POSTCOVID

COMPETITIVENESS

BUSINESS RESILIENCE & ADAPTIVE SYSTEM

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TANIA GONZÁLEZ-ALVARADO
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This book is a product of the members of RIICO (Red Internacional de Investigadores en Competitividad) with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of Universidad de Guadalajara and RIICO.

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CONTENTS

Prologue

*P*ost-Covid Competitiveness: Business Resilience & Adaptive System is of interest to those who expect a critical but positive vision of the pandemic times we live. Experts explain the situation of the organizations, institutions and regions according to resilience, innovation and adaptation for the new ways and best practices according to the Sustainable Development Goals (SDGs). SDGs are the essential guidelines that facilitate the strategic consideration of the Post-covid competitiveness.

The authors are from Colombia, Spain, Poland and Mexico. All of them are experts in Economic and Business Sciences. The institutions that participate in this project are Fundación Universitaria Konrad Lorenz, Universidad Complutense de Madrid, Universidad Externado de Colombia, Pontificia Universidad Javeriana, Universidad Autónoma Metropolitana-X, Instituto Politécnico Nacional, Universidad Autónoma de Aguascalientes, Universidad Michoacana de San Nicolás de Hidalgo, Universidad Autónoma de Coahuila, Instituto Tecnológico y de Estudios Superiores de Monterrey, and Universidad de Guadalajara.

Each chapter of this book was based on empirical real-life evidence from enterprises, universities, governments and institutions. All of these studied organizations are part of the Post-Covid competitive environment.

The writers believe in economic progress in line with innovation, resilience, entrepreneurship and international cooperation between regions, countries and corporations.

This publication was created following the best practices of scientific edition. Turnitin was applied to favor the originality. The editorial team carefully analyzed the quality and originality of the contents. Every chapter was selected, evaluated, and modified with the support of international peers. Editors and authors hope is that this book will contribute to the advancement of theoretical and practical knowledge.

Dr. José Sánchez-Gutiérrez

Organizational Change and Competitiveness in Commercial Organizations

Chapter 11

Organizational Change and Competitiveness in Commercial Organizations

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INTRODUCTION

C hange is part of our reality and it is invariably present. Today, a sequence of variables converges and has some impact on the performance of companies. An example of all this can be seen in how the pandemic produced by COVID 19, has caused a significant change in the way companies work, as well as the habits of consumers.

For these reasons, carrying out a study of the change process in business is essential, since it must have appropriate organizational management. As already indicated, the world is always changing, so markets and companies are part of such changes.

For this motive, the change process must be studied, to understand correctly what the dynamics of this change process are like, and what are the factors or aspects that cause it. Also, it is very useful to know the factors that influence an organizational change procedure.

The approach of Organizational Design's perspective of study, reveals that changes are a kind of metamorphosis that the company presents, which is planned, consists of several dimensions, it is an intermittent change, of quality and radical, that causes a change of model.

THEORETICAL FRAMEWORK

How an organizational change is carried out involves a lot of work, since any change must face a series of problems that make it difficult to implement those changes. Hence the importance of conducting this kind of research. Just as the world is in constant change, companies also change for the aforementioned

reasons. Therefore, how companies change and the reason for these changes must be understood.

To implement a strategy that makes a company more efficient and competitive, it must have a comprehensive orientation on how to design work processes, skills that the employees must have, values, corporate culture; and an organizational design and organizational structure, according to the challenges that the market demand.

Among the authors who examine organizational change from the perspective of Organizational Design: Delgado, Vargas, Rodríguez and Montes (2018), Adda, Natsir and Rossanty (2019), Badruddozza and Magnus (2018), Iljins, Skvarciany and Gaile- Sarkane (2015), Parra and Del Pilar (2009), Hodge (2003), Villegas, Montes and López (2016), Heckmann, Steger and Dowling (2016), Andhika (2018), Hall (1996), Rico (2004), Stabile, (2019), Mondo and Musungwini, (2019); who were analyzed in this study.

Organizational change is any change in person or worker, in the structure of the company, or technology (Robbins & Coulter, 2009). In this regard, Badruddozza and Ramage (2018), found that Information and Communication Technologies have a great implication in organizational change in different social and material aspects of companies. While Adda, Natsir and Rossanty (2019), say that organizational change requires the involvement of leaders, employees, structures, and business systems, as a strategy to anticipate the future, and adapt to change.

For Szelągowska-Rudzka (2018), changes in the organizational context require that they be adapted through a process of change in the company. Szelągowska-Rudzka indicates that low worker participation does not improve their attitudes to change and does not neutralize negative comments in the form of resistance.

For their part, Macías, Tamayo and Cerda (2019), point out among the sources of rejection to change, when in the change procedure there is no good communication; lack of leadership is another cause of resistance to change. While Delgado, Vargas, Rodríguez and Montes (2018) indicate that resistance to change, public awareness, and the commercialization of innovations, are the most common obstacles, because personnel training, the development of an organizational design, organizational structure, and culture-oriented to innovation are the challenges that companies face. In this regard, Werkman (2009) indicates that the most bureaucratic companies with mechanical structures can hinder a change in the organization, causing resistance to change in personnel, due to the size and inflexibility of the company. (Rosenberg & Mosca, 2011).

According to Rico (2004), Organizational Design is a process by which the structure of an organization is founded or changed, to achieve the planned goals. For Hodge (2003), organizational design is how jobs, activities, and workers are integrated into the company, thus seeking to make the company more efficient and effective. Hodge (2003) also says that through organizational design it is sought to achieve a structure and configuration in the company that enables the best mix of integration and differentiation, and that helps the organization to adjust as best as possible to the environment.

For Hall (1996), organizational design is the selection that a company makes about how it is going to structure the company, and it focuses on 2 approaches: strategic selection, and the institutional model of the organizational structure.

The organizational design is the process by which managers make decisions about how the most suitable organizational structure should be for company strategies and the environment in which company members put these strategies into action. Therefore, the organizational design makes managers have at the same time 2 perspectives: towards the inside and outside of the company.

The organizational design includes, in addition to the organizational structure, the following variables or processes: the size and how the units are grouped; centralization and decentralization; planning and control systems; decision-making procedures; and formalize behaviors. (Parra & Del Pilar, 2009).

On the other hand, Krishnan (2018), discovered that the redesign of the organizational structure and effective communication are two factors that contribute to the preparation of the company for organizational change; Krishnan points out that the structure of the company must be changed to ensure that the organizational change process is successful. While according to the research carried out, it has been found that different organizational structures are associated with different patterns of change. (Arora, Belenzon & Ríos, 2014).

The organizational design and the structure of a company that is intended to be part of the future organizational state may be different from the structure that the company used during the process of organizational change (Laughlin, 1991). A company that designs a structure that is based on functions, does well in a stable environment, but a structure based on work teams would obtain better results in this process of organizational change (Lyons *et al*., 2011).

Therefore, an organizational structure must be designed for the change process, which includes a change team with the authority to be in charge of planning and executing organizational change (Laughlin, 1991). In such change teams, it is necessary to incorporate the change agent, middle managers and workers, so that they work in coordination, in work teams in such process of organizational change.

Therefore, these change teams are part of the change design and structure and work in continuous feedback with the leadership team. Therefore, these teams of organizational leaders can use an organizational structure and effective communication to ensure a process of change. Therefore, business leaders must adapt their management style and design an organizational structure that is more appropriate to have a successful organizational change process (Gilley, Gilley & McMilan, 2009).

About this, Ford Motor Company turns out to be an example of how organizational change can be achieved by changing leadership, designing a new structure in the company, and producing a change in strategy. So leaders must react to external forces to change, forming a company that is prepared to absorb such change.

To revitalize the activities of the innovation process, it is necessary to use collaboration strategies with both external and internal agents, who intervene in the structure of the company and the workers, being external support, and a way that the ability to innovate can be shown with organizational resources, such as organizational structure, employees, as well as work networks with third parties (Villegas, Montes & López, 2016).

These elements allow changing resources and skills in the search for organizational competitiveness. Through these collaboration networks, it is pursued to improve the functioning of the organizational design, its structure, and personnel, developing skills oriented towards innovation.

For their part, Augustine (1997), and Goss, Pascale and Athos (1993) agree that companies must reinvent themselves, developing something that does not exist. They establish that executives know how to set up cross-functional work teams, how to innovate operational processes to improve the organization's performance; but all this only achieves a progressive change. If management wants a radical change in the capabilities of their businesses, they must not improve it, they must reinvent it.

For there to be a transformational change; the values, beliefs and attitudes of the organization must be redesigned before changing its structure, its processes, and its systems (Chapman, 2002). Companies must readapt their strategy to keep up with a changing environment and affect the structure of the company so that it fits with the model mentioned by Kral and Kralova, (2016).

These authors indicate that successful companies develop products following the needs of customers, therefore, when the external environment changes, the structure of the company must be redesigned (Kral & Kralova, 2016). About this, Lewin's theory of change (1947) establishes that a company would seek to establish itself in the new state of equilibrium with an

organizational structure, culture, and innovative internal communication methods that develop a new balance.

Therefore, companies that can respond quickly and restructure their internal resources, perform better in the process of organizational change, even better than businesses that could achieve technical perfection (Ogbonna & Harris, 2003). Also, innovative organizational structures give an advantage by reducing the weakness that characterizes traditional structures. As companies grow, they must design a distributed organizational structure where decisions are made in response to the interaction between different groups (Pichault, 1995).

According to Stabile (2019), architecture is the organization of a system, which includes its components, the relationship between them, and the principles that govern its organizational design and evolution. At the same time, it indicates that Business Architecture is a conceptual map of the organization, which seeks to understand the company's operation, align the strategic objectives with the elements that allow their achievement, analyzing the role of each one and what is the link between them, to devise and design the organization as a system. Its main elements are Strategic Objectives, Organizational Structure, Critical Factors, Business Processes, Regulations, Business Models, and Performance Indicators.

While referring to Enterprise Architecture: He mentions that aspects of computer technology are added to the Business Architecture, usually data, as well as computer applications for the company. Among the benefits of Enterprise Architecture, he points out: shared global visualization, identifying the degree of alignment between business management and information technology, and this serves to implement and guide the process of change.

To this complexity must be added the speed with which changes of all kinds occur: technological, cultural, and social; which cannot be approached without establishing an architecture, organizational design, and organizational structure that allows facing change projects. This composition of elements is established in the organizational architecture, thus making it possible to understand the scope of any project on the linked elements, and thus be able to establish the impact that the change of some element has on the others. For their part, Gouillart (1996), Nadler and Tushman (1999), handle similar concepts such as vision, personnel, and corporate structure. Gouillart (1996), talks about the "genetic architecture of the corporation", which is achieved by working with the 4 dimensions of transformation. While Nadler and Tushman (1999), explain that "organizational architecture" is a way of developing a competitive strategy aimed at the design of work methods, organizational structure, organizational philosophy, and personnel skills, uniting these elements into a dynamic whole.

It is essential to design organizational systems and structures that are part of the processes of the new organizational system and design. This implies that workers know what their role is, and how the change efforts will transform them, so they must know the change management areas, as well as the specific critical areas that are fundamental to carry out an organizational change (Mondo & Musungwini, 2019).

On the other hand, Rian (2018) indicates that adhocracy is also known as the structure of a modern company, being an innovative organization that can adapt to a changing environment. Therefore, companies must start with a new strategy that ensures that they plan and create an organizational structure and a hierarchy, that helps develop competencies in the company, in the process of organizational change (Gallo & Burton, 2012).

Summarizing; according to the researchers from the organizational design study perspective, changes should be made in the company's management and its organizational systems only when required. Also, they indicate that businesses have to evolve until they can reinvent themselves, which implies that what already exists is not modified, but that something new must be created, which does not exist.

Therefore, managers must also reinvent themselves and their companies, thus developing a new environment that governs their members, so that they accept a new future that was supposedly not possible. Besides, another scheme formulated by this study perspective is to provoke a kind of revolution within the company, so that all its shortcomings and failures emerge. In turn, according to the point of view of the perspective of organizational design, it is beneficial to have external support, carried out by agents of change that come from outside the organization.

METHODOLOGY

This work consists of 3 facets: 1) a theoretic one, where the theoretical part of the subject in question is investigated; 2) a bibliometric study about the relationship of organizational change and organizational structure, and 3) the empirical study. To obtain the information for this project, a structured questionnaire was developed, which served as an instrument for this research, in which the response alternatives for each question were shown.

As part of this work, a bibliometric study was also made of the results obtained from the literature review on the relationship between organizational change and organizational structure, a search was made in the Scopus database since according to Bar-Ilan (2008), Kulkarni and others (2009) is one of the most widely used databases to perform bibliometric analyzes (Olczyk, 2016).

The study was carried out having as search criteria articles, book chapters, book reviews, early accesses, without placing restrictions such as publication dates, type of document, nation, area of knowledge. On December 4, 2020, a basic search was made on organizational change and organizational structure. To perform the search in the Scopus database, the keywords used were: "organizational change" AND "organizational structure", the search was carried out in the following fields of the publications: Title, keywords, and abstract.

Unit of Analysis

For this research, business firms whose characteristics were: 1.- Being Small and medium-sized firms (from 1 to 250 workers). 2.- Commercial companies and 3.- That are in the AMG (Guadalajara, Tlaquepaque, Tonala, and Zapopan), were analyzed.

Sample

A non-probabilistic sampling was used for this study, applying the questionnaire that was prepared, to 78 people who were part of the workforce of the 78 MSMEs in the commerce sector, who were considered as part of this research, and who went through an organizational change. According to the SIEM, in Mexico, 69% of the companies are part of the commerce sector, while 21% are service companies, also, there is 7% of the industry-manufacturing sector, and finally, only 1% of the companies are part of the agricultural and mining sector.

Operationalization of Variables

For this work, the variables were operationalized through the use of graded questions using the Likert Scale. This scale uses statements that reveal an attitude, either positive or negative, towards each question. The individuals selected to answer the questionnaire were asked to express their level of agreement or disagreement with each question, to know how favorable or unfavorable their opinion was, about the topics analyzed.

Problem Statement

This project seeks to determine the causes and effects related to organizational design, which intervene in the consummation of an Organizational Change in commercial organizations, within the AMG. For this project, the research questions asked are:

- What causes related to the organizational design intervene in an organizational change in AMG businesses?

- What effects does organizational design have on an organizational change in AMG businesses?

Research objectives

- To determine which elements of Organizational Design influence an organizational change in commercial companies of the AMG.

- To establish how an organizational change affects the organizational design of a company in the AMG.
- To make a bibliometric analysis that shows the research trends on the relationship between organizational change and organizational structure and thus have a better understanding of the development of that study topic.

Hypothesis

- H1: The structure of the organization as part of the organizational design contributes to organizational change in companies in the AMG commerce sector.
- H2: Coordination of activities within the organizational design favors an organizational change in companies in the AMG commerce sector.
- H3: The work teams help to implement organizational change and improve the performance of companies in the AMG commerce sector.

Collection and processing of information

For this study project, the research instrument used was a questionnaire prepared according to the information from the examined bibliography, and with which it was intended to establish what factors related to the organizational design, intervened in an organizational change in commercial entities of the AMG. For this reason, a questionnaire with closed questions was devised, which would make it possible to distinguish these factors. After obtaining the information, the results obtained were examined and classified.To check the reliability and consistency of the instrument used in the research, Cronbach's Alpha was obtained. Additionally, the KMO Sample Adequacy Measure and the Bartlett Test were determined to verify that the variables are correlated and that it is feasible to carry out a factor analysis.

For the empirical analysis of this work that seeks to determine how organizational design influences an organizational change, the degree of significance of the analysis of variance: "ANOVA" was obtained, by relating variables belonging to the organizational design, with the effects that they can have on the organizational change, as well as with certain factors that help or hinder the achievement of the organizational change.

RESULTS AND DISCUSSION

Regarding the bibliometric analysis, firstly, the results obtained show the own analytics that the Scopus database throws up. In the search for articles that address the issue of the relationship between organizational change and organizational structure, 728 documents were found in the Scopus database with production from 1968 to 2021. As shown in graph 1, a significant increase in the publication of articles in 2007, with an irregular increase until 2019.

Graph 1. Scientific production on organizational change and organizational structure in Scopus
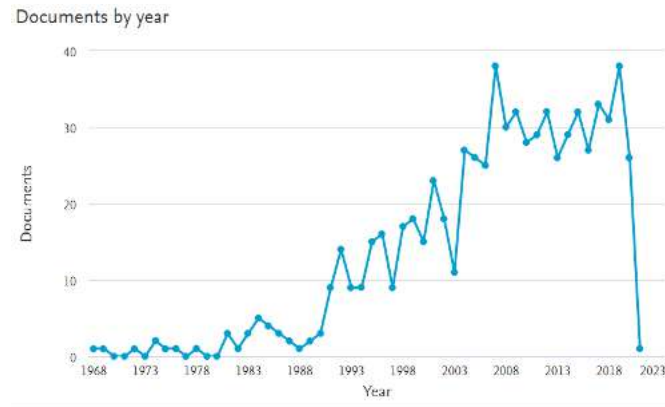
Source: Own elaboration based on Scopus statistics.

Graph 2. The 10 main countries of scientific production on organizational change and organizational structure
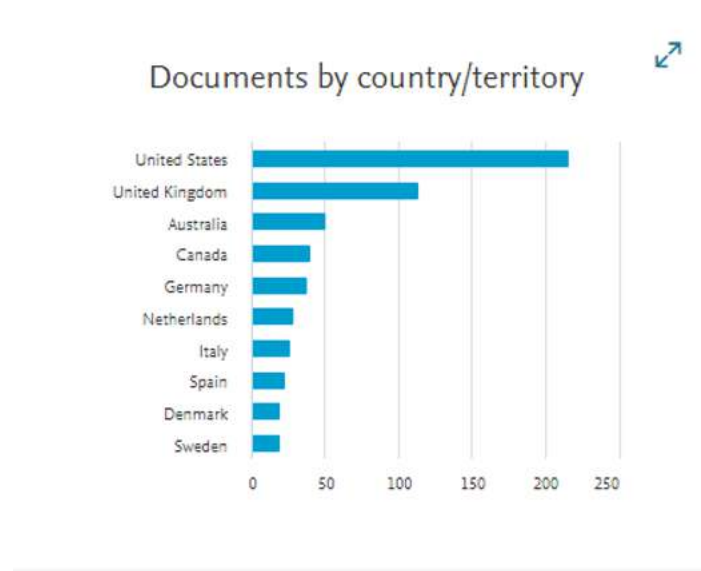
Source: Own elaboration based on Scopus statistics.

The United States leads scientific production on the relationship between organizational change and organizational structure, followed by the United Kingdom, Australia, Canada, and Germany, among the five most productive countries.

On the other hand, the main articles, taking as a reference for this classification the number of times they were cited. The most cited article is "Information technology and the structuring of organizations" which has 708 citations and was published by the Information Systems Research Journal in 1991, by the authors Orlikowski and Robey who develop a theoretical framework in which the development and deployment of Information technology in organizations is a social phenomenon, and in which the organizational consequences of technology are the product of both material and social dimensions.

The second most cited article is: "Intrapreneurship: Construct refinement and cross-cultural validation" with 491 citations, by authors Antoncic and Hisrich, published in 2001 in the Journal of Business Venturing, this work indicates that the companies that nurture the Organizational structures and values that drive intra-corporate activities are more likely to grow than organizations that have few of these characteristics.

The third most cited article with 349 citations is by the author Suddaby, published in 2010 in the Journal of Management Inquiry and is entitled "Challenges for institutional theory" and seeks to understand how organizational structures and processes acquire meaning and continuity beyond their technical goals.

Table 1. Most cited articles on organizational change and organizational structure in Scopus.

Author	Article title	Year	Number of citations
Orlikowski & Robey	Information technology and the structuring of organizations	1991	708
Antoncic & Hisrich	Intrapreneurship: Construct refinement and cross-cultural validation	2001	491
Suddaby	Challenges for institutional theory	2010	349

Source: Own elaboration based on Scopus statistics.

On the other hand, within the second part of the bibliometric study; It should be noted that to carry out the analysis, the 728 documents were processed in the VOSviewer program, which generated the maps based on the bibliographic data, and the criteria for creating the maps were determined.

Regarding the study of the relationship between organizational change and organizational structure, it was found that there are 8 research clusters, the first of which is made up of Austria, Canada, Germany, New Zealand, South Africa, and Switzerland; the second cluster is made up of China, Denmark, Finland, Norway, and Sweden; cluster number 3 is made up of France, Italy, Russia and Brazil; the fourth cluster is made up of Australia, Poland, and Taiwan;

the fifth cluster is made up of Spain, Holland, and Ireland; in the sixth cluster are the United Kingdom, Japan, and Turkey; cluster number 7 is led by the United States and is accompanied by Greece and South Korea. And in the eighth cluster are Belgium and Slovenia. (Figure 1).

Figure 1. Density map by countries
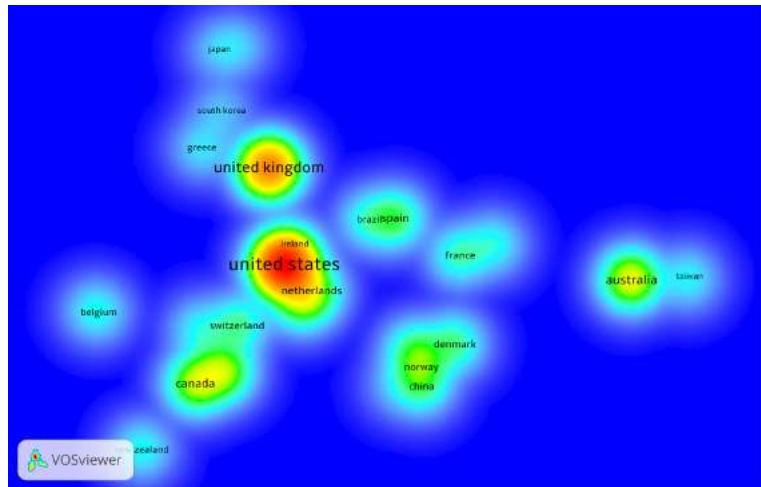
Source: VOSviewer 2020 software.

On the other hand, network maps are used to graphically interpret which are the research topics, since the keywords with the most co-occurrence are shown by labels, the size of the label being an indication of their importance in the topic research, and allow a more detailed analysis (Fergnani, 2019; van Eck & Waltman, 2010). The following bibliometric map shows the groups generated by the Scopus database, which were processed with the VOSviewer software.

Figure 2 shows that the keywords with the highest co-occurrence are: "organizational change" and "organizational structures" which were the keywords used for this research. In this way, on the map, you can see how the words are grouped, and they are indicated with colors to which group or cluster they belong.

On the other hand, the overlay visualization map shows which topics have been worked on overtime, and indicates which ones remain current. The years are symbolized by different colors. The topics investigated in the last 5 to 8 years appear in red, orange, and yellow, and the themes with more than 10 years are shown in green and blue (Fergnani, 2019).

Figure 2. Network Map by indexed keywords
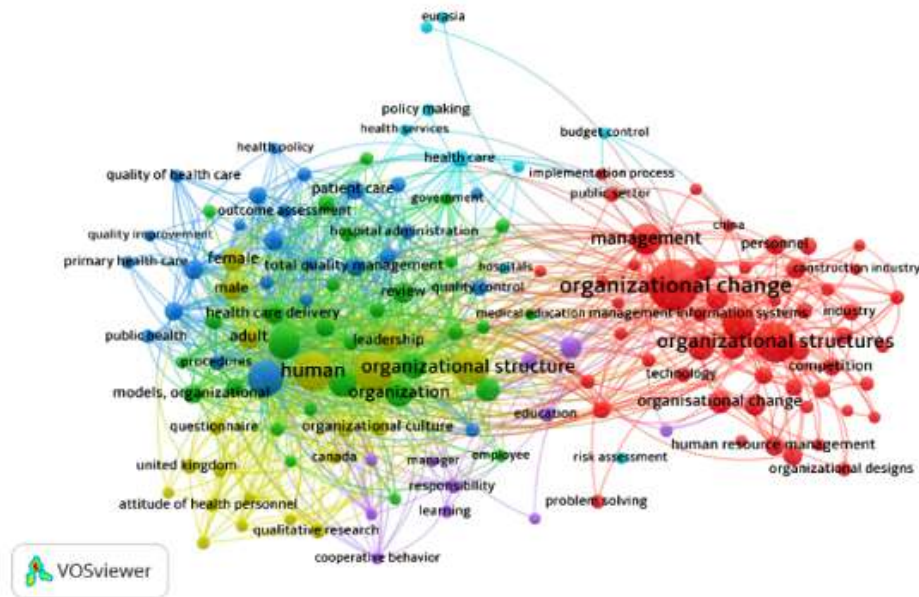
Source: VOSviewer 2020 software.

Figure 3. Overlay visualization Map by keywords

Source: VOSviewer 2020 software.

Sánchez-Gutiérrez, J. & González-Alvarado, T. (coord.)
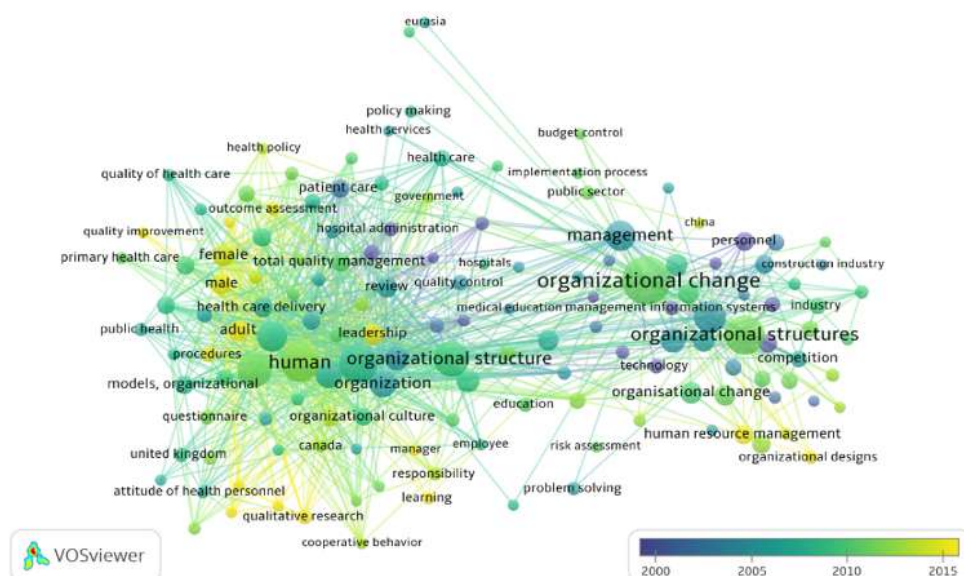
Figure 3 shows the keywords network again, but with a timeline perspective that reflects how the study of organizational change and organizational structure has evolved, the data obtained from the Scopus database show research results between 2000 and 2015.

The topics of study shown in Figure 3 that are trending in recent years are "adult" and "leadership." On the other hand, "organizational change" and "organizational structures" are topics that have been studied for a long time, but are still being studied today, while in the case of the term: "organization" their study takes longer.

In the density map, the VOSviewer program shows the work intensity of the keywords according to the number of times they appeared in the consulted documents. The colors indicate which are the most used keywords, in red are those with the greatest intensity and in blue those with the least amount of research, exposing the information in this way allows one to see which are the most important topics on the map. (Fergnani, 2019; Van Eck & Waltman, 2010).

Figure 4. Density Map by Keywords
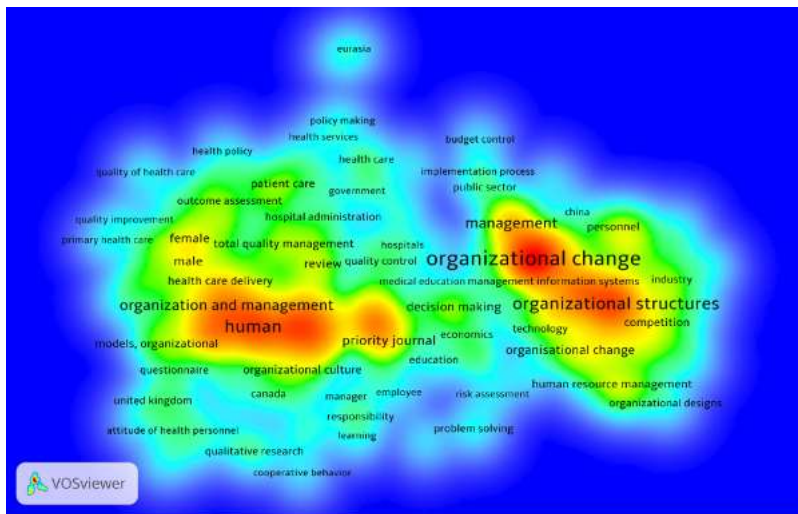
Source: VOSviewer 2020 software.

Figure 4 shows the density map of the keywords that have more relevance depending on the number of publications in which they appear, in which, once again, it is noted that the most relevant are "organizational change" and "organizational structures", followed by the word: "human."

FIELD RESEARCH RESULTS AND CONCLUSIONS

In this study, the organizational design was analyzed as a perspective that examines the change process in organizations. Therefore, as part of the instrument used, certain questions that study the organizational change from this perspective were taken into account. This research was carried out through personal surveys with employees of the analyzed businesses. The applied questionnaire served to verify the hypotheses stated. In turn, the Cronbach's Alpha, the Bartlett test, and the KMO were determined:

Table 2. Cronbach's Alpha of the Organizational Design variables
Reliability statistics

Cronbach`s Alpha	Number of Elements
0.926	29

Source: Own elaboration based on the results of the SPSS.

According to the statistical result of the reliability obtained, Cronbach's Alpha is highly consistent, 92.6% of reliability, which proves a high level because the approximation of the statistic is close to 1.00, in turn, the variables included in the questionnaire were applied consistently, that is, the correlations and general trends can be to describe in depth-through multivariate analysis, for this, the level of adjustment between groups must be understood according to a KMO factor analysis and Bartlett's Test.

KMO and Bartlett's Test- Organizational Change and Organizational Design

Table 3. KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.752	
Bartlett sphericity Test	Chi-square approximate		1143.800
	gl		378
	Sig.		0.000

Source: Own elaboration based on the results of the SPSS.

If. Sig. (P-value) <0.005, H0 (null hypothesis) is accepted> factor analysis can be applied.

If. Sig. (P-value)> 0.005 H0 is rejected> factor analysis cannot be applied.

The results obtained show that the level of significance achieved by being zero is representative because the closer it is to zero, the test is more satisfactory.

The most significant variable is Management Involvement, followed by Good human resources, other aspects of great importance are the Frequency with which Teamwork and Feedback are presented; On the other hand, Personnel's

Sánchez-Gutiérrez, J. & González-Alvarado, T. (coord.)

Education is also a very important variable to organizational design; Thus, these elements are required to promote organizational change in companies, when the organizational design is taken as the starting point of the change process.

Table 4. Communalities

	Group 1	Group 2	Group 3	Group 4
Management involvement	0.830			
Good human resources	0.821			
Frequency with which teamwork influences	0.815			
Frequency with which feedback influences	0.804			
Personnel's education	0.800			
Directors' commitment		0.790		
Adequate available information		0.790		
Adaptation		0.772		
Trained and competent workforce		0.769		
Team learning		0.752		
Employee training		0.747		
Intensity of the Feedback influence		0.742		
Access to relevant information		0.729		
Coordination of activities		0.726		
Intensity with which teamwork influences		0.724		
Accept taking calculated risks		0.722		
Intensity of the influence of the positive attitude of the direction		0.716		
Optimistic executives		0.713		
Frequency with which the positive attitude of management influences		0.713		
Teaching and training together		0.701		
Anticipate the future and its changes			0.699	
Adjust to changes			0.687	
There is a learning approach within the organization			0.687	
Actions are carried out to develop in employees an attitude of openness to change			0.622	
Forecast future market evolution			0.608	
Coordination of activities				0.597
The organization has values that reinforce its identity				0.596
The proposed goals of organizational change were satisfactorily met				0.591
As a consequence of the change, personnel developed new capacities and abilities				0.586

Source: Own elaboration based on the results of the SPSS.

Among the questions asked to the respondents, they were asked their point of view regarding whether they consider that the organizational design and the structure of the company favored organizational change; since in the structure of any company all its members have certain responsibilities and functions that they must perform, so it is necessary for the good running of the company that there is suitable coordination of activities in the personnel, having to work as a team when performing their work since in this way the processes required by the company will be carried out correctly. In the questionnaire used, certain questions and hypotheses that analyze the process of organizational change were considered, taking organizational design as a study perspective:

H1: The structure of the organization as part of the organizational design contributes to organizational change in companies in the AMG commerce sector.

Table 5. The organization's structure favored the organizational culture change

ANOVA		Sum of squares	gl	Mean quadratic	F	Sig.
The company had an adequate culture to effect organizational change	Between-groups	11.750	3	3.917	7.640	0.000
	Within -groups	29.734	58	0.513		
	Total	41.484	61			
The personnel was trained to perform their functions in the new organizational culture scheme	Between-groups	13.723	3	4.574	7.026	0.000
	Within -groups	37.761	58	0.651		
	Total	51.484	61			
Conflicts	Between-groups	11.525	3	3.842	6.804	0.001
	Within -groups	32.749	58	0.565		
	Total	44.274	61			
Personnel's education	Between-groups	8.269	3	2.756	4.548	0.006
	Within -groups	35.150	58	0.606		
	Total	43.419	61			

Source: Own elaboration based on the results of the SPSS.

According to the results of the investigation, it was discovered that there is a relationship between the organization's structure favored the organizational culture change with: The company had an adequate culture to carry out the organizational change; The personnel was trained to perform their functions in the new organizational culture scheme; Conflicts, and Personnel's education. This indicates that these factors concerning the organizational structure and organizational design favor an organizational change.

According to Adda, Natsir and Rossanty (2019), organizational change encompasses all kinds of change in workers, the structure of the company, or its technology (Robbins & Coulter, 2009). The ability of a company to carry out organizational changes in a sustainable way lies largely in the way in which managers address those changes (Heckmann, Steger & Dowling, 2016). To face a change in organizational culture, people with leadership are needed, to be authentic agents of change and to adapt the organization's structure to be more productive and efficient (Iljins, Skvarciany & Gaile-Sarkane, 2015).

For Adda, Natsir and Rossanty (2019), employees perceive the organizational change in terms of organizational structure, operational systems, and human resources; which has prompted them to work with greater dynamism and efficiency, regardless of the different degree of change they perceive. Then, H1: The structure of the organization as part of the organizational design contributes to organizational change in companies in the AMG commerce sector, is accepted.

H2: Coordination of activities within the organizational design favors an organizational change in companies in the AMG commerce sector.

Table 6. Coordination of activities. ANOVA

		Sum of squares	gl	Mean quadratic	F	Sig.
Teamwork	Between-groups	8.219	3	2.740	5.231	0.003
	Within -groups	30.378	58	0.524		
	Total	38.597	61			
Good human resources	Between-groups	10.071	3	3.357	5.006	0.004
	Within -groups	38.897	58	0.671		
	Total	48.968	61			
Positive attitude of the Management	Between-groups	11.903	3	3.968	11.744	0.000
	Within -groups	19.597	58	0.338		
	Total	31.500	61			
Adequate available information	Between-groups	10.535	3	3.512	4.920	0.004
	Within -groups	41.400	58	0.714		
	Total	51.935	61			
Management involvement	Between-groups	14.691	3	4.897	9.317	0.000
	Within -groups	30.486	58	0.526		
	Total	45.177	61			
Team learning	Between-groups	10.699	3	3.566	5.514	0.002
	Within -groups	37.511	58	0.647		
	Total	48.210	61			
Feedback	Between-groups	14.995	3	4.998	12.745	0.000
	Within -groups	22.747	58	0.392		
	Total	37.742	61			
Anticipate the future and its changes	Between-groups	13.700	3	4.567	6.668	0.001
	Within -groups	39.719	58	0.685		
	Total	53.419	61			
Personnel's education	Between-groups	14.558	3	4.853	7.970	0.000
	Within -groups	35.313	58	0.609		
	Total	49.871	61			
Adaptation	Between-groups	8.119	3	2.706	5.425	0.002
	Within -groups	28.930	58	0.499		
	Total	37.048	61			
Shared vision	Between-groups	11.456	3	3.819	7.759	0.000
	Within -groups	28.544	58	0.492		
	Total	40.000	61			
As a consequence of the change, personnel developed new capacities and abilities	Between-groups	5.682	3	1.894	5.356	0.003
	Within -groups	20.511	58	0.354		
	Total	26.194	61			
After the change, there was liking for work	Between-groups	6.749	3	2.250	4.707	0.005
	Within -groups	27.719	58	0.478		
	Total	34.468	61			
Employees are given authority to make decisions they believe are correct	Between-groups	13.777	3	4.592	7.917	0.000
	Within -groups	33.642	58	0.580		
	Total	47.419	61			
The organization has values that reinforce its identity	Between-groups	9.578	3	3.193	7.464	0.000
	Within -groups	24.809	58	0.428		
	Total	34.387	61			

Source: Own elaboration based on the results of the SPSS.

According to the results obtained, it was found that there is a relationship between the Coordination of activities, and: Teamwork; Good human resources; the Positive Attitude of the Management; the Adequate available information; the Management involvement; the Team learning; Feedback; Anticipating the future and its changes; Personnel's Education; Adaptation; Shared vision; As a consequence of the change, personnel developed new capacities and abilities; After the change, there was liking for work; Employees are given authority to make decisions they believe are correct, and The organization has values that reinforce its identity. This shows that those factors related to organizational design favorably influence the implementation of an organizational change. Therefore, H2: Coordination of activities within the organizational design favors an organizational change in companies in the AMG commerce sector, is accepted. (See Table 6).

To this point, it can be indicated that adequate management of an organizational change is a process of forecasting and executing changes in the company to improve its efficiency and maximize the added value of the company (Rebeka & Indradevi, 2015). Therefore, the company needs the design of an organizational structure created to ensure that the company works in coordination towards the desired state, which is the approach developed by the change team. (Krishnan, 2018). Also, the new perspective of the company must be designed with an organizational structure that allows feedback throughout the process of organizational change. (Judge & Douglas, 2009)
H3: The work teams help to implement organizational change and improve the performance of companies in the AMG commerce sector.

On the other hand, according to the results of the research, it was discovered that there is a relationship between Teamwork with: The organization has values that reinforce its identity; Good human resources; Adequate available information; Personnel's education; Adaptation; Accepting to take calculated risks; There is a learning approach within the organization; Actions are carried out to develop in employees an attitude of openness to change; The proposed goals of organizational change were satisfactorily met; As a consequence of the change, personnel developed new capacities and abilities; Uncertainty; Team learning; Feedback; and Coordination of activities.

To this, it can be affirmed that organizational change requires committed executives, capable human resources, who know how to work in a coordinated team, a good organizational design, and have relevant information and values, being fundamental that the company has the openness to changes, so, it can adapt faster to those changes. The importance of the perception of employees to organizational change, as an effort to provide better service to customers, is associated with a leadership behavior so that they are trained to work in a

coordinated team, and optimally. (Adda, Natsir & Rossanty, 2019). In the process of organizational change, companies that have a solid vertical structure will be able to employ project teams that are in charge of communicating the objectives efficiently to the entire company (Frohman, 1997). Therefore, companies that have a vertical structure must create a structure based on work teams, to ensure a successful organizational change process (Judge & Douglas, 2009).

Table 7. Teamwork. ANOVA

		Sum of squares	gl	Mean quadratic	F	Sig.
The organization has values that reinforce its identity	Between-groups	8.081	3	2.694	5.939	0.001
	Within -groups	26.306	58	0.454		
	Total	34.387	61			
Good human resources	Between-groups	13.500	3	4.500	7.359	0.000
	Within -groups	35.468	58	0.612		
	Total	48.968	61			
Adequate available information	Between-groups	11.449	3	3.816	5.467	0.002
	Within -groups	40.487	58	0.698		
	Total	51.935	61			
Personnel's education	Between-groups	11.038	3	3.679	5.495	0.002
	Within -groups	38.833	58	0.670		
	Total	49.871	61			
Adaptation	Between-groups	8.364	3	2.788	5.637	0.002
	Within -groups	28.684	58	0.495		
	Total	37.048	61			
Accept taking calculated risks	Between-groups	888.994	3	296.331	471.63	0.000
	Within -groups	36.442	58	0.628		
	Total	925.435	61			
There is a learning approach within the organization	Between-groups	4.645	3	1.548	6.328	0.001
	Within -groups	14.193	58	0.245		
	Total	18.839	61			
Actions are carried out to develop in employees an attitude of openness to change	Between-groups	7.144	3	2.381	6.200	0.001
	Within -groups	22.276	58	0.384		
	Total	29.419	61			
The proposed goals of organizational change were satisfactorily met	Between-groups	5.746	3	1.915	6.016	0.001
	Within -groups	18.464	58	0.318		
	Total	24.210	61			
As a consequence of the change, personnel developed new capacities and abilities	Between-groups	6.655	3	2.218	6.585	0.001
	Within -groups	19.539	58	0.337		
	Total	26.194	61			
Uncertainty	Between-groups	9.362	3	3.121	5.085	0.003
	Within -groups	34.371	56	0.614		
	Total	43.733	59			
Team learning	Between-groups	11.205	3	3.735	5.854	0.001
	Within -groups	37.004	58	0.638		
	Total	48.210	61			
Feedback	Between-groups	7.726	3	2.575	4.976	0.004
	Within -groups	30.016	58	0.518		
	Total	37.742	61			
Coordination of activities	Between-groups	7.159	3	2.386	4.842	0.004
	Within -groups	28.583	58	0.493		
	Total	35.742	61			

Source: Own elaboration based on the results of the SPSS.

Therefore, according to the results obtained, H3: The work teams help to implement organizational change and improve the performance in companies in the AMG commerce sector, is accepted (table 7).

CONCLUSION

Changes in our environment and the world are always present and are part of daily life. Also, competition is increasing between business firms, while consumer expectations are increasingly greater, for this reason, companies must streamline their operations to meet customer expectations before and better than their competitors.

The changes that occur in the world and in business cause companies to adapt to this uncertain environment, therefore, changes are made both in the company, in its processes, and its organizational culture; so that they adjust to the new requirements of this business world characterized by reigning uncertainty; and thus improve their performance.

As mentioned, the changes that occur in the business world show the situation of uncertainty that prevails in business. This forces changes to be made in companies, and in their operational processes. Companies cannot simply be witnesses of how the world changes, they must have an active role, since, if they only assume the role of spectators, their competitors will take advantage of the situation to impose themselves on the market.

An aspect that characterizes the most audacious companies is the fact that they are constantly innovating, this class of companies is the ones that generate and induce changes in their industries, forcing their competitors to be the ones who have to react to these changes. Thus, carrying out an organizational change is very complex, but the benefits outweigh the costs when done properly, as the company improves its performance and competitiveness.

In turn, according to the perspective of organizational design, companies to be more efficient and competitive must have a comprehensive approach towards the design of their work processes, which allow the coordination of activities and teamwork, for which Personnel training, organizational structure, and organizational culture must be taken into account.

It is worth mentioning that, as a result of the investigation carried out, it is concluded that the 3 hypotheses stated are accepted. The hypotheses raised were:

H1: The structure of the organization as part of the organizational design contributes to organizational change in companies in the AMG commerce sector.

H2: Coordination of activities within the organizational design favors an organizational change in companies in the AMG commerce sector.

H3: The work teams help to implement organizational change and improve the performance of companies in the AMG commerce sector.

The results of this research reveal, that the organizational design is fundamental, so there must be good coordination of activities among the members of the company and that they work as a team, so it is necessary to have an appropriate division of the functions.

In conclusion, it can be affirmed that, according to the perspective of organizational design, change is an evolution that occurs in the company, being planned and at various levels; being discontinuous, radical, and/or qualitative.

From the perspective of organizational design within the factors or aspects that favor an organizational change are the coordination of activities, teamwork, and team learning, good and educated human resources, the involvement and positive attitude of Management, Adequate available information, feedback, adaptation, and anticipation of the future and its changes, values, accepting to take calculated risks, organizational learning approach. and an open attitude to change.

This shows that, according to the results obtained, the companies met the goals set for the organizational change, and workers developed new capacities and abilities as a result of the change.

The human resources of any organization are its most valuable capital, so they are a fundamental part to achieve organizational change, since good and educated human resources better coordinate their activities, by working and learning as a team, and they are the ones who carry out change in the company, therefore greater attention should be given to personnel's training and education so that they are capable of taking risks and have an attitude of openness to change and thus develop new capacities and abilities, as the company has an organizational learning orientation.

We cannot know what the future will be like, but we can plan and prepare for what that future brings. If an organization is well prepared, this will allow it to face the challenges of that future.

Finally, it is suggested for future research projects to carry out case studies in companies that are characterized by going through a process of organizational change. Since it is necessary to carry out an organizational change to stay in the market.

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Each chapter of this book was based on empirical real-life evidence from enterprises, universities, governments and institutions. All of these studied organizations are part of the post-covid competitive environment. The authors believe in economic progress in line with innovation, resilience, entrepreneurship and international cooperation between regions, countries and corporations.

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