Knowledge Management as a Transforming Axis in Organizations

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Abstract:
Objective: This empirical study evaluated the scope of knowledge management as a transforming agent in organizations, which allows an efficient administration in the directive and managerial structure. Thus, it was revealed that knowledge management works as a transforming motive in the private or public organizational context.

Method: The analysis of the information was carried out under a mixed approach, with a descriptive statistical foundation from surveys and combined with the participant observation technique for an approach to the behavior of the organizational environment. Results: The quantitative and qualitative results and findings showed relationships with positive and significant results when exploiting knowledge management from different variables in the organization, both endogenous and exogenous.

Discussions: The organizational variables used were adequate and positively expressed knowledge management as a transformer in the administrative activity of the organization; which allows establishing assertive methodologies to achieve the established objectives and open lines of future research.

Conclusions: The findings concretely and effectively confirmed that knowledge management allows for the proper structuring of organizational activities that improve actions and aligns them conveniently; Likewise, it is consistent with external participation, expressing a generalized scope for the different configurations in the entities.

Keywords: knowledge management, organization, organizational learning, organizational change

1. INTRODUCTION

Currently, organizations face unfathomable and persistent changes, caused by the internal and external environment they face to achieve their objectives, as well as the need to achieve them in the circumstances in which they are immersed and in increasingly shorter times. In this context, the use and transfer of knowledge becomes relevant. According to Venturo and Oscaona (2021), this refers to the effectiveness and efficiency of knowledge management skills, which allow the design of better strategies to deal with disparate sources of information and allows the interaction of assimilated knowledge, where information is used. transfer, expression, dimension and application of external and internal knowledge.

For Nagles (2007), knowledge in institutions lacks a structure that facilitates its effective use. Therefore, the organizations that face the changes in question need to optimize their activities and organizational functions through the assets that allow them to solve their dilemmas. In this scenario, knowledge and its proper management become an effective way, which – in general – is a source of transforming guidance in entities.
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Based on the scope of knowledge management, it is possible to affirm that it represents a useful and sufficient tool to fully influence as a transforming axis of organizational work. According to López (2011), we reflect on the value of knowledge management (tacit and explicit) in organizations, where information is a relevant input, highlighting how it could be recognized and used.

Due to the above, it is necessary to associate knowledge management as a backbone with cross-cutting issues at the same time; even more so, when in the organizational world these emerge constantly and transform traditional structures. In this sense, this panorama goes beyond the paradigmatic analysis of the organization, which is generally limited only to the technological issue, with knowledge management being a significant factor of change in the structure as an asset based on its underlying value (knowledge).

This appreciation of knowledge has a considerable impact on organizational management and, therefore, on its environment, which is dynamic per se and in continuous transformation. In its essence, organizations face paradigmatic variations, where knowledge and its creation are consolidated as the transformations with the greatest impact. For Merino et al. (2016), knowledge management is a means to unify a platform in public or private companies, educational institutions and non-governmental organizations, through the elaboration of policies for all hierarchical structures or a management model for governance.

In general, organizational transformation is contemplated and channeled from the technological perspective, within which many institutions do not consider it in the short or medium term; in such a way that they leave aside equally valuable assets such as knowledge in its transformative dimension. In the words of Beltrán-Ríos et al. (2019), Managed effectively, this intangible asset supports the innovative processes in the various productive areas in which it is carried out; It even facilitates the development of innovations that have a social impact with the development of countries.

It should be noted that organizations carry out daily activities that promote the exchange of knowledge and the creation of it. In this way, the processes linked to the knowledge generated must allow the development of optimal practices within it. Based on the above, this article provides and contributes: first, the evidence and demonstration in the theoretical field of the transformation of internal administrative processes in a typical organization. Second, in the same vein, the action in the field to present the empirical evidence of the dimensions that reform the organization. Third, the contribution of the present through the proposal of the conformation of knowledge management structures and systems to optimize organizational development in these, as well as new lines of research.

In that order of ideas, knowledge management is a subject of wide interest, with a large collection of information in this regard, since, as López (2011) mentioned, A reflection is made around the importance of knowledge management (implicit and explicit), in institutions where information is the relevant input. For this reason, it is suggestive to associate this theme with transversal themes, especially when they arise constantly. In the organizational world and allow through the generation of new paradigms. In this scenario, knowledge management is a significant transformation factor in the organizational structure based on its underlying value (knowledge).

This assessment of knowledge has a significant impact on broad organizational areas and, therefore, on the environment of the university institution, which is a precursor entity of knowledge per se. In its essence, the public university faces paradigmatic changes, where knowledge and its creation are constituted as the transformations with the greatest impact. According to López (2003), higher education institutions have been in a dilemma with many of the challenges and problems of the new century; so that they are committed to integrating more effectively into the cultural, social and economic life of the region and the world.

In this sense, the public university carries out daily organizational activities that promote the exchange of knowledge and its elaboration. Thus, the processes linked to the knowledge generated must allow the development of the best organizational practices within the institution. Based on the above, this research provides and proposes: first, the evidence and demonstration in the theoretical field of the change of internal administrative processes in a public university. Second, action in the field to present empirical evidence of institutional transformation. Third, the contribution of this article through the proposal of conformation of knowledge management structures and systems for the best organizational development in these.
2. LITERATURE REVIEW

In order to have a better understanding of the topic and address it properly, it should be noted that knowledge can be seen as organizational knowledge. This debate arises in relation to the terminological and logical-semantic aspect, in addition to revolving around the generation of a competitive advantage in organizations.

2.1. Organizational Learning

Learning is the way in which new knowledge is formulated and created and the individual and organizational environment is improved. For del Río and Santisteban (2011), organizational learning is a process with which entities – large or small, public or private – obtain and generate knowledge through their participants, with the aim of translating it into organizational knowledge. It should be added that the intention of organizational learning is based on managing knowledge and understanding the process and final product. For his part, Ley (2011) pointed out that organizational learning can be seen as a dynamic and continuous improvement procedure, from which all types of institutions create, develop and materialize the potential from those who create it, with the intention of turning this potential into the representative knowledge base of the entity.

For Quiñonez and Rivera (2021), the organizational structure must facilitate individual interaction and support the community to obtain explicit and tacit knowledge within the organization. In this sense, the structure must foster trust between people and promote the free exchange of knowledge. Instead, according to Nonaka et al. (1996), knowledge creation is like a dynamic human process that demonstrates personal belief in truth or demonstrates technical skill through practice.

Likewise, Nonaka et al. (1996) stated that there are two types of knowledge: tacit (such as presumptive, unmodified mental models, or embedded technical knowledge). and the explicit (that is, meaningful information presented in simple language that includes numbers or diagrams). The first is individual and complex to externalize and communicate, therefore, complicated to participate socially. The second is oral and expressive, so it can be used in a similar way by a social group. Finally, as has been described, knowledge is subject to being categorized as implicit and explicit, so that understanding the presence of these knowledge patterns is paramount when analyzing the fundamentals of knowledge management and innovation.

2.2. Knowledge Management

Knowledge has participated in an important way in the organizational development in society. Historically, there have been effective institutions in the creation and dissemination of knowledge (David and Foray, 2002). Thus, the essence is constituted by the unprecedented acceleration of the rate of creation, accumulation and, indeed, the devaluation of knowledge. Specifically, this trend is reflected in a high intensity of scientific and technological progress.

From the perspective of Farfán and Garzón (2006), knowledge management is beneficial, because it helps to align individual objectives, while providing effective and equitable communication channels for all parties. In this way, knowledge management is essential for the organization because it allows identifying where in the organization the source of knowledge is located and how to transform and distribute it to create intellectual capital.

In this context, Barrios et al. (2017) indicated that, in the organizational field, knowledge plays a role in creating value. In this sense, changes in the environment lead to changes in organizational realities, emphasizing the relevance of the development of innovative capacities as a critical resource for adaptation to the environment. On the other hand, Escorcia and Barros (2020) stated that "knowledge management has become a topic of interest for academics and professionals who recognize that" (p. 83) it positively impacts the performance of all types of entities, including educational institutions.

Consequently, knowledge management becomes a structure that makes it possible to locate, codify, systematize and disseminate both individual and collective experiences of human talent within the organization, while being useful in organizational activities. Thus, the generation of knowledge becomes a self-transcendent structure, where organizations are constituted as the place where this process is carried out.
2.3. Knowledge Management Models

Knowledge management has been developed organizationally from the concepts provided by various authors, who have determined each of the stages that make it a dynamic and innovative process for continuous organizational evolution, whether private or public. For example, for Avendaño and Flores (2016), one of the challenges that entities face today is to translate the knowledge that everyone has into organizational knowledge, thus creating a collaborative organizational culture that fosters cooperation and drives this process to increase the intellectual legacy of the institution.

In addition to being a resource, according to Vitale et al. (2020), the knowledge that exists in an organization is also a relevant strategic asset. In this scenario, academics and businessmen realize “the importance of knowledge to obtain and maintain the competitive advantage” (p. 1) of an entity, which is essential for its success and availability. It should be noted that in this process, continuity is essential.

For their part, Bustelo and Amarilla (2001) stated that knowledge management is a set of activities whose purpose is to use, share and develop the knowledge of an organization and the people who work in it, guiding them to optimize the achievement of their objectives. While Wiig (2011) stated that individuals act effectively when they understand their environment, are motivated and have adequate resources. They must also understand how subjects work with knowledge, the role knowledge plays in getting work done, and how this translates into effective action for the organization, themselves, and other relevant stakeholders.

In other words, knowledge management is a model of acquisition, formalization and codification of knowledge. In this, the creation of an organizational structure that can be understood from the assignment of specific roles is proposed; where one of its principles emphasizes that knowledge must be in order for it to be useful and valuable. That is, this knowledge needs to be organized in a useful way, which allows organizations to employ a variety of knowledge management strategies.

Similarly, Wiig (1994) determined that this organizational experience allows managing knowledge effectively. The participants have always managed knowledge with different degrees of awareness and effectiveness. Nowadays, there is a growing perception that explicit and active knowledge management can be effective and profitable, especially when executed from specific methods and as a way of using methodologies and approaches carefully designed and adapted to the organization. In this regard, Avendaño and Flores (2016) indicated that it is necessary to take into account the model is based on five basic processes: creation, capture, renewal, sharing and use of knowledge in all activities.

In contrast, in the model developed by Paniagua et al. (2007), one of the most relevant common frameworks for knowledge management today is established: the creation of knowledge (based on learning) as a competitive advantage. These authors stated that the dimensions of their model are permanently and reliably related to each other. Thus, its components and elements are different in nature, but must work together to successfully implement the knowledge management model. In this way, they start with aspects such as leadership, information systems and organizational culture. Being relevant that the presence of factors related to human processes predominates. In addition, it is necessary to point out that one of its contributions is to retake the creativity and humanity of the Nonaka and Takeuchi (1999) model, while expanding it so that its use in organizations would be complementary and global.

In the words of Paniagua (2007), after all, knowledge is broader than information and is considered a tool that enables action. In other words, knowledge is information that is analyzed, thanks to which it acquires a new meaning and utility, enables action and achieves objectives. On the other hand, in his work, Riesco (2004) sought to design a knowledge management model from holistic and specific perspectives, as well as from social and technical points of view. As a general objective, it sought to build a knowledge management model that combines theory (previous research and literature) and reality (how companies manage knowledge). Try to apply this model in a company to see its relevance and functionality.

Also, Riesco (2004) described the knowledge management model from a holistic, specific and dual perspective, as well as a social and technological one. Through the analysis of different contextual and
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integrated models of knowledge management, he determined the structure of knowledge and knowledge management. Finally, he discussed databases in more detail; knowledge portals; Knowledge Graphs and Knowledge Yellow Pages; Data mining; instant messaging and mobile phones; search engines; email management and more, considering them as intangible assets.

For Nonaka and Takeuchi (1999), the epistemological basis of their model is the distinction between tacit and explicit knowledge; while the key to the creation of knowledge is the mobilization and transformation of tacit knowledge. Thus, knowledge requires the use of information related to the development of subjective processes; Likewise, he refers that, in his theory of the generation of organizational knowledge, the traditional definition of knowledge is used as a true and legitimate belief. Although traditional Western epistemology has emphasized focusing on truth as the core of knowledge, it focuses on the nature of knowledge as belief; is justified.

In that order of ideas, from the postulates of Nonaka et al. (1996), the definition of justified belief does not include physical ability or embodied knowledge. In addition to the physical aspect, they defined knowledge as a body of important information that constitutes solid beliefs or demonstrated technical ability. Instead, Takeuchi (2006) recognized the vital role that individual interactions with the company play in creating organizational knowledge, as well as that of groups in facilitating this interaction.

Regarding the above, according to Torres and Rojas (2017), initially, knowledge is created by the individuals of the organization and, as it becomes organizational knowledge, the ontological dimension extends from the knowledge of the individual in one extreme and from there it goes to the rest of the teams, groups and organizations. In that order of ideas, according to Nonaka and Takeuchi (1999), knowledge management encompasses the following processes (Table 1).

Table 1. The knowledge management process

<table>
<thead>
<tr>
<th>Procesos</th>
<th>Creación o captación</th>
<th>Estructuración</th>
<th>Transformación</th>
<th>Transferencia</th>
<th>Almacenamiento</th>
<th>Incorporación</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establecer</td>
<td>Clasificar y definir el conocimiento como justificado, verdadero y creíble. Los nuevos conceptos creados por individuos o equipos de trabajo, se incorporan a los procedimientos para compartirse.</td>
<td>Convertir el conocimiento estructurado en algo tangible o concreto, ya sea en un prototipo de producto, asistente o modelo.</td>
<td>Distribuir el conocimiento creado en los grupos de interés al interior o al exterior de la organización.</td>
<td>El conocimiento transferido debe estar disponible para ser utilizado, por tal motivo se debe incorporar a un medio físico perteneciente a la organización.</td>
<td>Adquirir el conocimiento como parte activa de la organización, siendo un activo apreciable y estratégico de la misma.</td>
<td></td>
</tr>
</tbody>
</table>

Modelo de Nonaka y Takeuchi

Note: Adapted from “Theoretical models of knowledge management: descriptors, conceptualizations and approaches”, by Avendaño and Flores, Entreciencias : Dialogues in the Knowledge Society, 4 (10), 201-227. DOI: http://dx.doi.org/10.21933/J.EDSC.2016.10.181.

Regarding the creation of organizational knowledge, it is highlighted that the process requires the conversion or interaction between tacit and explicit knowledge. From socialization, skills, techniques or experiences are shared. The next metamorphosis is externalization, consisting of making explicit (supported by the communication and reflection of the community) tacit knowledge through models, schemes, analogies, metaphors, hypotheses or their interconnection. In this evolution, there is an interaction between tacit and explicit knowledge, building a spiral of permanent ontological transformation of knowledge.

3. Method

3.1. Design

The analysis of the information was carried out under a mixed approach, that is, from the quantitative and qualitative approaches. In the words of Guelmes and Nieto (2015), the mixed approach is the process of collecting, studying and linking quantitative and qualitative data in a single or several
investigations with the intention of solving an approach and justifying its use, considering that the two methods (quantitative and qualitative) are intertwined in most of their stages. For Pole (2009), mixed methods can sometimes be superior to when a single method is used. Mixed methods study can answer questions that other models cannot. Similarly, mixed methodology can be conceptualized as the use or combination of traditional quantitative and qualitative research methods.

Based on the above, it can be seen that mixed designs allow the analyzes that are carried out to allow the combination of elements and paradigms that lead to better knowledge structures in solving dilemmas in knowledge. Thus, it is supported with activities that originate the conceptualization of integration. In accordance with the previous definitions referring to the use of the mixed methodology, it is presented as an adequate tool in research in development, in the organizational field. In this sense, a more robust vision is formed to address the different phenomena in the organization and in the public university.

3.2. Participants and Instruments

The present analysis was carried out based on surveys, which involved the internal personnel belonging to the different faculties of professional studies of the Autonomous University of Querétaro, as well as the personnel of their staff areas. Similarly, a complement was made with the participant observation technique.

3.3. Qualitative Methodology

The qualitative methodology seeks an explanation for the social fact that is analyzed, as well as its scope, motive and representation. In other words, it seeks the interpretation of a group within its environment.

3.4. Participant Observation

Participant observation is used in various areas of qualitative study, in the collection of data on the interaction of people, the process in which they interact and the culture of the people and the organization. In this regard, Galeano (2012) exposed it as a social research technique; that is, participant observation refers to the collection of information by relevant observers – such as researchers – over a period of time long enough for appreciation in close proximity to the group.

Similarly, the author stated that the nature of the participation associated with this strategy marks the difference with others. The participatory nature of this strategy distinguishes it from other methods, such as participatory and ethnographic research, which also use participant observation, but with a different meaning. Thus, participatory research forms a cosmos with heterogeneity of approaches to structures that explain and transform the reality of the participants in the study. Unlike other research options, it makes the understanding of the fact, but it is not the ultimate goal, but rather a means to interpret the transformation of concrete realities.

For his part, Mackellar (2013) explained that, as a qualitative research method, participant observation is recognized as adequate to collect data on interactions and relationships by recording behaviors, conversations, and experiences in situ. In addition, participant observation allows the present investigation to be strengthened with complementary techniques that serve to better understand the context. The usefulness increases with methods such as interviews and surveys, questionnaires or other quantitative techniques.

3.5. The Quantitative Methodology

The purpose of the study of this article is the proper interpretation of the sample and generate the appropriate information for making the right decisions. As far as data collection is concerned, it is done from surveys. The method requires a measurement that makes it possible to explain from quantitative methods, through indicators. As Kuznik stated et al. (2010), the survey has been established as a vital instrument when studying social relationships. For this reason, contemporary political, economic and social organizations use this technique as an essential tool when they want to understand and make decisions regarding the way in which their interest groups behave.

For López-Roldán and Fachelli (2015), the survey has become more than a technical data collection tool, but rather a social research method whose application involves monitoring a sample or a population. These authors added that it is a set of research processes, with the purpose of collecting
data and analyzing them, but in which a variety of related techniques are combined, in a specific and coherent formula, directed and with purpose. The objective is to build the purpose of scientific research.

For the study of the collected data, they are examined with the optics and the method of non-parametric statistics - which analyzes the results corresponding to the sample when its underlying distribution does not fit parametric criteria (a normal distribution) - and inferential statistics, which allows conclusions to be argued based on the analyzed sample. Finally, for Ramírez and Polack (2020), the importance of non-parametric or scatter-free tests is that they are not subject to specific preconditions like the parametric test. Therefore, non-parametric methods are convenient when the collection is presented in a biased way and better represent social behaviors.

3.6. The Correlation Coefficient

Correlation is a measure of correspondence or link between variables. In the case of the Pearson correlation coefficient, the following criterion is established generically between 0 and (+-) 1. The closer it is to zero, the lower the correspondence relationship between the variables analyzed, as can be seen; It is important to note that the coefficient can be positive (+) or negative (-). This also implies a change in the slope of the orientation of the variables in context; In addition, they determine if both behave in the same direction or if their behavior is antagonistic. Mendenhall et al. (2015) established the following formula for the Pearson correlation:

**Equation 1**

\[
 r = \frac{s_{xy}}{s_{x}s_{y}} = \frac{s_{xy}}{s_{xx}s_{yy}} \quad \text{para} -1 \leq r \leq 1
\]

3.7. Cronbach's Alpha Coefficient

The establishment of the internal coherence of a measurement refers to the validity of the construct and the strength of the correlation that exists between the components. According to Oviedo and Campos-Arias (2005), a Cronbach's alpha value between 0.70 and 0.90 shows good internal consistency and, similarly, the Cronbach's alpha definition is given for unidirectional scales from three to twenty items. It should be noted that Cronbach's alpha refers to a coefficient that allows a measurement of the degree of reliability within a measurement scale, which comes from the mean of the correlations between variables that make up the sample.

According to da Silva et al. (2015), its relevance in psychometric practice is based on the use of various indicators to evaluate latent constructs, which is of great importance for the reliability of the measurements. Likewise, this coefficient has desirable properties in relation to other indicators used for reliability analysis. Cronbach's alpha is determined by the following equation:

**Equation 2**

\[
\alpha = \frac{K}{K-1} \left[1 - \sum \frac{S_i^2}{S_T^2}\right]
\]

Where:

K = number of items.

\(S_i^2\) = sum of variance of the items.

\(S_T^2\) = variance of the sum of the items.

The closer the Coefficient is to 1, the higher the degree of reliability.
4. RESULTS

The sample was made up of representatives of thirteen faculties of the university, except for the Escuela de Bachilleres Autónoma de Querétaro and two employees belonging to the Administrative Area. In this way, the information was collected and the questionnaire method, structured with the Likert scale, was used as an instrument. It should be noted that the first data examination is a study of the reliability of each scale in all the dimensions of the observed variable, for each case. Through the first analysis of the dimensions (create knowledge, share knowledge and apply knowledge), it is possible to establish that there is an important correlation that enables the creation and management of knowledge. From the data collected, for Zabaleta et al. (2016), the scale is reliable when the Cronbach's alpha value is closer to 1. Consequently, the scale is suitable for a Cronbach's alpha value greater than or equal to 0.70. The results of this first analysis are shown in Table 2, corresponding to the knowledge management variable.

Table 2. Quantitative analysis of organizational learning

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimensiones</th>
<th>Unidad de medida</th>
<th>α de Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crear conocimiento</td>
<td>Escala de Likert</td>
<td>0.829582</td>
</tr>
<tr>
<td>Gestión del Conocimiento</td>
<td>Compartir conocimiento</td>
<td>Escala de Likert</td>
<td>0.833333</td>
</tr>
<tr>
<td></td>
<td>Aplicar conocimiento</td>
<td>Escala de Likert</td>
<td>0.752841</td>
</tr>
<tr>
<td></td>
<td>Promedio de la variable</td>
<td></td>
<td>0.805252</td>
</tr>
</tbody>
</table>

As can be seen in Table 2, it has a favorable result with respect to the internal consistency of each evaluated dimension: creating knowledge with 0.829582 and sharing knowledge with 0.829582; in both cases, the data is very reliable and meets this requirement. Regarding the dimension apply knowledge with 0.752841; although it is lower than the other items evaluated, it is at an adequate value. As indicated by Oviedo and Campos-Arias (2005), the minimum value allowed for Cronbach's alpha coefficient is 0.70; with a lower value, the internal consistency of the scale used is low, which makes it possible to show to what extent the analyzed data is free of random error. From there, they provide stable and consistent results for analysis.

Ergo, it is admissible to state that there is an important relationship between the dimensions analyzed with respect to the knowledge management variable. As Quero (2010) explained, it should be emphasized first that Cronbach's alpha internal consistency coefficient expresses how well an item measures the same variable: homogeneity, so it is mainly used to calculate the reliability of an instrument, where an item fits a single domain, that is, a single variable or feature. In this way, the homogeneity of behavior can be established from the average of the different variables, which corresponds to 80.5252%. Therefore, it can be affirmed that the agreement between variables in relation to the data is sufficiently homogeneous (Graph 1).

Graph 1. Quantitative analysis of knowledge sharing
As a second test, the results of the analysis of the organizational change variable are presented in Tables 3.

**Table 3. Quantitative analysis of organizational change**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimensiones</th>
<th>Unidad de medida</th>
<th>α de Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liderazgo</td>
<td></td>
<td>Escala de Likert</td>
<td>0.828500</td>
</tr>
<tr>
<td>Cambio Organizacional</td>
<td></td>
<td>Escala de Likert</td>
<td>0.803815</td>
</tr>
<tr>
<td>Actitudes</td>
<td></td>
<td>Escala de Likert</td>
<td>0.811567</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.814627</td>
</tr>
</tbody>
</table>

In this regard, it is observed that - as in the previous test - an adequate result is obtained with respect to internal consistency in each dimension examined: leadership with 0.828500, communication with 0.803815 and attitudes with a value of 0.811567. Thus, it can be seen that the Cronbach's alpha coefficient with the lowest value is 0.803815, which corresponds to the communication variable, so the data is very reliable and meets the basic requirements of the applied tool.

In this order of ideas, it is feasible to establish that there is a positive homogeneous relationship in an important way and that it complies with the established parameter both for each dimension and for the resulting average of them, which represents 0.814627. In this way, the items that were analyzed are sufficiently correlated with respect to the change variable organizational, being in an optimal situation and showing optimal results for this second evaluation (Graph 2).

**Graph 2. Quantitative analysis of organizational change**

In a transversal way, a first test was carried out correlating items located in different dimensions. In this regard, Restrepo (2007) stated that the correlation coefficient measures the degree of association that generally exists between two variables. Regarding the interaction between the dimensions of leadership and apply knowledge, the result is shown in Table 4.

**Table 4. Quantitative analysis of leadership**

<table>
<thead>
<tr>
<th>Dimensión</th>
<th>Coeficiente de Correlación</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liderazgo</td>
<td>Aplicar Conocimiento</td>
</tr>
<tr>
<td></td>
<td>0.838690</td>
</tr>
</tbody>
</table>
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By transversely exchanging the categories of elements, it is possible to strengthen the interpretation of the values of the coefficients of the results, it can show with greater precision the relationship between the variables and allows to investigate and show the degree of correlation between two variables located in different dimensions, while removing the influence of the source variables. In this first cross-sectional evaluation, the result obtained with the correlation coefficient was 83.68%. As can be seen from the result, it is an adequate, significant and high intensity positive correlation. In this way, a joint mutuality of both variables is presented. As indicated by Reguant-Álvarez et al. (2018), a value of 0 means that there is no linear relationship between two test variables; when it approaches the extreme value of -1 or 1, the relationship is stronger.

As a result, the application of knowledge in the study group is strongly linked to the development and presence of leadership in which the social group carries out its activities; In addition, this is presented as a fundamental guide in the conformation of the good practices of the group, with which the actions to be executed are supported. In the same way, a second analysis is carried out by contrasting the dimension of sharing knowledge with attitudes, through Table 5.

Table 5. Quantitative analysis of knowledge sharing

<table>
<thead>
<tr>
<th>Dimensión</th>
<th>Coeficiente de Correlación</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compartir Conocimiento</td>
<td>Actitudes</td>
</tr>
<tr>
<td></td>
<td>0.848167</td>
</tr>
</tbody>
</table>

The result of the Pearson correlation coefficient is 84.81%, which is established as adequate, significant and of high intensity. Thus, it can be affirmed that there is a close relationship between the attitudes of the study group and that knowledge is shared adequately in it, transversally strengthening the context of action of the target group. So, by determining sufficient relationships and connections in the study, it is possible to support and confirm the bases that allow the proper development and performance of knowledge, which promotes the subsequent evolution and transformation in organizations. The behavior described is shown visually in Graph 3.

To conclude, it is pertinent to remember that the objective of this empirical study aims to evaluate the scope of knowledge management as a transforming agent in organizations, which allows efficient administration in the directive and managerial structure. With this, it seeks to reveal knowledge management as a transformative motive in the private or public organizational context.
5. DISCUSSION

To begin with, it is pointed out that the statement postulated by Takeuchi (2006) is correct, to stay at the forefront of the knowledge economy, organizations must create knowledge, just being informed is not enough. Likewise, Nonaka and Takeuchi (1999) argued that the world is witnessing the emergence of a new society, different from the industrial society, in which the acquisition and application of knowledge becomes an essential element of competitiveness.

In this way, it is necessary to point out that organizational transformation is inclusive: it accepts and receives the different cultural conceptions of the participants. This statement was supported by Nonaka et al. (1996), when they stated that new organizational knowledge arises from interpersonal interactions between individuals with different types (i.e., tacit or explicit) and different knowledge contents. This allows organizational permutation through the very transformation of the constructs and paradigms in the collaborating group.

In this sense, knowledge management practices are vital today, because they enable different stakeholders to understand and realize the perspective and participation of the institution in improving the common good. The level of knowledge of this topic applies not only to administrators, but to everyone involved in the operation of an organization. For Fragozo et al. (2020), when an entity is aware of the synergy between the participants at all levels and coordinates actions to seek common goals within it, it can realize all the benefits of knowledge management.

In that order of ideas, the research shows that knowledge management in organizations favors permanence and development in a changing environment, based on the exploitation of competencies and intrinsic qualities of the participants in it, as well as of the correct alignment of these by the administrators of the institution. Authors such as Quiñonez and Rivera (2021), have supported this position by stating that the structure of an organization, as part of it, needs to facilitate individual interactions and support the community of practice to capture implicit and explicit knowledge within the entity.

It is at this point that limitations arise for the creation of new knowledge, the organizational group requires specific skills and competencies for its creation and adequate development in the various dimensions that support the research, so its action in other organizations could be limited. Since the concept of knowledge management itself is not a generalized field, the institutions that implement these strategies require a unified guide focused on the entity's objectives. In this way, the adequate reinforcement of the practices that support the creation of knowledge and its management is fundamental for the transformation in an organization, since it allows adaptation, development and growth in a global environment.

In this sense, Moreno (2012) concluded that the construction of knowledge has become a current issue, because it is a matter carried out through the education of the integrated participants to know, know, know how, know how to be and know how to live together. That is, to obtain the best knowledge and that this is useful in all areas in which they must develop and contribute critically and creatively.

For its part, the research shows the need for an organizational guide that effectively structures the appropriate conditions for the creation and management of knowledge. Thus, one contribution of this analysis is to highlight leadership as a factor of cohesion in the structure shown. In the study, in the case of leadership, the effect on organizational change is significant and the relationship is positive. Therefore, it supports that leadership benefits transformation, which must be found in a relevant stage of maturity by the organization's administrators to carry out and meet organizational objectives effectively and efficiently, generating organizational change.

As Kazak (2021) indicated, knowledge-based organizational structures need leaders to manage and guarantee the efficiency of knowledge. These knowledge leaders encourage participants to become involved in knowledge management processes and contribute to the adoption of knowledge management as part of the organizational culture. Thus, it is the ability of organizations to create, organize and process knowledge from its sources, to transform the paradigms of new individual, team, organizational and inter-organizational knowledge, with which a culture is generated that facilitates it and allows the conditions for develop new capacities, design new products and services, increase the existing offer and improve processes aimed at durability.
In this way, Díaz (2018) commented that behavioral support optimizes employee commitment, focuses on developing individual initiative and dedication, and strengthens positive attitudes and emotions towards a goal or task. For its part, knowledge can be shared and is part of organizational improvement, in addition, it is a variable that also applies to the public university institution.

In this regard, Chaithanapatet al. (2022) indicated that knowledge-oriented leaders encourage learning and support an error-prone learning environment, where employees can discover and harness knowledge for the benefit of their organization. Accordingly, a line of research that opens refers to the ability of administrators to generate an ideal environment for best practices, based on knowledge management. If there are not enough capacities to efficiently lead the group, knowledge management will have less development than in favorable conditions.

In the same sense, Ramírez (2020) argued that the construction of this new environment has changed both the leaders and the members of the organization, following a new decision-making model that consciously creates new perceptions in the organizational space. Within this transformation, Laihonen and Huhtamäki (2020) added that a constantly changing environment redefines the contingencies that impose requirements on both organizational and knowledge strategy. Thus, the participation of the administration is fundamental for the correct alignment towards the objectives of the organization, which recognizes, strengthens and guides the activities of the participants, as well as transforming the institution in the face of the evolution of its environment.

6. CONCLUSIONS

The diagnosis of knowledge management in this research shows the fundamental elements and dimensions required to form a transformative model in organizations, based on knowledge management. Likewise, the need for a favorable environment for the transforming development of knowledge in institutions is based. Through this research work, the importance of the creation and management of knowledge as a source of change in entities, whether private or public, is presented. In this sense, the study of knowledge in organizations is inclusive, allows and accepts concepts and practices from different cultural origins, both internal and external; granting a greater magnitude, transforming the dimension of the original concept of knowledge management and allowing an effective and efficient insertion to the changing environment.

Similarly, capturing internal knowledge and the participation of the author as a participant observer allowed the formation of an organizational change, which in turn generated a new ideological assessment that allowed the breaking of the previous conceptual paradigm, which generated new judgments from of the existing ones and added those coming from abroad; In addition, a line of research focused on leadership was opened. Therefore, the constant analysis and study of the different dimensions of the organization is important thanks to activities such as this one, which contribute to the permanent evolution of both knowledge and organizations in their public or private nature.

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Knowledge Management as a Transforming Axis in Organizations


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**Citation:** Mtro. Roberto Alejandro García Jiménez et al. "Knowledge Management as a Transforming Axis in Organizations" International Journal of Managerial Studies and Research (IJMSR), vol 10, no. 6, 2022, pp. 49-63. DOI: https://doi.org/10.20431/2349-0349.1006006.

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