledge in different teams and organizational departments, in addition, it is important that there is awareness among workers of the importance of sharing, and that there is availability of such knowledge through the existing organizational processes.

As a result of the findings of this study, it is considered important to carry out new investigations of an empirical nature, especially in-depth case studies, which allow having a more detailed and realistic knowledge of the situation of each organization in the sector; studies related to the description of the knowledge sharing, the use of organizational culture. This will allow identifying, designing and implementing strategies based on knowledge management that contribute to the companies of the sector and the sector building a competitive advantage that adds value to the national economy.

Bibliographic references

Al-Alawi, A., Al-Marzooqi, N., & Mohammed, Y. (2007). Organizational culture and knowledge sharing: critical success factors. *Journal of knowledge management*, 11(2), 22-42.

Alavi, M., & Leidner, D. (1999). Knowledge management systems: issues, challenges, and benefits. *Communications of the Association for Information systems*, 1(1), 7.

Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS quarterly*, 25(1), 107-136.

Amster, R., & Böhm, C. (2016). Improving intercultural competency in global IT projects through recognition of culture-based behaviors. *IJISPM-International Journal of Information Systems and Project Management*, 4(2), 5-20.

Bruce, H., Fidel, R., Pejtersen, A. M., Dumais, S., Grudin, J., & Poltrock, S. (2003). A comparison of the collaborative information retrieval behaviour of two design teams. *The New Review of Information Behaviour Research*, 4(1), 139-153.

Canestrino, R. (2004, June). Cross-border knowledge transfer in international strategic alliances: from cultural variations to asymmetric learning process. *In Proceedings of I-Know*

(Vol. 4, p. 30).

Chennamaneni, A. (2006). *Determinants of knowledge sharing behaviors: Developing and testing an integrated theoretical model*. The University of Texas at Arlington.

Chiu, C. M., Hsu, M. H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision support systems*, 42(3), 1872-1888.

Chow, W. S., & Chan, L. S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & management*, 45(7), 458-465.

Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of management journal*, 49(3), 544-560.

Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know.* Harvard Business Press.

De Vries, R. E., Van den Hooff, B., & de Ridder, J. A. (2006). Explaining knowledge sharing: The role of team communication styles, job satisfaction, and performance beliefs. *Communication research*, 33(2), 115-135.

Demarest, M. (1997). Understanding knowledge management. *Long range planning*, 30(3), 374-384.

Denning, S. (2006). Effective storytelling: strategic business narrative techniques. *Strategy & Leadership*, 34(1), 42-48.

Ellis, K. (2001). Dare to share. *Training*, 38(2), 74-77.

Ferreira Peralta, C., & Saldanha, M. (2014). Knowledge-centered culture and knowledge sharing: the moderator role of trust propensity. *Journal of Knowledge Management*, 18(3), 538-550.

Gian Casimir, G., Lee, K., y Loon, M (2012). Knowledge sharing: influences of trust, commitment and cost, *Journal of Knowledge Management,* 16(5), 740-753.

Goh, S. C. (2002). Managing effective knowledge transfer: an integrative framework and some practice implications. *Journal of knowledge management*, 6(1), 23-30.

Goman, C. (2002). What leaders can do to foster knowledge sharing. *Knowledge Management Review*, 5(4), 10-11.

Goyette, S., Cassivi, L., Courchesne, M., Elia, E., Stawnicza, O., & San Cristóbal, J. R. (2015). The ERP post-implementation stage: a knowledge transfer challenge. *International Journal of Information Systems and Project Management*, 3(2), 5-19.

Großer, B., & Baumöl, U. (2017). Virtual teamwork in the context of technological and cultural transformation. *IJISPM-International Journal of Information Systems and Project Management*, 5(4), 21-35.

Gruenfeld, D. H., Mannix, E. A., Williams, K. Y., & Neale, M. A. (1996). Group composition and decision making: How member familiarity and information distribution affect process and performance. *Organizational behavior and human decision processes*, 67(1), 1-15.

Gurteen, D. (1999). Creating a knowledge sharing culture. *Knowledge Management Magazine,* 2(5), 1-4.

Henttonen, K., Kianto, A., & Ritala, P. (2016). Knowledge sharing and individual work performance: an empirical study of a public sector organisation. *Journal of Knowledge Management*, 20(4), 749-768.

Howells, J. R. (2002). Tacit knowledge, innovation and economic geography. *Urban studies,* 39(5-6), 871-884.

Janz, B. D., & Prasarnphanich, P. (2003). Understanding the antecedents of effective knowledge management: the importance of a knowledge-centered culture. *Decision sciences*, 34(2), 351-384.

Jones, M. C. (2005). Tacit knowledge sharing during ERP implementation: a multi-site case

study. *Information Resources Management Journal (IRMJ),* 18(2), 1-23.

Kankanhalli, A., Tan, B. C., & Wei, K. K. (2005). Contributing knowledge to electronic knowledge repositories: An empirical investigation. *MIS quarterly*, 29(1), 113-143.

Kim, S., & Lee, H. (2006). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public Administration Review*, 66(3), 370-385.

Liao, L. F. (2006). A learning organization perspective on knowledge-sharing behavior and firm innovation. *Human Systems Management*, 25(4), 227-236.

Lin, H. F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of information science,* 33(2), 135-149.

Liyanage, C., Elhag, T., Ballal, T., & Li, Q. (2009). Knowledge communication and translation–a knowledge transfer model. *Journal of Knowledge management*, 13(3), 118-131.

Newell, S., Robertson, M., Scarbrough, H., & Swan, J. (2009). *Managing knowledge work and innovation.* Macmillan International Higher Education.

Nonaka, I. (2008). The knowledge-creating company. Harvard Business Review Press.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford university press.

Polanyi, M. (2009). *The tacit dimension.* University of Chicago press.

Politis, J. D. (2003). The connection between trust and knowledge management: what are its implications for team performance. *Journal of knowledge management*, 7(5), 55-66.

Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20(6), 1225-1246.

Saenz, J., Aramburu, N., & Blanco, C. E. (2012). Knowledge sharing and innovation in Spanish and Colombian high-tech firms. *Journal of Knowledge Management*, 16(6), 919-933.

Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.

Schepers, P., & Van den Berg, P. T. (2007). Social factors of work-environment creativity. *Journal of business and psychology*, 21(3), 407-428.

Seow-Wei, L., & Hakim, M. (2006). *The development of knowledge sharing culture in the construction industry.* (Doctoral dissertation, Faculty of Geoinformation Science and Engineering, Universiti Teknologi Malaysia).

Stoddart, L. (2001). Managing intranets to encourage knowledge sharing: opportunities and constraints. *Online information review*, 25(1), 19-29.

Suppiah, V., & Singh-Sandhu, M. (2011). Organisational culture's influence on tacit knowledge-sharing behaviour. *Journal of knowledge management*, 15(3), 462-477.

Swan, W., Langford, N., Watson, I., & Varey, R. J. (2000). Viewing the corporate community as a knowledge network. *Corporate Communications*, 5(2), 97-106.

Syed-Ikhsan, S., & Rowland, F. (2004). Knowledge management in a public organization: a study on the relationship between organizational elements and the performance of knowledge transfer. *Journal of knowledge management*, 8(2), 95-111.

Tangaraja, G., Mohd Rasdi, R., Ismail, M., & Abu Samah, B. (2015). Fostering knowledge sharing behaviour among public sector managers: a proposed model for the Malaysian public service. *Journal of Knowledge Management,* 19(1), 121-140.

Tohidinia, Z., & Mosakhani, M. (2010). Knowledge sharing behaviour and its predictors. *Industrial Management & Data Systems*, 110(4), 611-631.

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human resource management review*, 20(2), 115-131.

Wang, W. T., & Hou, Y. P. (2015). Motivations of employees' knowledge sharing behaviors: A self-determination perspective. *Information and Organization*, 25(1), 1-26.

Willem, A., & Scarbrough, H. (2006). Social capital and political bias in knowledge sharing: An exploratory study. Human relations, 59(10), 1343-1370.

Yang, C., & Chen, L. C. (2007). Can organizational knowledge capabilities affect knowledge sharing behavior?. *Journal of information science,* 33(1), 95-109.

Zamantılı Nayır, D., & Uzunçarşılı, Ü. (2008). A cultural perspective on knowledge management: the success story of Sarkuysan company. *Journal of Knowledge Management*, 12(2), 141-155.

Zhou, S., Siu, F., & Wang, M. (2010). Effects of social tie content on knowledge transfer. *Journal of knowledge management,* 14(3), 449-463.

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