

ORGANIZATIONAL INTELLIGENCE: STRATEGIC INSTRUMENT FOR THE COMPANY-ENVIRONMENT RELATIONSHIP

MARÍA GABRIELA PÁEZ

Universidad Metropolitana de Caracas, Venezuela

mpaez@unimet.edu.ve

Summary

This article analyzes organizational intelligence as a key tool for strategic decision making within companies. Various theoretical approaches to strategic planning and management are presented, highlighting how information gathering and analysis allow organizations to improve their competitiveness. In addition, tools such as SWOT matrices, prospective analysis and expert consultation are explored to optimize organizational processes. The research emphasizes the importance of business intelligence in adapting to the environment and reducing risks.

Keywords: Organizational intelligence, strategic management, decision making, competitiveness, SWOT, prospective analysis, business intelligence.

RECEIVED: 12-03-2024 / ACCEPTED: 15-05-2024 / PUBLISHED: 15-06-2024

How to cite: Páez, M. G. (2023). Organizational intelligence: Strategic instrument for the company-environment relationship. *Cuaderno Unimetano*, 2024-1, 1 - 18.
<https://doi.org/10.58479/cu.2024.141>



INDEX

Summary	1
CONCEPTUAL THEORETICAL FOUNDATIONS	6
Strategic Planning	6
Strategic Management	6
Organizational Intelligence (OI)	6
ORGANIZATIONAL INTELLIGENCE TOOLS TO FACILITATE DECISION MAKING PROCESSES AND ORGANIZATIONAL OBJECTIVES	7
Issues management	8
Weaknesses-opportunities-strengths-threats matrix (SWOT)	8
Stakeholders	9
Prospective analysis	9
Brainstorming and Nominal Group Technique (NGT)	10
CONSULTING EXPERTS ON THE USE OF ORGANIZATIONAL INTELLIGENCE	10
Presentation of results	10
Relationship of the data obtained with the IO	14
Conclusions	15
Bibliographic references	16



Compared to its beginnings, the business world has substantially changed its dynamics. The increasingly competitive and demanding market requires from organizations better and innovative strategies to face the threats of the environment and thus be able to position themselves in the business area.

To this end, intelligence has become a fundamental piece of the business puzzle. In other words, information alone, data alone, is not enough to establish a strategic plan; it is the analysis tools and human capital that allow organizations make optimal decisions in tune with the proposed goals.

Therefore, the objective of this research is to analyze the organizational intelligence approach as a facilitating instrument for the competitive decision-making process and the achievement of the organizational objectives of each company.

It is pertinent to point out the importance of this research, taking into account the need for companies to carry out constant reviews of their internal and external factors, through analysis tools that allow them to position themselves in economically, socially and politically convulsive markets.

In short, the work seeks to assist in the decision-making process of organizations, which translates into greater effectiveness and efficiency, improving and increasing the results that emanate from them and reducing the risks (trial and error processes that represent losses of time, money and other resources) in which a company may be immersed in an environment with few guarantees.

CONCEPTUAL THEORETICAL FOUNDATIONS

Strategic Planning

Serna (2010) explains strategic planning as a process by which:

“...decision makers in an organization obtain, process and analyze relevant internal and external information, in order to evaluate the present situation of the company, as well as its level of competitiveness, with the purpose of anticipating and deciding on the institution’s direction for the future” (p. 55).

In addition, this process allows defining the long-term vision and the strategies to be used to achieve the company’s objectives, based on its strengths, weaknesses, threats and opportunities (Serna, 2010).

Strategic Management

Strategic management is another term often used in the business area. According to David (1990), strategic management (SM) can be defined as “the formulation, execution and evaluation of actions that will enable an organization to achieve its objectives”, and it should be understood as an “attempt to organize qualitative and quantitative information in such a way as to enable effective decision making under circumstances of uncertainty” (p. 3).

The ESM process is practically based on the assumption that any organization must continually check “internal and external facts and trends” (p. 5). David (1990) states that basically what differentiates ESM from the strategic planning of the past is a “heightened awareness of the importance of strategy execution” (p. 5).

The strategic management process is composed of three fundamental steps: strategy formulation, execution and evaluation.

Organizational Intelligence (OI)

According to Martín (2007) and Calderón (1994), the differentiating characteristic among companies in today’s knowledge society is their ability to learn, their organization.

Similarly, Drucker, quoted by Lozano (2014), establishes the exercise of learning as one of the fundamental pillars for organizational success. Therefore, every organization today must understand that when information is processed correctly, it becomes a key resource for the executive and, in turn, an essential foundation for the organization’s activities.

Now, for modern industries, intelligence:

“can be considered to consist of the collection of information. Therefore, intelligence is the process and the result is a capability that can be measured in the form of IQ based on the results of applying this capability to processes. In addition to analyzing the information that has been gathered, intelligence answers questions or gives advance warnings that facilitate the planning or decision-making process for future development” (p. 21).

According to the School of the Americas (2001), information by itself is only a statistic. Intelligence, on the other hand, implicitly refers to the processing by which, from information data, comparisons are made. Therefore, intelligence is processed information.

Likewise, intelligent organizations consider information and knowledge as essential tools and resources, seeking to increase their value “through their systematic, integrated and regulated management to solve, avoid or propose the solution of problems effectively, and develop their individual, group and organizational competencies or intelligence” (p. 13); a process that is influenced by social, cultural and historical conditions that favor collective commitment to change the environment, continuously developing creativity and innovation (Haber-Veja and Más-Basnueno, 2013).

Lozano (2014) states that the importance of knowledge as an economic resource is increasingly growing and, in turn, explains that the competitive advantages gained by corporations are not achieved by manufacturing better products than their competitors, but by the ability to learn faster than the rest.

Along the same lines, it is important to mention that, in the business context, organizational intelligence is usually referred to as business intelligence (BI) or business intelligence (BI). In turn, Spaniards use the term corporate intelligence as a synonym for competitive intelligence (CI) Haber-Veja and Más-Basnueno, 2013, p. 2).

Jung (2009) explains that IoT combines “knowledge and skills that result from the integration of organizational assets, particularly intellectual capital” (p. 45). The latter should be understood as the tangible and intangible resources within the organization that can contribute to the organization, and is divided into three domains: human capital, organizational capital and relational capital.

ORGANIZATIONAL INTELLIGENCE TOOLS TO FACILITATE DECISION MAKING PROCESSES AND ORGANIZATIONAL OBJECTIVES

Organizational intelligence has then a range of tools, methods and analysis that allow enhancing the organization’s capacity “to develop processes of treatment and use of information, knowledge and learning that facilitate effective decision making, generating competitive advantages” (Contreras et al., n.d.).

The opening of markets, among other factors, has intensified business competition, and as risk possibilities increase, so do the potential rewards. It is a fact, then, that as a consequence of the evolution of technology, intelligence analysis tools are becoming increasingly diversified. However, one set of tools remains the mainstay of information processing today.

Some of the most popular tools and methods for improving strategic planning and organizational intelligence in recent decades are outlined below.

Issues management

Issues management, also called Potential Conflict Management (PCM), through its active and systematic method makes it possible to avoid crisis situations by minimizing the surprise effect, anticipating future obstacles and resolving unforeseen issues (Matilla et al, 2012).

Chase (1984), one of the main representatives of the issues management model, states that it “is a tool for predicting the effect of environmental changes, both internal and external, on the overall performance of the company’s system” (p. 34). At the same time, he points out that the tool assigns decision-making authority and responsibility for performance, and makes possible an objective review and evaluation of performance.

According to González Herrero (2004), the general outline of the issues management process is based on two approaches: identifying a potential conflict as early as possible and resolving it before it has negative repercussions for the organization.

Weaknesses-opportunities-strengths-threats matrix (SWOT)

SWOT is a comparison tool based on information from the external and internal factor evaluation matrices and competitive profile. The name given to the method is an acronym of the first letter of the factors to be analyzed: D, for internal weaknesses; O, for opportunities; F, organizational strengths; and A, for threats.

Francés (2006) comments that the matrix can be implemented to “establish the challenges or strategic gaps that the company faces and that consist of situations that require a response from it” (p. 182). Along the same, he develops the strategic responses that can be obtained from the matrix: offensive strategies if it benefits from opportunities and strengths, adaptive strategies if it confronts opportunities with weaknesses, reactive strategies if it confronts threats with strengths, and defensive strategies if it responds to threats with weaknesses.

Stakeholders

The substance of the model is as follows: “to identify (through different channels), prioritize (according to their relevance and materiality) and respond (by establishing the necessary resources and measures) to the needs and demands of organization’s stakeholders” (Granda and Trujillo, n. d., p. 71).

Caballero (n. d.) states that the theory suggests attitudes, practices and structures at the managerial level, in addition to clarifying cause-effect situations. He also emphasizes the role of managers, who, because of their strategic position and because they are contractors, are key players in identifying the groups of importance or stakeholders.

Prospective analysis

The Center for Regional Studies 2003) of the University of Talca in Chile explains that the prospective methodology:

“allows one to examine the forces behind the changes by trying to identify the variables that could be controllable and thus reduce uncertainty about the future. This implies discovering factors (trends, events, purposes) potentially bearing on the future that could be intervened, or disregarded, for the decision-making process” (p. 18).

Short, “foresight is about reflecting on the future we need to define the actions to be implemented” (Centro de Estudios Regionales, 2003).

However, it should be noted that foresight is not intended to provide exact results. It is used exclusively to evaluate and assess, as objectively as possible, the various unknown realities. The application of these methods is inspired by an ambition to enrich the intellectual discipline, essentially in order to be able to ask good, pertinent questions and to reduce inconsistencies in the rationalization (Godet, 2000).

In another paper by Godet cited by Amozurrutia (2014), the author states that the methodology is based on three major stages: problem delimitation and analysis of variables (structural analysis), analysis of actors, and scenario development, where strategic foresight takes shape; in other words, the perspective seeks to understand the present, analyze future requirements and build the most probable subsequent scenarios.

Brainstorming and Nominal Group Technique (NGT)

Ivancevich et al (1996) states that brainstorming and the Nominal Group Technique (NGT) are among the most suitable techniques for boosting creativity, understanding obstacles and making better decisions.

Brainstorming is a tool usually used by work teams in companies, universities and organizations to extract individual ideas and present them to the rest of the team. The key part of the process is a non-judgmental environment that allows creative and unrestricted exploration that leads to a solution to the problem posed (Air University, n. d.).

On the other hand, the Nominal Group Technique (NGT) consists of a structured meeting of a group of between seven and ten people, who express in writing their ideas the solution of the problem posed. This is followed by a structured sharing of ideas in which each participant explains his or her proposal while notes are taken, and then, after everyone has presented their proposals, there is a phase of clarification. Finally, in the voting stage, each individual must prioritize by ranking or voting the ideas they considered the best. The group's decision will then be the mathematical result of the sum of the individual votes.

CONSULTING EXPERTS ON THE USE OF ORGANIZATIONAL INTELLIGENCE

In order to record the use of organizational intelligence instruments, a questionnaire was made up of four questions, the purpose of which was to analyze the IO approach as a facilitating tool for the competitive decision-making process and the achievement of the company's organizational objectives. Thus, the questions were related to the use of intelligence analysis tools and the opinion of professionals on use of these tools for decision making in an organization. At the same , questions were asked about the strengths and weaknesses of environmental analysis for decision making, and most convenient analysis tools in each professional environment.

Presentation of results

The questionnaire was mailed to more than 70 people, as well as posted on LinkedIn. In the end, 39 professionals participated, including directors (sales, operations, general), analysts, managers (brand, project, administration and finance, channel), professors, supervisors, human resources, advisors, consultants, managers, presidents, vice presidents of corporate planning, executive vice presidents and assistants.

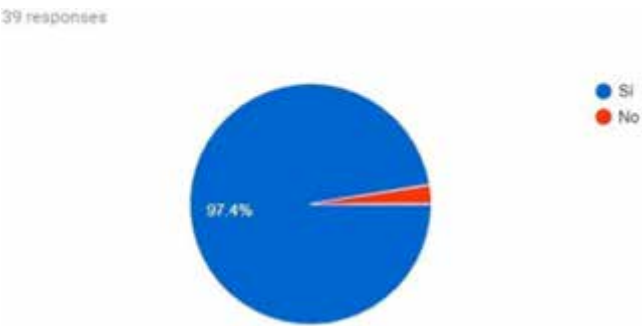
The following question was posed to begin the questionnaire: In your professional practice,

Have you made use of intelligence analysis tools (prospective analysis, issues management, SWOT analysis, scenario analysis, etc.) In what context (HR, political, etc.)*?

Of the 39 responses recorded, 38 stated that they made use of intelligence analysis tools in their professional practice.

FIGURE 8.

Have you made use of intelligence analysis tools: after “Of the 39 responses recorded, 38 stated that they made use of intelligence analysis tools in their professional practice.”



Source: Own elaboration

The responses were varied. In general, the experts consulted contextualized their arguments in the operational area, strategy definition, human resources, software development, mass consumption, political, commercial, economic and research environment.

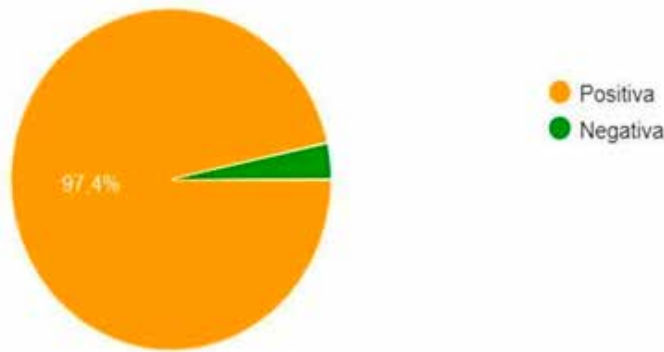
It should also be noted that several of the participants emphasized the routine practice of business and market intelligence, making reference to the tools of organizational intelligence. The professionals expressed the need to use the analysis tools when determining the macro strategy to be pursued by each company, especially when launching new projects or introducing a new product to the market. At the same , they expressed the use of these tools for communication risk consulting.

Regarding the second question of the questionnaire, the following was consulted:

What is your opinion about information processing tools for decision making in a company or organization? *

FIGURE 9.

What is your opinion of the information processing tools: after “Of the 39 responses, only one can be categorized as negative by saying that the tools were ‘monotonous’”.



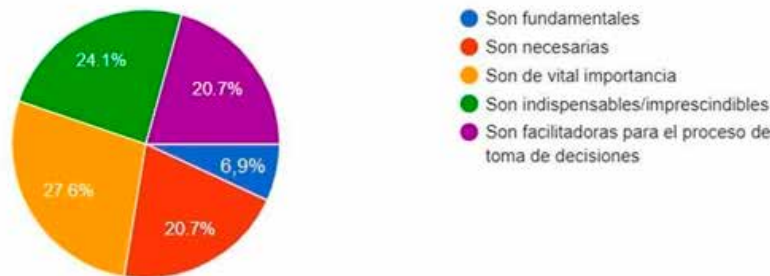
Source: Own elaboration

97.4% of the respondents expressed their approval of the instruments. 29 professionals responded by using the terms “fundamental”, “necessary”, “vitally important”, indispensable/ indispensable” or “facilitating the process” when talking about the methods of analysis, as illustrated in the following graph.

FIGURE 10.

Positive opinions about the analysis tools: after the paragraph “97.4% expressed their approval of the instruments, with a good number of participants even using the same words to describe them. A number of 29 professionals responded by using the (...)”

29 responses



Source: Own elaboration

The other responses, likewise, recognized the properties and benefits of using intelligence analysis mechanisms. Among the discursive threads to be highlighted is that of ordering ideas, establishing their degree of influence and achieving greater objectivity in the analysis of information. Likewise, the experts evidenced through their testimonies that the mentioned methodologies allow more accurate decisions to be made in real time.

In general terms, the responses showed that among the survey participants there is a high percentage of approval of intelligence analysis tools, even indicating that most of them use them in their daily professional practice.

As a third question, it was asked:

What, in your opinion, are the strengths and weaknesses of environmental analysis for decision making in the company? *

The responses on strengths were very diverse. Among them, the following should be highlighted: taking advantage of competitive advantages, projecting scenarios, preventing situations, contributing to improvement of products and services, and improving production and administrative processes.

In sum, it was established that the environmental analysis offers opportunities to project scenarios that would allow the company to make more optimal and satisfactory decisions, according to its strategy.

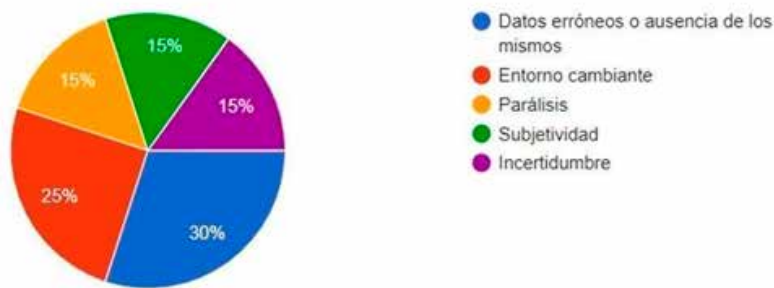
On the other hand, with respect to weaknesses, 20 of the 39 participants indicated that these were due to: erroneous data or absence thereof (referring to analyzes that start from wrong or inaccurate figures, resulting in an erroneous diagnosis), changing environment (meaning that due to the speed with which the context evolves by the time the analysis is ready, it will also be obsolete), paralysis (due to excess analysis), subjectivity (inferring that the people conducting the study will be biased by their intrinsic vision, so they will not be able to offer objective results), and lastly, uncertainty (referring to the fact that the scenarios are subject to so many assumptions that the development of one is unlikely).

The following are the most important of these: the changing environment (meaning that due to the speed with which the context evolves by the time the analysis is ready, it will also be obsolete), paralysis (due to over-analysis), subjectivity (inferring that the people conducting the study will be biased by their intrinsic vision, so they will not be able to offer objective results), and finally, uncertainty (referring to the fact that the scenarios are subject to so many assumptions that the development of one is improbable).

FIGURE 11.

Weaknesses analysis of the environment: after the paragraph “Now, among the information recorded with respect to the third question, there seems to be greater consensus on the weaknesses. Of the 39 participants, 20 indicated that in their opinion the main weakness was among the following statements: erroneous data (...)”

20 responses



Source: Own elaboration

Finally, the last question demanded:

Which analysis tool is the most convenient to use in your professional environment? *

Now, the outstanding answer in this case was the SWOT matrix. More than half of the respondents stated that it was the tool par excellence to be implemented in their professional environment. However, it is important to mention that in most cases they indicated that it was accompanied by another instrument, such as prospective analysis and scenario analysis.

Relationship of the data obtained with the IO

From the recorded information it can be analyzed that, as Jung (2009) explained, modern companies must make use of organizational intelligence through analysis tools in order to continue competing in the market, remembering that “intelligence answers questions or gives advance warnings that facilitate planning or the decision-making process for future development” (p. 21).

In this sense, the theory of Lozano (2014) is confirmed, which establishes the importance of knowledge as an economic resource, and which explains that today’s companies use several of the analysis tools developed in this research work to be able to learn and know more than the rest; which classifies them as intelligent organizations.

Conclusions

The purpose of this research was to study Organizational Intelligence (OI) as a tool to facilitate the competitive decision-making process and the achievement of the company's organizational objectives. After an exhaustive study of sources, the following preliminary conclusions can be drawn:

In the words of Rodríguez Barcenas (2013), and by way of a summary of the different positions presented in the document, organizational intelligence is:

“... a tool to support decision making is a necessity for organizations involved in any competitive environment, and therefore part of the success will be framed in the process of transforming information into knowledge before decision making, as well as deciding what information is relevant to the organization, obtaining it, analyzing it and understanding it in time is part of the whole process” (p. 104).

Now, although IoT is a relatively new concept (1990s), many authors have already worked on the subject, and although there are great similarities between the definitions, there are also important divergences between them, precisely because it is a modern issue. Nevertheless, the different conceptions are not exclusive but complementary; each one contributes to the global concept of organizational intelligence.

The same applies to the definition of strategic planning. There is an abundance of authors and works on the subject, offering a variety of meanings that may or may not be similar. However, for the purposes of this research, the approach taken was the one presented by Serna Gómez, who stated that it was a process in which processed information was passed to decision-makers in an organization to evaluate the company's present and choose future directions in order to remain at competitive levels.

In fact, both issues are profoundly important for today's business world, since, due to high levels of competition and uncertainty, not having a strategy makes the difference between success and failure.

It is not surprising, then, that practically all the participants in the questionnaire affirmed and justified the use of business intelligence tools in their daily professional practice.

The contributions that this research can contribute to the business environment, especially to the development of strategic planning and organizational intelligence, are important because they corroborate the imminent need to outline a strategy in each organization and use the corresponding tools to ensure its correct execution.

However, it is worth mentioning that the degree work was not able to address all the existing IoT tools, so further research is encouraged in this area to extend and detail more intelligence analysis tools, such as benchmarking, Porter's five forces analysis, PEST analysis, McKinsey's seven “S” model, and the market growth and business share (BCG) matrix, to mention a few.

Bibliographic references

- Air Universit (n.d.). Brainstorming. Retrieved from: https://www.niu.edu/facdev/_pdf/guide/strategies/brainstorming.pdf.
- Amozurrutia, J (2014). Prospective analysis and scenario building. Retrieved from: http://computo.ceiich.unam.mx/webceiich/docs/amos/Apuntes_Prospectiva.pdf
- Calderón, E. (1994). The knowledge society and intelligent enterprises. *Informática Educativa*. Retrieved from: http://colombiaaprende.edu.co/html/mediateca/1607/articulas-127681_archivo.pdf
- Center for Regional Studies (2003). Prospective analysis: four cases of regional studies. Retrieved from: <http://www.ministeriodesarrollosocial.gob.cl/btca/txtcompleto/DIGITALIZADOS/M665a-2003.pdf>
- Chase, W. (1984). *Issue Management: Origins of the future*. United States, Connecticut: iap.
- Chiavenato, I. and Sapiro, A (2011). *Strategic planning: fundamentals and applications*. Mexico: Mc Graw Hill.
- Contreras, L et al (n. d.). Semantic Organizational Intelligence. Retrieved from: http://www.iiis.org/CDs2012/CD2012SCI/CISCI_2012/PapersPdf/XA778HS.pdf.
- David, F (1990). *Strategic management*. Bogotá: Fondo Editorial LEGIS.
- School of the Americas (04 November 2001). *Combat Intelligence*. Edited on the Internet by Equipo Nizkor and Derechos Human Rights Available at: <http://www.derechos.org/nizkor/la/libros/soalC/index.html>
- French, A (2006). *Strategy and plans for the company: with the balanced scorecard*. Estado de México, Mexico: Pearson educación de México.
- Godet, M. (2007). *Manuel de Prospective Stratégique, l' Art et la méthode*. Retrieved from: http://www.lapro prospective.fr/dyn/francais/ouvrages/la_prospective_strategique/t2--manuel-de-prospective-strategie-dunod-2007.pdf
- González Herrero, A. (2004). *Issues management: the management of potentially conflictive issues*. Retrieved from: <https://idus.us.es/xmlui/bitstream/handle/11441/38972/Alfonso%20Gonzalez%20C3%A1lez%20Herrero.pdf?sequence=1>
- Granda, G., and Trujillo, R. (n. d.). *La gestión de los grupos de interés (stakeholders) en la estrategia de las organizaciones*. Retrieved from: <https://www.mincotur.gob.es/Publicaciones/Publicacionesperiodicas/EconomiaIndustrial/RevistaEconomiaIndustrial/381/Germ%C3%A1n%20Granda%20Revilla.pdf>
- Haber-Veja, A. and Más-Basnuevo, A. (2013). *Organizational Intelligence: concepts, models and methodologies*. Retrieved from: <https://periodicos.ufsc.br/index.php/eb/article/view-File/1518-2924.2013v18n38p1/25954>

- Ivancevich, J. et al (1996). *Gestión, calidad y competitividad*. Madrid, Spain: IRWIN.
- Jung, Y. (2009). An approach to organizational intelligence management (a framework for analyzing organizational intelligence within the construction process). Retrieved from: https://vtechworks.lib.vt.edu/bitstream/handle/10919/28604/Younghan_JungSep_09.pdf?sequence=1&isAllowed=y
- Lozano, J., and González-Campo, C (2014). A proposal for the definition of organizational intelligence. *Universidad & Empresa*, 16(26), 159-175.
- Martín, I. (2007). The new challenges to corporate communication in the so-called knowledge society: From information management to the creation of organizational knowledge. *Signo pensam*. Retrieved from: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-48232007000200006
- Matilla, K. (2012). Strategy, Issues Management and media vs. public sphere, change and new future trends. Retrieved from: http://cienciared.com.ar/ra/usr/9/689/fisecestrn-16pp23_42.pdf.
- Ortega, F. (2013). *Prospectiva empresarial*. Retrieved from: <http://conferencia2013.consortio.edu.pe/wp-content/uploads/2014/09/1.-Ortega.pdf>.
- Rodríguez Bárcenas, G. (2013). *Organizational Shared Intelligence Network as a support for decision making* (Doctoral dissertation). University of Granada and University of La Habana, Granada, Spain.
- Serna, H. (2010). *Strategic management*. Retrieved from: https://datenpdf.com/download/gerencia-estrategica-humberto-serna-gomez_pdf

