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Competitive Advantage of Higher Education Institutions improving through Knowledge Management in Universities of Guayaquil, Ecuador

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Abstract
Knowledge management is a useful tool to consolidate the processes in organizations that transforms the intangible assets into reasons that increase the competitive advantage of organizations. For higher education institutions, this idea is a strategic vision based on the knowledge gathered that may be the greatest difference between a university with good administrative processes and another one that doesn't have them, so that can be seen as a healthy process. This idea is a strategic vision based on the knowledge gathered that may be the great difference between a university with good administrative processes and another one that doesn't have them, so that can be seen as a healthy process. This research proposes this vision into the higher educational institutions of the city of Guayaquil, Ecuador.

Keywords: Knowledge Management, Higher Education Institutions, Competitiveness

Resumen
La gestión del conocimiento es una herramienta útil para consolidar los procesos en las organizaciones que transforman los activos intangibles en razones que aumentan la ventaja competitiva de las organizaciones. Para las instituciones de educación superior, esta idea es una visión estratégica basada en el conocimiento recogido que puede ser la mayor diferencia entre una universidad con buenos procesos administrativos y otra que no los tiene, por lo que puede ser visto como un proceso saludable. Esta idea es una visión estratégica basada en el conocimiento acumulado que puede ser la gran diferencia entre una universidad con buenos procesos administrativos y otra que no los tiene, por lo que puede ser visto como un proceso saludable. Esta investigación propone esta visión en las instituciones de educación superior de la ciudad de Guayaquil, Ecuador.

Palabras clave: Gestión del Conocimiento, Institución de Educación Superior, Competitividad

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Introduction

South America is a geographic macroregion that compresses the continental mass that extends from Cape Tiburon, Panama in the north and Cape Horn, Chile, in the south. This is a Hispanic culture that in most of the continental nations, makes this area a zone with high opportunities to realize the exchange of knowledge between nations, since in all of them has common idiosyncrasy.

Likewise, the region's educational systems share interesting traits through which it is possible to obtain knowledge that may be homogeneous.

Higher education institutions in Ecuador, like many others in Latin America, has many important growing challenges; The internal administrative and academic models struggle to adapt to the latest days that quality is measured not only in terms of teaching students but also with the participation and the existing representation of the university in various fields of universal knowledge and the impact they've on the region of South America and all over the world; However, the development of inefficient administrative systems, which they have an impact on the academic and organizational levels, means that the vision is limited in its totality, so it is necessary to develop an internal strategic vision that provides a clear competitive advantage in the organization and Therefore establishing processes that can adequately feedback, that is why it is required that intangible assets such as knowledge.

This research shows how these cognitive relationships can be used to improve the strategic vision of the organization in order to increase a competitive advantage in institutions such as the educational institutions in the city of Guayaquil, Republic of Ecuador. Most of the organization were chosen because of a model of knowledge management that is not so easy to recognize, at the same time, they are the universities that have a better projection outside their territory because this city is considered the Economic capital of Ecuador and therefore the contact existing with other nations of both America and the rest of the world, require the local administration to focus on the development of a strategic vision that can put them at the forefront in South America.

Theoretical framework

The role of a strategic vision focus on obtaining an great performance and a big organizational success (Kantabutra, 2008), is a clear leadership and provides an effective vision, since it is the one that will be in charge of disseminating the achievements in all the areas of The organization (Ireland & Hitt, 1999), is how Dowling & Moran (2012) understands that very different factors can give a

higher reputation that is reflected in the employees and that strengthens the support of the stakeholders towards the internal processes.
The objectives and methods, as well as the practical actions of the organization, give a shape to the strategic vision (Pascu, 2015), but their nature must be found in the consolidation of processes of internal innovation of the general administration (Dragomir & Panzaru, 2014), this is a proof of a resource that must be found and can be renewed as quickly as it may be needed (Miner, 2002), it is in this way a very logical solution that is found in Knowledge Management.

The administrative models proposed that in the organizations generally are attached to limiting visualizations proposed by the managers of the organizations (de Oliveira, Filon, Dalfovo & Urbanavicius, 2013), although the theoretical approach of this kind of problems delimits that for the creation of Better models, attached to reality, it is necessary to find differences between the resources, the faculties and the existing competencies both internally and externally (Devece, 2013), this is called non-standardized information.

(Luiza & Daniela, 2013) it usually becomes a part of the enriched processes (Grundspenkis, 2007) through which is a smart strategy that can be generated by management (Tomášková & Kopfová, 2010) in its moment, it contributes to developing and improves the competitive advantage of the organizations where Is developed and therefore has the ability to trigger new elements that provide better Now continues to the organizations;Generating in this way a new vision on which it is possible to build a new concept that provides international recognition to the organization in question.

For institutions of higher education, the environment is extremely competitive (Mount & Belanger, 2004), the heterogeneity of education grows according to the complexity that is based on its competence (Maringe, 2005), however, it is required that University activities are focused on the same mission: to have cognitive elements to develop an integral strategic vision (Alhakimi and Qasem, 2014), which brings together the general opinions of the members of the organization and its stakeholders.

It is important to understand that there is a great diversity of institutions of higher education, where these differences do not stop only in the understanding of the educational concepts, but in the approach of the programs and systems focused on the administration (Meek, Goedegebuure, Kivinen & Rinne, 1996), which in turn has a direct impact on academic orientation, access to

certain educational levels, quality and social relevance (Lang, 2003), which has the capacity to support the generation of sustainable competitive advantages Through an adequate internal and external strategic vision (Windiputera, De Witte, Groot & Van Den Brink, 2017).

According to Blank (2012) last paragraph capabilities demonstrate that resource characterization is generally based on tangible assets, however, based on an epistemological view, knowledge must be the factor that the organization's members create, store and transfer (Centobelli, Cerchione And Esposito, 2017), based on this scenario, the establishment of processes based on so-called knowledge management has the capacity to improve administrative performance that positively influences decision-making cycles (Nonaka, 1994).

Which requires a careful analysis of the experience that is going on in the organization comes from tacit knowledge or explicit knowledge; That is, that the contextual dimension evaluates the experience of both decision-makers and those who participate in the external elements of the organization (Nonaka & Takeuchi, 1997), in case of the higher education institutions, if Internal managers take the appropriate knowledge, or in the internal case, ie the most explicit part, is properly used to create visions appropriate to the environment that are lived and that can encourage the creation of competitive advantage.

One of the main advantages of knowledge management is that it can be adapted to practically any sector or any discipline, including public or private organizations (Tarnekar, 2017), which means that many organizations implement this model to be efficient in their processes and become more competitive (Tanty, Spits & Suroto, 2017), the process of teaching and the administrative process (Akbar, Setiawan & Basuki, 2015), in the case of higher education institutions, the knowledge management process must take two fronts: that means that it must permeate an absolute integration of the processes that take a place on the day to day.

However, in the denomination was based knowledge, based on good systems, but capitalize knowledge in a way that can function as a resource similar to economic and can be tested according to competitive needs (Brahma and Mishra, 2015).

The paradigm that is lived with the administrative process requires that knowledge functions as part of the strategic organizational vision, that is, that both explicit knowledge and tacit knowledge contributes to the development of a cross and strategic administration (Brajer-Marczak, 2016),

According to Mikula (2007), the creation of cognitive systems are an obligatory part of the continuous understanding of information, so that to develop an integral vision in higher education institutions, required an interdisciplinary approach is where the human resource is Finance and technology (Jashapara, 2006), increasing, according to Davenport & Prusak (1998), efficiency, effectiveness and internal productivity, making them a competitive advantage for organizations that apply it.

The action is an addition of cognitive processes to the main structures of the organization and it must create above all some more value (Lee and Choi, 2003), in this way it is possible to observe a real change in the strategic vision of organizations.

Methodology

This research aims to understand how knowledge management can act as a growth factor of strategic vision in the higher education institutions of the Ecuadorian city of Guayaquil; Focusing directly on the environment, both external and internal, as well as the processes that are generated by this model (Ahmed, 2010), so it can be analyzed in depth which are the facts that make a bigger impact and could be used directly in the creation of an appropriate strategic model for these organizations.

In order to carry out the research, as sample as 75 managers and middle managers were taken, all related to the educational system of several universities in Guayaquil; The sample was taken for convenience, and at the same time it was considered that those are involved in the process of data collection also had the ability to make direct decisions about events of the same institution to which they belong, as well as that, could be propellers of a vision Strategy.

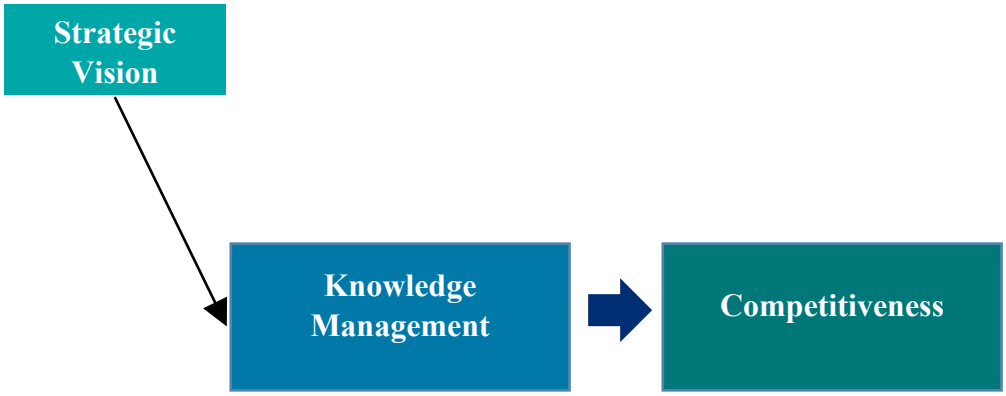
Sampling was calculated based on an estimated error of 11%, taking into account the formula of infinite samples, because the number of people available could be very broad given the educational offer, however, the questionnaires were also controlled to only develop them in institutions already consolidated and recognized in the region.

A measurement instrument was developed with 18 items based on the Likert scale of 5 elements. At the same time, to theoretically support the instrument, we proceeded to review the theoretical framework of the work and in this way to obtain an adequate theoretical condition; at the same time,

each of the data presented must be directly related to the process of knowledge management and the strategic vision that is sought.

From the results will be reviewed the most relevant categorized variables, offering an interpretation of the data and also the focus on the impact on the competitive advantage existing in the studied institutions, so that it is possible to comply with the factors that our construction provides.

Theoretical and Methodological Construct



Source: Self elaboration with theoretical framework design.

The proposed construct, as simple as it seems, contains a complex general idea, in which it can be seen how a strategic vision based on a correct knowledge management has the power to influence directly in the creation of competitiveness.

To observe the relationships between these two schemes it is important to use quantitative tools, which, according to Pierce (2013),brings establish to the correct relations between **the** independent variable and the dependent variable, measuring directly as it influences one in the other, at the same time it is required for a solid statistical technique, so that Analysis of Variance (ANOVA) was chosen as the highest level of the process, since even when it is a correlational technique, it allows to observe clearly how these relations between items are established.

Analysis of results

The data collection was based on a probabilistic trial, that is, only members of organizations whose knowledge level was sufficient to answer the questionnaire were selected, as well as having the

capacity to make decisions. As already mentioned, the sampling formula considered 7% error and 91% confidence in infinite terms, this was due to the location of managers in the various institutions of higher education in the city of Guayaquil.

To start the analysis, we proceeded to test the reliability of the sample taken, based on the questions called the Cronbach Alpha statistic, which measures the internal consistency of the variables through a simple test, which Measures the unidimensionality and homogeneity of each of the studied variables in a range of 0 to 1 (Tavakol & Dennick, 2011), where the value between the closest to the unit will be much more representative, in such a way that the coefficient Can be transformed into percentage terms by validating how the variables behave.

Cronbach's Alpha – Questionnaire Items.

Alfa	Elementos
0.871	18

Source: Self elaboration with questionnaire data.

According to the Cronbach statistic, the value of the crossing of the variables expressed through the 18 items indicates that the variables have a consistency of 87.1%, which means that the results are adequate to work with these variables in more elements Complexes or crosses of variables by means of several complementary quantitative techniques.

It is in this way that a validation is carried out through a general factorial analysis with the Kaiser-Meyer-Olhkin statistic and Bartlett's Sphericity Test, which is an identity matrix where it is possible to observe if the variables are Found correlated with a value of significance close to zero (Montoya, 2007), the results of the test showed the following data

KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.898**
Bartlett's Test of Sphericity	**Approx. Chi-Square**	**6.2583**
	df	2628
	Sig.	0

Source: Self elaboration with questionnaire data.

The results preset after the analysis show that in the Bartlett sphericity test it is significant, since the value is close to.000, which is an indicator of data consistency, so that it can be said that the data

were collected from Randomly, while the degrees of freedom of 2628 speak of a wide dispersion of responses, as well as a Chi square of 6.2583,which indicates that the variables provide relatively efficient information at the time of crossing them; On the other hand, the KMO statistic shows that the consistency of correlation, that is to say, the proximity of the variables between the groups is 0.898, or 89.8%.

The importance of the results presented at the tables lies in the possibility of obtaining better results for the verification of the hypotheses supported in the work from its observation through the multivariate method of analysis of variance; To do this, three groups will be taken, in which the events that generate leadership in the organization will be measured in a separate way, on the other hand how the decision-making is contemplated and finally which of these two schemes contributes most to knowledge management.

Next, we proceed to carry out the crossings of variables related to the hypotheses raised; In order to clearly answer the correlation, the variables will be analyzed through the one-way ANOVA technique.

Hypothesis 1 quantitative analysis

The first assumption focuses in terms of the variable Knowledge Management and its item Strategic Vision, generating the following statement:

H_1.- Greater knowledge management in institutions of higher education, greater strategic vision.

One-way ANOVA of Hypothesis 1

		Square Sum	DF	Cuadratic Mean	F	Sig.
Tacit Knowledge	Between Groups	194.021	59	3.288	4.081	0
	Intergroups	48.345	60	0.806		
	Total	242.367	119			
Explicit Knowledge	Between Groups	194.155	59	3.291	2.769	0
	Intergroups	71.312	60	1.189		

Total	265.467	119			
Total	321.592	119			

Source: Own elaboration with data analysis of the survey.

It is observed that Explicit Knowledge is the one that contains a much more relevant value in the quadratic mean between groups, with a value of 3.291 which indicates that the availability of the same is adequate in the institutions of higher education, this may also indicate that the Hypothesis is confirmed since the explicit and the tacit knowledge are very close and are highly representative in both cases, since also tacit knowledge, ie that which is not visible in its totality has the capacity to intervene correctly in the creation of An adequate value for the strategic vision.

It can be said that the hypothesis is confirmed and that in the first place the institutions of higher education of Guayaquil have a significant and representative amount of knowledge to be applied, however the strategic vision depends on the appropriate use of the information.

Hypothesis 2 quantitative analysis

Hypothesis 2 measures the relationship between knowledge management through a strategic vision and the generation of competitiveness in higher education organizations in Guayaquil, Ecuador.

H_2.- The strategic vision of higher education institutions based on a Knowledge Management model promotes a direct increase in the competitiveness of the sector.

One-way ANOVA of Hypothesis 2

		Square Sum	DF	Cuadratic Mean	F	Sig.
Technology Competitiveness	Between Groups	195.205	44	4.436	4.223	0
	Intergroups	78.787	75	1.05		
	Total	273.992	119			
Financial Competitiveness	Between Groups	154.094	44	3.502	2.923	0
	Intergroups	89.873	75	1.198		
	Total	243.967	119			

Total	195.205	44	4.436	4.223	0

Source: Own elaboration with data analysis of the survey.

It is observed that in both cases the quadratic average is found in normal levels, however in the case of the technological competitiveness variable the quadratic value between groups is the highest, which means that the hypothesis is accepted, However, it is necessary to work an integral vision through which all items grow, since there is a visible disparity in intergroups, which is not normal.

Conclusions

Knowledge management is undoubtedly one of the tools that can most contribute to the continuous improvement of higher education institutions, however, its implementation, mainly in those studied in the city of Guayaquil, is still far from a common denominator.

As one can observe in the investigation one of the main problems is that even in the universities of Guayaquil the model is based mainly on obtaining advantages from the existing tangibles, but it does not make adequate decisions based on personal expectations and experiences Both the students and the teaching staff, this through the general observations that are made of the tables developed for the hypotheses, at the same time it can be observed that a model of strategic vision can be fulfilled naturally, nevertheless requires a special Attention in the collection of cognitive processes, because they are being left aside the main intangible assets are tacit or explicit experiences.

This is how research understands that universities should bet more to generate advantages from knowledge, leadership and above all from conscious decision making.

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