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Impact of the practices of knowledge management in the organizational performance: case banking sector in Mexico.

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Abstract

The globalization of markets has modified the structures of business models. Organizations are challenged to be more competitive every day, and knowledge management plays a very important role. Financial markets are obliged banks to trust knowledge and be more efficient in managing their operations.

This study is empirical of a qualitative nature and sought to compare the vision of managers with respect to bank executives on the application of knowledge management practices that are carried out in the sector and how they impact on organizational performance Interviews were conducted structured carried out with the executive directors of six banking companies and questionnaires with 48 bank executives. This first approach to the banking sector contributes to the literature on the subject as it is a pioneering work in the country, the study highlights the emerging trends of the prevailing perspectives of CG among bank employees and the main problems they face.

Keywords: Knowledge management, organizational performance, banking sector.

JEL: G20, D80, M10

Introduction

Knowledge management is a buzzword in business. With the introduction of technology and the internet in all sectors of the industry, companies are changing their business model. Critical success factors previously accepted as plant, equipment, inventory and financial capital (tangible assets), have already gone down in history, giving rise to the value of knowledge and information as the power base and competitive advantage of any company.

E-business has evolved the economic world into a new operational era, where the fundamentals and rules of the market change, presenting virtually unlimited opportunities and increasing the ability of organizations to do business and share information at a higher speed than ever before.

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This channel has the power to connect people and organizations around the world, making it possible to create global relationships with partners, suppliers and customers. It also clearly changes the way these relationships are started, strengthened and maintained. It is here where optimal knowledge management becomes so important for the company and the creation of value and competitive advantage.

Two of the most important opportunities and risks in the new economy are taking advantage of knowledge as a corporate asset, as well as building and maintaining solid relationships with clients, employees, shareholders, and other company personnel (Du Plessis and Boon, 2004).

This article aims to identify the knowledge management practices that are carried out in the Mexican banking sector and their impact on organizational performance, so as to establish the bases for future empirical works of greater scope and depth that relate this line of research and the banking industry.

Contextual framework

Banking sector in Mexico

The Mexican banking system is made up of 51 authorized and operating banks that comply with international regulatory standards and are supervised by the National Banking and Securities Commission (CNBV) under a risk-based prudential scheme. Its important work within the financial system is to contact suppliers and applicants of financial resources so that, through this financial intermediation function, the efficient functioning of the economy is supported (CNBV, 2020).

The banking sector in Mexico has had significant growth in recent years. According to the CNBV (2020) in the Multiple Banking Statistical Bulletin, during the period from December 2010 to December 2020 the following data is available:

- Assets have grown by 54.89%.

- Total deposits grew by 45.57%.

- The net result is positive with a growth of 45.82%.

- Regarding the loan portfolio, growth has been 39.35% and a delinquency rate that fell from 2.33 to 2.20% in the same period.

- The coverage index closed in 2019 with 146.01.However, despite the promising figures mentioned above, the banking sector faces a series of challenges that, like any company, to stay in the market it must consider and face.

According to the CNBV (2019), one of the main challenges facing this sector is bank deconcentration. Most of the assets (78.34%) of the banking sector, as well as the majority of the portfolio (81.93%) and deposits (79.63%) are concentrated in only 7 institutions (BBVA Bancomer, Santander, Banamex, Banorte, HSBC, Scotiabank, Inbursa).

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Another challenge is to increase penetration through formal financial infrastructure and credit, since the commercial banking sector still does not provide products and services to significant segments of the population. Although the number of access points per 10,000 adults has increased continuously (1.9 more access points per 10,000 adults in 2018, municipal coverage of 51% and demographic coverage of 92%; CNBV, 2019), Mexico is still lagged compared to other Latin American countries. Regarding credit, the level of credit penetration in the country is low (12% of adults with credit in 2017 below Chile, Brazil and Colombia; CNBV, 2019, p. 45).

Another challenge is to maintain the stability and development of the industry. This refers to the fact that international regulation standards must be implemented but paying attention and care to the sensitivity of the characteristics of the Mexican sector so that regulation guarantees stability and the sea conducive to its development.

Why study knowledge management in the banking sector?

The reasons for studying knowledge management in the banking sector are many, however they can be summarized in the following three:

- Mandatory automation as part of financial sector reforms around the world and the use of technology gives rise to various information systems and therefore massive generation of information from the different products and services it offers and the points of interaction that has (ATMs, internet, mobile, etc.).

- Banking has been considered the riskiest business that has effects on the economy (Goyal, 2007), so risk management is another area that requires banks to document (Baruah, 2008), turning information into knowledge and taking advantage of it to make it more competitive.

- Banks are improving the speed of processes and supply. They are working with knowledge to create service innovations, new products, and customer focus. In this complex and challenging operating environment, their orientation to knowledge and their ability to harness it can only differentiate them to help continue to grow (IBM, 2006, Goyal, 2007). Reasons for which it has been decided to carry out this work.

To compete and be successful in their own market, banking sectors must now learn to manage their intangible asset, that is, knowledge. To the extent that they collect, organize, share and analyze their knowledge in terms of resources, they will be able to more easily respond and satisfy customer expectations at any time and place by positioning themselves above the competition (Manivannan and Kathiravan, 2016).

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Literature review

Knowledge management

Knowledge management has become an undoubtedly important component within the intangible assets of an organization. Continuous change in market expectations and demand for new products has gradually replaced capital and labor by knowledge and the routine work of the knowledge worker (Satish, 2012). Along with the introduction of new technologies, companies must focus on knowledge management activities. The banking sector has not been the exception, however in the financial panorama it becomes somewhat more difficult due to the nature of the activity and the type of resources to which it is directed (Davenport, 1998; ISIS, 2002; Satish, 2012).

Looking for a conceptualization of the term, knowledge has been defined from different contexts in order to relate it to management, for example: knowing why, knowing what, knowing how to do, knowing who, knowing where and knowing when (Satish, 2012).

Knowledge management is the conscious collection, organization, exchange and analysis of knowledge in terms of resources, documents and people's skills.

While Bounfour (2003) defines it as the arrangement of a specific and administrative philosophy, systems and gadgets, designed to create, grant, use information and data within and around an association.

Knowledge management practices can be grouped into four large areas; knowledge acquisition, conversion, application and protection process (Gold and Arvind Malhotra, 2001).

These knowledge management activities can be defined as:

A.Knowledge acquisition: Acquisition refers to obtaining information, where achieving, searching, producing, developing, capturing and coordinating are shared terms used to represent the knowledge acquisition process.

B.Knowledge conversion: It refers to the procedures that make existing learning useful and are related to the capacity of an organization to assimilate knowledge (Grant, 1996), solidify it (Sánchez & Mahoney, 1996), and transmit it (Zander & Kogut, 1995).

C.Knowledge Application: It is the real use of learning.

D.Knowledge Protection: Learning or knowledge within the company can be as a printed or electronic record, however its protection must be guaranteed by licenses, copyrights, trademarks, etc. And as Barney (1991) mentioned, it is imperative that the organization knows that the basis of an advantage will be the premise that it is exceptional and cannot be duplicated.

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Knowledge management: process or system

Dutt (2013) establishes that knowledge management can be seen as a process and a system. As a process that involves any systematic activity related to the capture and exchange of knowledge by the organization (Nonaka and Takeuchi, 1996; Singh, 2008). As a system because it is a strategy, a cultural practice, a technology-driven process, and a leadership agent to harness and extract value from intellectual assets.

Table 1 shows the characteristics of the CG, its source, where to look for it, objective, focus, basic principle, evaluation scale, benefits, role of the client, role of the organization.

Table 1. Knowledge management characteristics

	Knowledge management
Source of knowledge	Internal knowledge, incorporated within the organization
Where to look for knowledge?	Employees, team, company, business, colleagues
Objetive	Discover, use and share internal knowledge
Who is it focused on?	Employees who do not use and / or share their knowledge
Basic principle	If we knew what we know
Explanation	Integrating employee knowledge about customers, sales processes and R&D
Business purpose	Increase return on capital, decrease economic cost, omit repeated processes, share lessons learned
Evaluation scale	Efficiency versus budget
Profits	Customer satisfaction
Customer role	Passive, recipient of the product or service
Role of the organization	Empower the employee to share her knowledge with their co-workers

Source: Adapted from Gibbert, Leibold y Probst, 2002.

Knowledge management in the banking sector

In recent years, banks have made an effort to automate their processes by creating information systems to carry out their operations and improve the offer of services. While these systems have helped to improve their processes, they have also generated large volumes of data and information.

In this environment, the application of technologies and knowledge management have become of vital importance to obtain a competitive advantage.

Unfortunately, not all banks are aware of this, as very few banks apply the principles of knowledge management (Blesio & Molignani, 2000). In addition, apart from the large volumes of knowledge, the use of information technology in knowledge management has given it another dimension. According to DeSanctis & Poole (1994) it is important that the use of technology and the social process of using technology are in harmony.

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According to Satish (2012, p. 135):

"The first step for banks to start with the knowledge management process is to create the necessary mentality among employees regarding this issue, subsequently identifying the areas of which knowledge is required, acquiring knowledge, developing the knowledge bank within of the organization and constantly update it. Then make the appropriate updated knowledge available to employees (users) anytime, anywhere and reuse it. And finally, define places of concentration of knowledge where new knowledge can be added".

Satish (2012) mentions that knowledge management in the banking sector involves the external environment (Regulations, financial system, competitors, clients, media, etc.) as an important element to be considered by any organization that wishes to maintain a competitive advantage. in its turn through the proper management of knowledge. And in the internal or organizational environment, all the personnel of the company are involved, from the General Manager to the lowest level subordinate. It is here where through the combination of people with technology (internet, intranet, e-mail, mobile, computers, and other equipment), information is transformed (through the process of creation, retention and dissemination in meetings, emails, discussions, etc.) in knowledge (explicit: documents, reports, letters, emails, among others. And implicit: ideas, opinions, thoughts, plans, experience, etc.) that produces services and products.

Proposed conceptual model

Performance within the organization is a common theme in most management-related areas. Organizational performance can be defined as efficiency related to money, operational efficiency and productivity of an organization (Venkatraman and Ramanujam, 1986). Performance can be characterized as: "a measure of the achievement of the organizations objectives" (Daft, 2012).

If organizational performance is associated with knowledge management, the benefits are many and can be individual as well as business (Cong & Pandya, 2003).

At the organizational level, knowledge management provides two main benefits for an organization: improving the performance of the organization through greater efficiency, productivity, quality and innovation and increasing the financial value of the organization by treating people's knowledge as a active.

Knowledge is the only input that can help you cope with radical changes and take corrective action before it is too late. Knowledge alone can accelerate product innovation and increase revenue (Kalling, 2003; Darr, Argote, and Epple, 1995).

Knowledge provides effective decision support. Effective knowledge sharing of past successes, failures, projects and initiatives enables better decisions to be made and creates greater economic value for the organization (Youndt, Subramaniam & Snell, 2004).

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And directing the direct benefits to organizational performance, it can be mentioned that there is a reduction in costs, an increase in the flexibility to accept and change, a reduction in time to market for new products / services, an increase in sales, a reduction in the cycle times of the process and better decision-making, greater responsiveness to customers, improved innovation, greater customer satisfaction, and improved employee competence (Ofek and Sarvary, 2001; Tsai, 2001; Wiig and Jooste, 2003; O'Dell et al., 2003; Carmeli, 2004).

The literature shows that efficiency is absolutely influenced by knowledge management. The achievement of learning and dispersion do not have a specifically direct or identifiable result on the efficiency of an organization, however, a large part of organizations affirm that adequacy and productivity in knowledge management procedures are useful for performance of an organization. Knowledge management is seen as the origin of performance (Darroch, 2005).When there is an improvement in the use of technology and knowledge management capabilities, the organization is in a superior position to satisfy customer needs by offering better services (Hunt and Morgan, 1995; Housel and Bell, 2001). The literature shows that the security of learning and information exchange within a company led to improved profitability (Darr et al., 1995). Learning is the best variable for a company (Hendriks and Vriens, 1999; Andrew and Wayne, 2001; Schiuma, 2012).

One way to measure the effectiveness of knowledge management applications is to measure their influence on business performance (Yaşar and Kızıldağ, 2013).

To measure organizational performance, there are studies that focus on financial indicators and those that consider that these studies are insufficient to evaluate this variable. Studies such as that of Chakravarthy (1986), Kaplan and Norton (1996) and Robinson, Anumba, Carrillo and Al-Ghassani, (2005), point out that considering only the classical financial measures is not enough to make a good calculation of organizational performance (Tseng, 2015). Lou (2000) and Fliaster (2004) mention that non-financial measures such as the relationship with the client and employees, their satisfaction and loyalty, etc. they can be variables that positively or negatively influence organizational performance.

On the other hand, Pfeffer and Sutton, (1999), Mentzer et al. (2001), Ribiere and Sitar (2003), Hult, Ketchen and Slater, (2004) and Tseng and Fang (2015) establish that the management of Knowledge, as another non-financial measure, has a positive impact on corporate performance. Alavi and Leidner (1999) mention that in the financial aspect the company can have an increase in sales and decrease in costs, which means higher economic returns. However, they also establish that these benefits are given by good knowledge management with positive impacts on non-financial but visible issues, such as: internal communication between staff is greater, better and faster, reducing problem solving, better customer service, improves project management, in short there is greater overall efficiency in the company.

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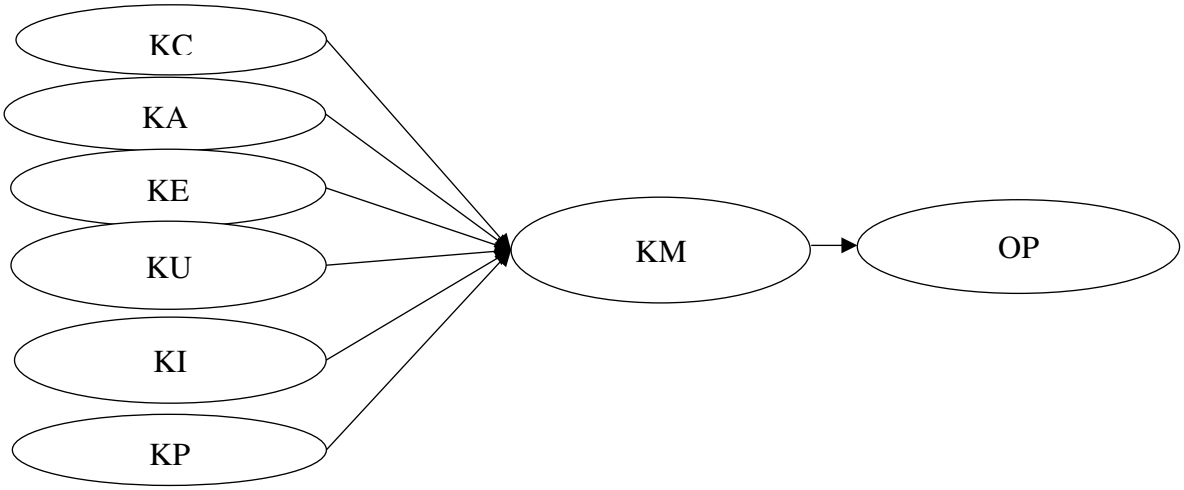
Given the above, the following model shown in figure 1 was proposed.

Figure 1. Proposed model



Note: KC - Creation of knowledge, KA - Accumulation of knowledge, KE - Knowledge exchange, KU Knowledge utilization, KI – Knowledge internalization, KP – Knowledge protection, KM- Knowledge management, OP - Organizational performance.
Source: Adapted from Tseng and Fang (2015) and Yaşar and Kızıldağ, (2013).

Methodology

To carry out this study, an exploratory analysis divided into two stages was carried out. The first stage consisted of holding a focus group meeting with bank executives to apply a structured questionnaire in which they were asked their perception of how much the aforementioned knowledge management practices were carried out within the company. The instrument was structured in such a way that they evaluated, according to their experience, a Likert scale using five options, ranging from "never / not done / not have / not applied" to "always / applied / have / are done" The activities mentioned with respect to knowledge management. Table 2 presents the variables with their definitions, Table 3 presents the indicators by variable.

For the data analysis of this first stage, the SPSS program was used. Starting with the coding of all the answers. Subsequently, mean scores were established for each question, and in the same way it was continued until obtaining a result per dimension and then in a general way. The results were located within one of the five levels of the following scale: 1 = very low, 2 = low, 3 = medium, 4 = high, 5 = very high. In this way, it was possible to describe the results obtained by the instrument.

In a second moment, with the coding of the responses, the statistical validation of the instrument was carried out and finally a multiple linear regression that allowed to find which dimensions of those analyzed exert the greatest influence on knowledge management and how this variable impacts on organizational performance.

To carry out stage 1, 48 bank executives (28 men and 20 women) supported, whose age ranged between

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22 and 49 years, the positions they held are executive of products other than traditional ones (n = 28), manager (n = 9), traditional bank executive (n = 5) and control desk analyst (n = 6). Years of experience working in the sector ranged from one to 29 years.

Table 2. Conceptualization to measure the variables of knowledge management (KM)

Variable	Definition	Source
Knowledge creation (KC)	It is the production of knowledge by creating or finding new knowledge internal or external to the company through the analysis of existing information.	Holsapple & Singh, 2001 Tseng & Fang, 2015
Accumulation of knowledge (KA)	It is the systematized management of stored knowledge by linking information and communication systems in a company.	Davenport & Prusak 1998 Teece, 1998
Knowledge exchange (KE)	It is the exchange of knowledge and experiences between the members of the company; testing the processes, tools and platforms that promote learning, its exchange and thereby improve productivity.	Nissen & Espino, 2000 Hung. Lien, Yang, Wu & Kuo, 2011 Lin, Su & Chien, 2006
Knowledge utilization (KU)	Knowledge application.	Tseng y Fang, 2015 Lehtimäki, Simula & Salo, 2009
Knowledge internalization (KI)	It's when the relevant knowledge is selected, acquired, and then applied.	Holsapple & Singh, 2011 Du Plessis & Boon, 2004
Knowledge protection (KP)	The forms that protect the theft of information and the illicit use within a company fall within the security framework of the information that is had.	Liebeskind, 1996
Organizational Performance (OP)	Efficiency related to money, operational efficiency and productivity of an organization.	Venkatraman & Ramanujam, 1986

Source: Own elaboration with information obtained from the different authors cited in the table.

Table 3. Description of the indicators by variable

Variable	Indicator	Source
KM	KM1. The company has developed methods to achieve monetary results through knowledge. KM2. The company has developed a series of specific indicators for knowledge management. KM3. The company has balanced hard and soft indicators, as well as monetary and non-monetary. KM4. The company allocates resources for actions that improve the knowledge base in a measurable way. KM5. The knowledge gaps found in our bank are systematically determined and well-defined processes are used to compensate for them. KM6. The company has developed an advanced intelligence compilation mechanism in accordance with developed and ethical values.	Yaşar & Kızıldağ, 2013

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	KM7. Each member of our bank gathers opinions from traditional and non-traditional sources. KM8. The company has defined a specific pattern for the best practices transfer process, including documentation and lessons learned. KM9. The company values the knowledge of its employees that they know but do not express, and transfers them.	
KC	KC1. The company has processes to acquire knowledge about customers, suppliers, employees, etc. KC2. The company has a process to generate new knowledge from existing knowledge. KC3. The company has knowledge distribution processes throughout the organization. KC4. The company has collaboration processes with other organizations.	Ahmed, Fiaz & Shoaib, 2015
	KC5. The company has established a well-designed platform to provide the latest information.	Tseng & Fang, 2015
	KC6. The institution has processes to filter information.	Ahmed *et al.*, 2015
KA	KA1. The company has the information I need for my work stored in a database. KA2. When doing my work, I search, analyze and use the information from the company's databases.	Tseng & Fang, 2015
	KA3. The company has processes for the integration of the different sources and types of knowledge.	Ahmed *et al.*, 2015
KE	KE1. The company promotes the exchange of information and knowledge between the different departments. KE2. The company offers a comprehensive network platform for accessing necessary information and knowledge sharing among staff.	Tseng & Fang, 2015
	KE3. The company has processes to convert knowledge into the design of new products and services.	Ahmed *et al.*, 2015
KU	KU1. The company provides a friendly knowledge system to improve the application of the same. KU2. The company has promoted a culture of knowledge sharing. KU3. The company has a reward system in place to encourage staff to use existing knowledge to generate new ideas and suggestions. KU4. The company offers an excellent educational training opportunity to enhance staff knowledge and skills.	Tseng & Fang, 2015
	KU5. The company has processes for absorbing the knowledge of individuals.	Ahmed *et al.*, 2015
KI	KI1. The company has processes to apply the knowledge learned from mistakes and experiences. KI2. The company has processes for the use of knowledge in the development of new services. KI3. The company has processes for the use of knowledge to solve new problems. KI4. The company has processes to make knowledge accessible to those who need it.	Ahmed *et al.*, 2015
KP	KP1. The company has processes to protect knowledge leakage inside and outside the organization. KP2. The company has Incentives that promote the protection of knowledge. KP3. The company has technology that restricts access to some sources of knowledge. KP4. The company has processes to protect knowledge from theft inside and outside the organization.	Ahmed *et al.*, 2015
OP	OP1. The organization is growing faster. OP2. The organization is more profitable. OP3. The organization is achieving higher customer satisfaction OP4. The organization provides higher quality services.	Ahmed *et al.*, 2015

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	OP5. The organization is efficient in the use of resources. OP6. The organization is using internal quality-oriented processes. OP7. The organization responds faster to requests.	

Source: Own elaboration adapting the information of several authors.

The second stage consisted of holding a meeting with high-level banking executives that allowed them to carry out a simple and structured interview that, due to the availability of their time, would yield useful data on their perception of knowledge management practices in the banking sector. For this, they were asked to weight from 1 to 100 the variables presented in table 4 in such a way that the sum gave 100. Considering that more value would be given to the activities that they considered most important due to their impact on organizational development.

Table 4. Weighting of variables

	Variable	**Weighing**
Knowledge Management Practices	Knowledge creation	
	Accumulation of knowledge	
	Knowledge exchange	
	Use of knowledge	
	Knowledge internalization	
	Knowledge protection	
	Total	100 points

Results

Results of the first stage

Figure 2 presents the weighted results of the responses of the 48 executives regarding the knowledge management practices that they considered were carried out within their company. It is observed that with regard to knowledge protection practices, they considered that they are carried out almost entirely, since the High category obtained 42%, as well as regarding the internalization of knowledge. Similarly, for the accumulation of knowledge and the creation of knowledge, Alto is the highest, with 44% and 50% respectively. Unlike the knowledge use practices that they considered to be carried out at a medium level, which accounted for 38% of the total.

Regarding the knowledge management variable in general, 35% answered that it was high, a sign that they are indeed being carried out, not entirely in accordance with the questions considered for its measurement, but mostly.

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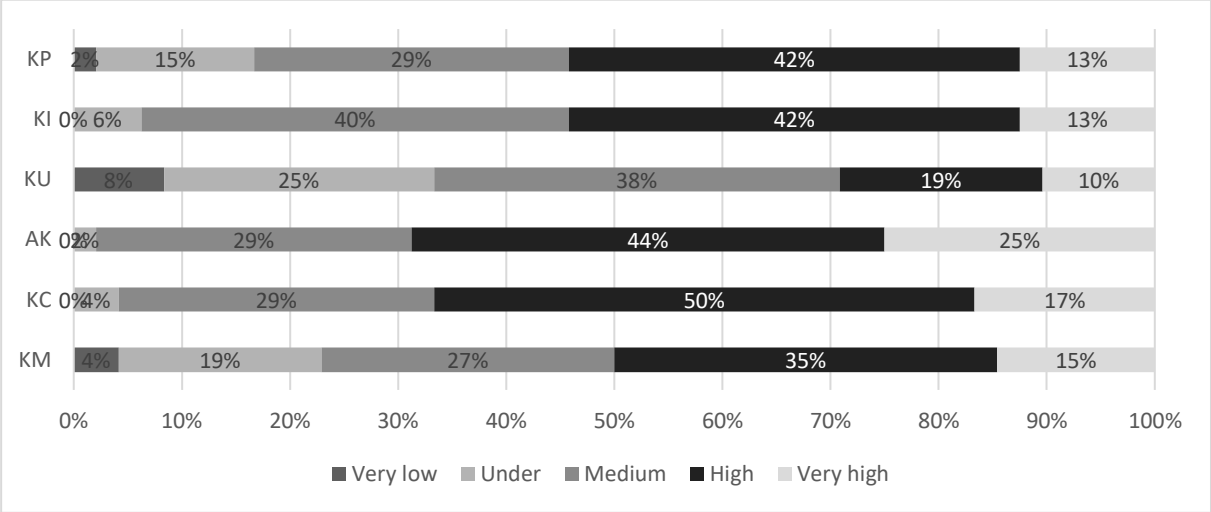
Figure 2. Weighting of knowledge management practices by executives



When making the sum by level, it was obtained that the inclination is indeed positive, since for "Very low" it was 15%, for "Low" it was 71%, for "medium" it was 192%, for level 4 (High) 231% and level 5 (Very high) obtained 92%. Meaning that knowledge management practices are effectively being carried out within banking companies.

Now, if the value by variable is reviewed, the executives gave greater weight to the accumulation of knowledge with 69% between levels 4 and 5, followed by the creation of knowledge with 67%. Which differs a bit from what was obtained in the following tests.

Linear regression was carried out, for which the exploratory factor analysis of the items considered to measure each variable was previously carried out together with the validity and reliability tests. The results are presented in Table 5.

Table 5. Validity and reliability tests

Variable	Indicator	Cronbach's Alpha	KMO & Barlett Test	Total variance explained	Factorial load
KM	KM1.	0,943	KMO 0,895 Chi squared 370,758 gl 36 Sig. ,000	69.624%	0,916
	KM2.				0,856
	KM3.				0,708
	KM4.				0,861
	KM5.				0,869
	KM6.				0,913
	KM7.				0,728
	KM8.				0,846
	KM9.				0,785
KC	KC1.	0,902	KMO 0,829 Chi squared 178,962	67.809%	0,837
	KC2.				0,877
	KC3.				0,866
	KC4.				0,759

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	KC5.		gl 15 Sig. ,000		0,798
	KC6.				0,799
KA	KA1.	0,848	KMO 0,688 Chi squared 64,336 gl 3 Sig. ,000	76.643%	0,913
	KA2.				0,901
	KA3.				0,809
KE	KE1.	0,873	KMO 0,688 Chi squared 83,912 gl 3 Sig. ,000	80.184%	0,822
	KE2.				0,929
	KE3.				0,930
KU	KU1.	0,915	KMO 0,832 Chi squared 183,884 gl 10 Sig. ,000	75.257%	0,736
	KU2.				0,886
	KU3.				0,870
	KU4.				0,914
	KU5.				0,919
KI	KI1.	0,937	KMO 0,804 Chi squared 174,072 gl 6 Sig. ,000	84.349%	0,887
	KI2.				0,955
	KI3.				0,936
	KI4.				0,894
KP	KP1.	0,811	KMO 0,690 Chi squared 76,244 gl 6 Sig. ,000	64.346%	0,892
	KP2.				0,702
	KP3.				0,760
	KP4.				0,842
OP	OP1.	0,958	KMO 0,880 Chi squared 379,237 gl 21 Sig. ,000	80.726%	0,867
	OP2.				0,878
	OP3.				0,940
	OP4.				0,943
	OP5.				0,893
	OP6.				0,928
	OP7.				0,835

Subsequently, the multiple linear regression was run, performing two models. Model one considered knowledge management as a dependent variable and knowledge creation, accumulation, exchange, use, internalization and protection as independent variables. Model two considered organizational performance as a dependent variable and knowledge management as an independent variable. The results are observed in tables 6, 7 and 8.

For model 1, a corrected R squared of 0.768 was obtained, which means that knowledge management is explained by the variables of creation, use, accumulation, internalization and protection of knowledge

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by 76.8%, being significant (<0.05) the result obtained in the ANOVA test, and in the coefficients the variables that were significant were the creation of knowledge and the internalization of knowledge, with a beta of 0.554 and 0.210, respectively.

Model two explains that organizational performance is explained by knowledge management in 45.1%, being significant in the result of the ANOVA and a beta of 0.681.

Table 6. Multiple linear regression

Model	R	R square	R squared corrected	Standard error of the estimate
1	,890	,792	,768	,48198646
2	,681	,463	,451	,74062192

Table 7. **ANOVA**

Model		Sum of squares	gl	Quadratic mean	F	Sig.
1	Regression	37,243	5	7,449	32,063	,000
	Residual	9,757	42	,232		
	Total	47,000	47			
2	Regression	21,768	1	21,768	39,685	,000
	Residual	25,232	46	,549		
	Total	47,000	47			

Table 8. **Coefficients**

Model		Non-standardized coefficients		Typified coefficients	t	Sig.
		B	Standard error	Beta		
1	(Constant)	-1,000E-013	,070		,000	1,000
	Knowledge creation	,554	,136	,554	4,077	,000
	Accumulation of knowledge	-,051	,118	-,051	-,434	,666
	Knowledge utilization	,136	,113	,136	1,201	,237
	Knowledge internalization	,210	,103	,210	2,031	,049
	Knowledge protection	,158	,093	,158	1,702	,096
2	(Constant)	-1,000E-013	,107		,000	1,000
	Knowledge management	,681	,108	,681	6,300	,000

Stage 2 results

The results of stage 2 are shown in table 9 and figure 3, where for its elaboration the sum of the points awarded per variable assigned by each interviewee was made. In this case, the CEOs gave greater weight to the use of knowledge, followed by the exchange of knowledge and thirdly, its internalization.

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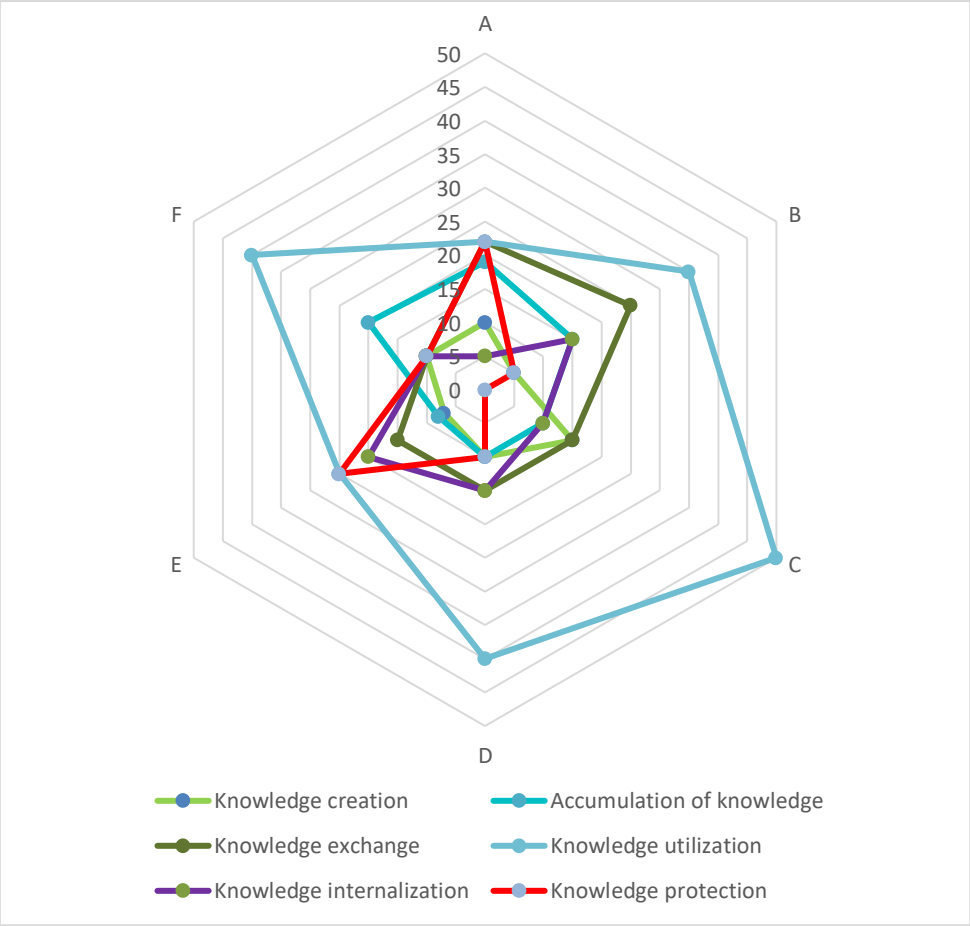
Table 10. Weighting of knowledge management variables for bank CEOs.

Variable	Points						Total
Knowledge creation	10	5	15	10	7	10	57
Accumulation of knowledge	19	15	10	10	8	20	82
Knowledge exchange	22	25	15	15	15	10	102
Knowledge utilization	22	35	50	40	25	40	212
Knowledge internalization	5	15	10	15	20	10	75
Knowledge protection	22	5	0	10	25	10	72
Total	100	100	100	100	100	100	

Figure 3. Weighting of knowledge management variables for bank CEOs



Obviously, the views between senior managers and executives are different, however it is redeemable, that even though they do not coincide, both recognize that knowledge management practices are carried out. To a greater or lesser extent but they are present.

Conclusions

Technology, new reforms and innovations are generating important changes in financial systems,

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promoting new strategies that favor the expansion and digitization of products and services aimed at increasing financial inclusion. However, one of the challenges is to maintain the stability of these systems, where knowledge management has become an indispensable factor for data analysis and its transformation into valuable information that allows you to better understand your customers, offer solutions to companies. diverse individual needs and achieve lifetime customer loyalty. Organizations must now learn to manage their intangible asset, which is "knowledge", on which their competitive advantage in the market increasingly depends.

The proposed model contributes to the literature on the subject without omitting that this study has limitations. The study is descriptive in nature, which means that, although there is a good theoretical basis for the research propositions, more extensive and in-depth empirical tests are needed that will have to be performed in the near future to more strongly validate the model. In addition, this study can be expanded by future researchers through a comparative analysis of the sectors that best perform knowledge management in the financial industry in Mexico or comparative within the same banking brands. In addition, empirical studies can be undertaken to validate or identify the characteristic factors of knowledge management in Mexico in the banking sector, cooperatives, or in any type of organization and compare it with other countries, so that they can be developed. best practices on the topic for business success.

In addition, it should be mentioned that this study was carried out before the COVID 19 pandemic began, so it would be important to evaluate what changes this sector experienced and how technologies in a certain way cushioned all the changes and restrictions established to monitor the safety of the employees and customers.

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