COMPETITIVE INTELLIGENCE AND ORGANIZATIONAL CHANGE

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SUMMARY

The success of an enterprise depends today more and more, of the strategy of its business. A structural component of the strategy is, certainly, the adjustment between its primary activities and its support activities. This estimates that only operational effectiveness does not determine the business' success. It is necessary a synchrony between this and the organization business strategy. The information technology (IT) acquires a resolvable role within this context, because it is the strategy activating mechanism, i.e., it is the organizational mechanism that allows the internal adjustments in the organization value chain, and the forces of its environment, guaranteeing that the organization raise competitive advantages. In this paper IT should be seen as a system that is within reach of the whole organization, not only as a mere infrastructure. Because a system, in this way, the IT acquires functions of competitive intelligence, because the internal synchrony of its processes and the external effectiveness of the business depend on the adjustment and the utility of the environmental information available for IT. The synchrony between the business strategy and the IT infrastructure, (i.e. the internal IT strategy) were proven previously in an enterprise leader in its sector, the enterprise Y, indicating an exceptional synchrony level. The objective of this research, thus, was to verify if, given the synchrony between business strategy and IT, this last one satisfies the functions of competitive intelligence. To direct this verification, Riccardi and Rodriguez's (2003), MOSIPIC, (Systemic Model of Competitive Process),

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will be used, by means of the questionnaire with closed questions, evaluation in Likert's scale. The verification was made in all of enterprise Y's business strategic units.

KEY WORDS: Competitive intelligence; Information Systems; Information Technology; Strategy.

INTRODUCTION

Global competitiveness is forcing the organizations to re-evaluate their operation strategies. Sometimes they go for the search of new markets, other times for mergers and acquisitions, and others to launch new products, or for the formation of strategic societies, or even for the establishment of new distribution channels. All these movements have as objective to determine the best form of guaranteeing results, be they financial or of market share.

There are not doubts that the organizations, post globalization, are giving more importance to the term "strategy", concentrating study efforts on this topic. Porter (1986) already contributed for the study, mentioning that each enterprise in a competitive environment possesses a strategy, it being explicit or implicit. And that this strategy could have been explicitly developed by means of planning processes, or to have been developed implicitly with the activities of some functional departments of the enterprise. In the second alternative, making use of their own means, each functional department will inevitably look for methods dictated for its professional training and for the incentives from those responsible. However, Porter (1986), highlights that the addition of these methods, are difficultly equal to the best strategy, it is necessary to build defenses against the competitive forces and to determine positions where these forces are weaker.

Tregoe and Zimmermann define the strategy as "the vision directed to what the organization should be, and not how to reach it" and finishes up saying that strategy is "the structure that guides the options which determine the nature and the direction of an organization. Those options are related with the environment of the products or of the services of the organization, their markets, basic capacities, growth, returns, and of the allocation of resources" (Tregoe and Zimmermann, 1988, p.14-15). This managed vision is approached by Hamel de Parlad (1989) as "strategic attempt" or strategic intention, providing for the enterprise the orientation for its planning. According to authors, the strategic intention is the dream that encourages and energizes the

organization that can commit all; it is something more sophisticated and more positive than a simple war cry, or than a simple objective. If one is ambitious and stimulating he offers emotional and intellectual energy.

Lastly Porter defines strategy "as the creation of unique and valuable position, implying a different group of activities and the essence of this strategic position to choose activities that are different from the competitors' ones" (Lastly Porter, 1996, p.64)

Nevertheless Porter draws the attention, "to choose an only position, is not enough to guarantee a sustainable advantage" (Nevertheless Porter, 1986, P.68). That is to say, a valuable position will attract the imitation for the interested parties, which they will probably do it one way or another. That is to say, the success of a strategy depends on doing many activities well, creating adjustments among them.

When there are no adjustments among the activities, there is no different strategy, not being very sustainable. But this constant adjustments process, among the activities makes the organizations confuse the operational effectiveness (OE) with strategy. And that according to Porter (1996) this confusion is a serious error, both are essential for the superior operation of an organization, but they act in different ways.

Operational effectiveness according to Porter (1999) means to complete the same similar activities in a way better than the other competitors. The operational effectiveness includes the efficiency but is not limited to it. It refers to any practice that allows an enterprise, to use their incomes better, e.g., reducing defects in the products or developing better products in a quicker way.

On the other hand, strategic placement means for an enterprise, to apply diverse activities different from the competitors or to apply the same activities in diverse ways.

Therefore, one can say that operational effectiveness depends on strategy. However an organization which has defined strategic placement will find the barriers that will block putting into practice its strategy if it does not reach operational efficiency.

The problem then presents itself that a new strategy, to be executed, generally implies revising the commercial processes, or to introduce new forms to execute the enterprise operations. Those and processes, at the same time, require data or information so that they can be executed,

accompanied and evaluated, in such a way, as to verify if the foreseen strategy is applicable, and that leads to the prospective results. As the processes had been modified, it is possible that the organizational structure of the enterprise is modified; new areas created, areas merged, outsourcing and others. So, it is necessary to have well defined the resources that should be available to maintain the new strategies, where in the of the information era, technology must be present.

Prahalad and Krishnan (2002) demonstrate in the results of their research that organizations frequently say that the IT infrastructure follows innovation's desire level. Many times IT is an impediment for putting into practice business changes. In general, the organizations are still unsatisfied with the quality and the assiduity of the information generation for business administration and decisions taking. That means that tools like business intelligence, warehouse data, departmental and corporate and ad hoc consultants, data of sales and of clients are necessary to guarantee that the business leaders are prepared to take advantage of the available occasions of guaranteeing greater effectiveness and operation of their organizations.

However one cannot affirm that when reaching a synchronism between business strategy and IT infrastructure, an organization has reached all the requirements demandable to implement a process of change induced by a competitive intelligence system. It is probable, however that this synchronism gives the organization the occasion of incorporating the competitive intelligence process and it allows it to begin the change process.

The changes cannot happen in a random way under the punishment that they become a conflict. Thus, it is rational to think that a change, to have its desirable effects, that which was planned, and with the transformational goals defined clearly. It is also easier, to reach the objectives of a change, that its planning obeys a model, a project, a process or a method. Riccardi and Rodríguez's (2003) system, inducer of the organizational changes, presents a conceptual model of the change process, which seems to be quite rational and possible of being executed in the organizations. The model, called by the authors as MOSIPIC, Systemic Model of the Competitive Intelligence Process, has not yet been proven. The question which is presented is: would the MOSIPIC, be appropriately representing the elements and the factors that intervene in a process of organizational change, under the influence of a system of competitive intelligence? To

respond to this question, we look for a context in which we could identify the preconditions for MOSIPIC's conceptual test.

The first condition demandable for that is that the IT's role is clearly defined in the organization and definitively at the service of the corporate strategy. This condition was verified in the process of organizational change of the group enterprise Y, our research object.

Y enterprise, an organization of the textile sector, located in Blumenau-SC, acts in the domestic and international market, serving in the health area. In six years the enterprise was able to get rid of the unavoidable bankruptcy and to draw the attention of foreign investors.

In the recent exploratory research as to the synchronism level among the corporate strategies and those of IT, a high synchronism degree between both was observed, in this enterprise. All the questions had reached above 82% synchrony between the true and the expected. Of the eleven questions, four went beyond the expected, the sub items "b" and "c" of question 6, the sub-item "b" of question number 11 and the questions of numbers 7 and 9 had reached more than 100% of what expected. In general the synchronism degree was of 95% between the true and the expected.

The synchronisms described above can be observed better below in Chart 1:

Chart Nº 1

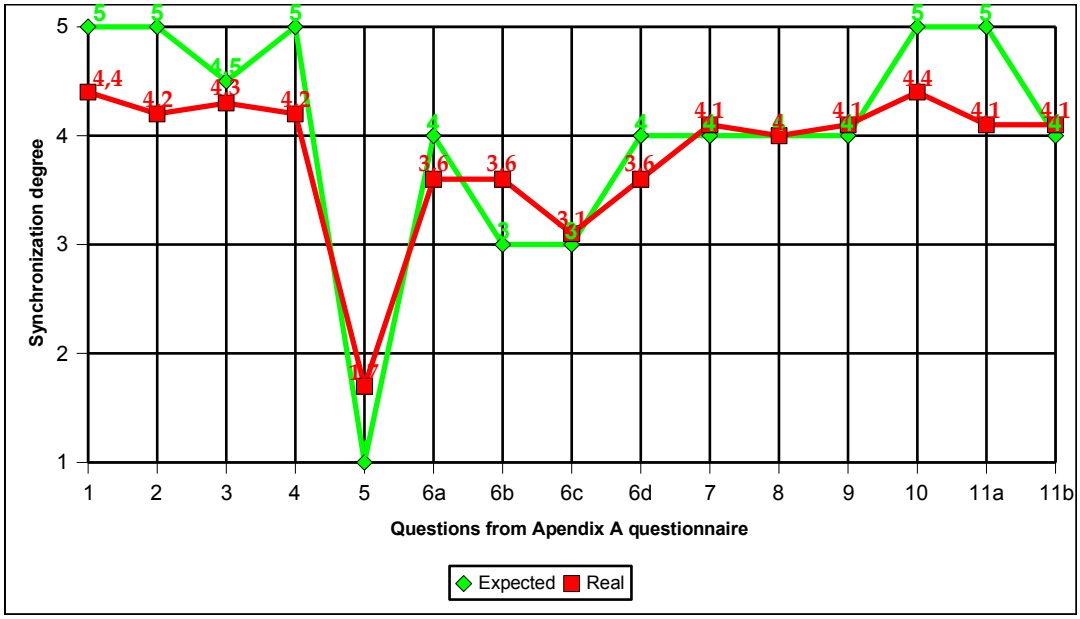

Chart Nº 1 - Synchronism between the commercial strategy and the IT infrastructure of enterprise Y.
Source: Research.

Observing the chart, in axis X are questions of the questionnaire, and in axis Y are the synchronisms degrees. The green line represents the expected degree for each question, and the red line the true synchronism degree. It is verified that only the article of question 6 presented accented difference of what expected, in relation to the true question, and that in some items the true question went beyond what was expected. A sufficiently diverse profile of the dispersed profiles of synchronisms of the enterprises researched by Parlad and Krishnan (2002).

The synchronism of the corporate strategy of enterprise Y and its IT strategy, can suggest that the process of change within the organization is also obeying parameters of processes operational effectiveness, described in Hutt and Speh (2002). The MOSIPIC suggests that the change in the organization, directed by the competitive intelligence system, should observe definitive parameters, in the way of the system, i.e., that the change should contain the parameters and to carry them out in a sequential way, so that the change consolidates itself, and have the best results for the organization.

Enterprise Y, as shown by the results of the preliminary research of dynamic synchronism between organizational strategy and IT infrastructure, presents a high synchronism degree between both. As synchronism is a characteristic typical of effectiveness of the effective strategy in the organization, the other constituent elements of this strategy, determinatives of the organizational changes, those they contained specifically in the systems of the IC, they are presumably appropriate. It is supposed, in this way that the enterprise Y, observes the requirements of the process of organizational change. Such requirements are contained in Riccardi and Rodríguez's (2003) MOSIPIC's model which represents the process of organizational change, resultant of the guidelines of the IC systems.

The research has as its objective to validate Riccardi and Rodríguez's (2003) MOSIPIC's proposal of Systemic Model of the process of competitive intelligence - in the managerial group of a big organization that presents the necessary conditions to the organization of a system of competitive intelligence.

Therefore, to reach this objective the following specific objectives should be reached: to characterize MOSIPIC's evolutionary stage where the group of the enterprise is; to verify the level

of adherence of the conception and operability process of the IC systems of enterprise Y and for the MOSIPIC to identify incongruities and to suggest alterations in the model.

The MOSIPIC's validation in real situation is relevant for some reasons. In the first place, the MOSIPIC as a theoretical model and not yet validated needs to suffer the normal confrontations of rational and operational sustentation which will be accepted as a model of consistent scientific bases. This model's validation, therefore, is an important contribution for an emergent area of the administrative science, the competitive intelligence. Secondly, MOSIPIC's validation opens space for the discussion of methods and management tools of competitive intelligence, useful for the strategic management of organizations of any nature. Thirdly, MOSIPIC's validation brings incorporated contributions of typically pragmatic character. For those that are willing to use, new managerial technologies MOSIPIC's validation can become an excellent methodology to improve the capacity to create and of executing applicable competitive alternatives to the specific necessities of its organizations.

1. INFORMATION SYSTEMS AS A STRATEGIC RESOURCE

The strategic role of the information systems implies the use of information technology to develop products, services and capacities that grant an enterprise strategic advantages on the competitive forces which they face in the world market. O'Brien says that "this role generates the strategic information systems of which support or model the position and the competitive strategies of an enterprise." (O'Brien, 2001, p.282)

In accordance with O'Brien (2001) a strategic information system, can be a MIS, a DSS or an ESS that helps an organization to obtain a competitive advantage, to reduce a competitive disadvantage or to reach other strategic objectives. An enterprise can survive and be successful in the long term if it efficiently develops strategies to face five of Porter's (1980, 1985), competitive forces.

According to O'Brien (2001) the information systems can play fundamental strategic roles in an enterprise, such as: reduce costs, differentiate, innovate, promote growth, develop alliances, improve quality and effectiveness, mount an IT platform, other strategies.

The quick growth of internet, intranets, extranets and other global nets interconnected in the 90's radically modified the strategic potential of the business information systems. This connection in the enterprise global net revolutionized computer science, within the enterprises and between the organizations, therefore it modified the communications and the contribution that support the managerial operations generating a new business environment, providing the increase of the scale of use of the electronic business.

1.1 The information systems with the support of modern IT

The new organization generation is taken to invest in the installation of information systems that have implemented in their processes the activities of the value chain, described by Porter (1986). Previously described these systems are identified as Enterprise Resource Planning and the Customer Relationship Management. Providing then, the base for construction of Data Warehouses, source for the development of Data Warehousing through tools of Business Intelligence (BI).

In accordance with Jamil (2001), for BI tools what one understands is as technical, methods and tools that make it possible for the user to analyze data with base in these analyses, to emit answers that can subsidize objectively and dependably the decision-making processes in an enterprise. These tools provide the development of a necessary environment for an intelligent competitive business that does that, due to the integration of SIGs, DSS and ESS.

The use of Business Intelligence through appropriate tools can provide for the organizations the installation of information systems that can absorb new concepts in the management of the strategic information as for example the Balanced Scorecard.

According to Kaplan (1997), innovative enterprises are adopting the scorecard philosophy, so as to make viable the critical managerial processes as: to Clarify and to translate the strategic vision, to Communicate and to associate objectives and strategic measures, to Plan, to establish goals and to align strategic initiatives, to improve feedback and strategic learning.

The BI development tools are a powerful instrument in the construction of BSC that can be found in some tools, as one of the development modules. Together, Business Intelligence and

Balanced Scorecard are powerful tools to generate tactical and strategic information as well as the supervision of the operation of the organizations through the measuring of indicators.

However, in accordance to Rodríguez (2003), BI independently of the applied IT types, are actions executed starting off from decisions based on strategic and tactics information produced by organizations that are in order to reach a systemic process of competitive intelligence. It is not adequate to refer a certain technology of the information such as BI, because the fact of using the best information technologies does not guarantee the putting into practice of Business intelligence in a certain organization.

2. E-BUSINESS

The innovative organizations are beginning to automate, organize, standardize and stabilize the services offered to create and to maintain sustainable relationships intermediated by the computers in the whole life cycle of an E-Business.

> The concept of electronic business was invented before internet became popular. In the 1970's E-Business was already popular for the financial nets, for example, those that used proprietary solutions of hardware and software. The electronic exchange of data (EDI - electronic data interchange) is also available long before internet, but without the internet E-Business it would not have been possible to use it in a large scale. (Amor, 2000, p. 8)

Kalakota and Robinson mention that "besides including the E-commerce, E-Business includes contact and rearguard activity that form the main mechanism of the modern business [...] ". It is not just purchase and sale transactions through the internet or another electronic net. "[...] it is a global strategy of redefinition of the old business models, with the help of technology, to maximize the value of the client and the benefits." (Kalakota and Robinson, 2002, p.24)

In short, according to the authors, E-Business is any business transaction made through an electronic channel. Within the E-Business context, internet is a piece that composes the infrastructure that is behind an electronic business, a new environment.

2.1 E-business infrastructure

The E-Business project and its architecture application have become topics of entrepreneurs' meetings as more enterprises integrate the applications to accelerate the operations and to enter in the e-commerce competition.

Kalakota and Robinson recommend that "to assemble uses isolated in an architecture of cohesion is the central process of the execution of E-Business" (Kalakota and Robinson, 2002, p.140). Projects of modern businesses are built with modular blocks well integrated called as managerial uses that provide a standard platform for uses, such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM). According to Kalakota and Robinson "these entrepreneurs are the modern enterprise spine" (Kalakota and Robinson, 2002, p.140). Figure Nº 1 illustrates how the diverse uses are integrated to form the model for E-Business entrepreneurship.

Figure Nº 1

E-Business infrastructure uses

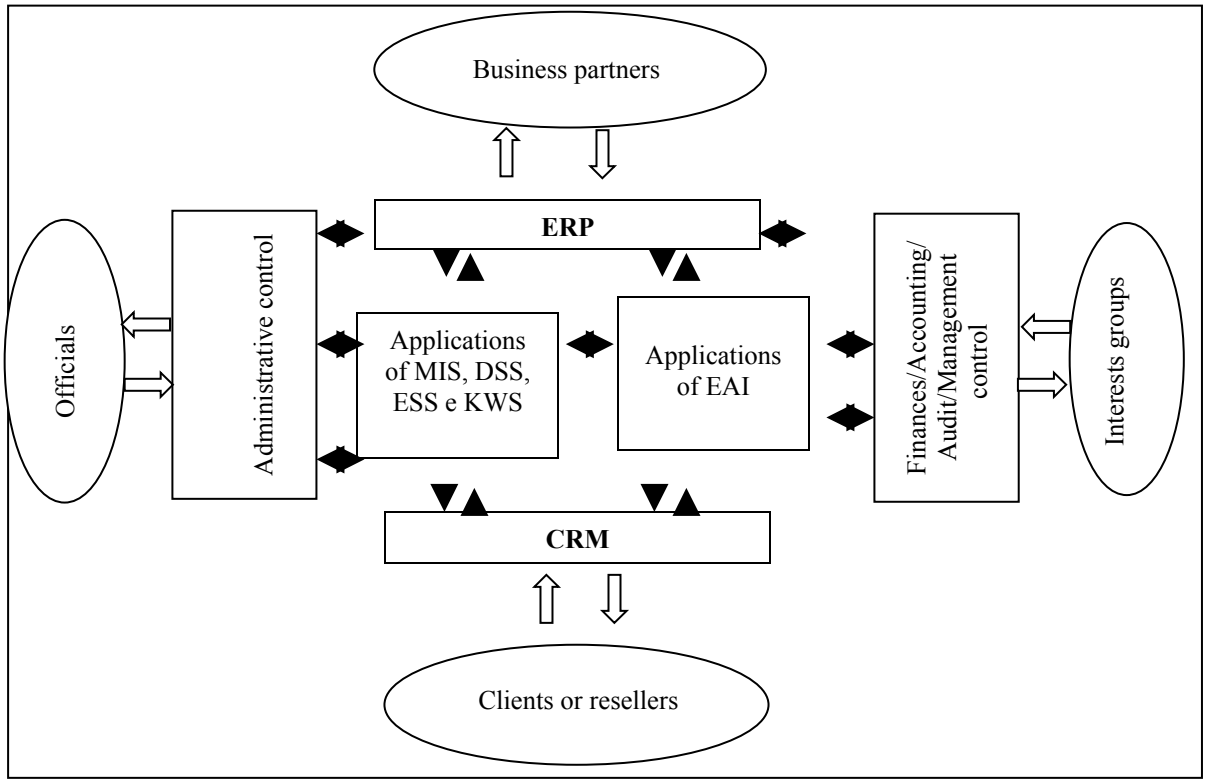

Figure Nº 1: E-Business: Strategies to be successful in the digital world. 2nd Ed. Porto Alegre: Bookman, 2002.
Source: KALAKOTA, Ravi; ROBINSON, Márcia.

According to Kalakota and Robinson (2002), the uses of CRM are the E-Business front line, and the use of ERP is the rearguard. And the requirement of these big use structures provided the market rent growth of this Application Service Provider (ASP) that became an alternative for the organizations during these last years.

3. THE IT DYNAMIC SYNCHCRONISM STRUCTURE WITH THE ORGANIZATIONS' BUSINESS STRATEGY

The organizations are in a continuous search of strategy synchronism and information technology because they know about the competitive advantage that they will gain. However it is a great challenge that few up to the present have been able to overcome.

For Prahalad and Krishnan (2002), enterprises such as Cemex, Keebler, Amazon and Ge, paid attention to create new capacities for their information infrastructures. Therefore, they simply were not able to align the IT with the business strategy, but they made the IT to integrate part of the strategy. "This is a continuous and dynamic synchronization of the intrinsic capacities within the information infrastructure, and the demand of the strategy". (Prahalad and Krishnan, 2002, p. 26).

Prahalad and Krishnan (2002) worked for 4 years with more than 500 entrepreneurs of very big enterprises, in the United States. They requested groups from 25 to 30 managers, focusing in each business to respond to a series of questions on their capacities to conduct the changes within their enterprises. The managers indicated that the quality of the IT infrastructures of their enterprises were behind their necessities, and desires to change, and they are, in some categories, an impediment for transformations. In Figure Nº 2, below, one can observe the result of the research.

Figura Nº 2

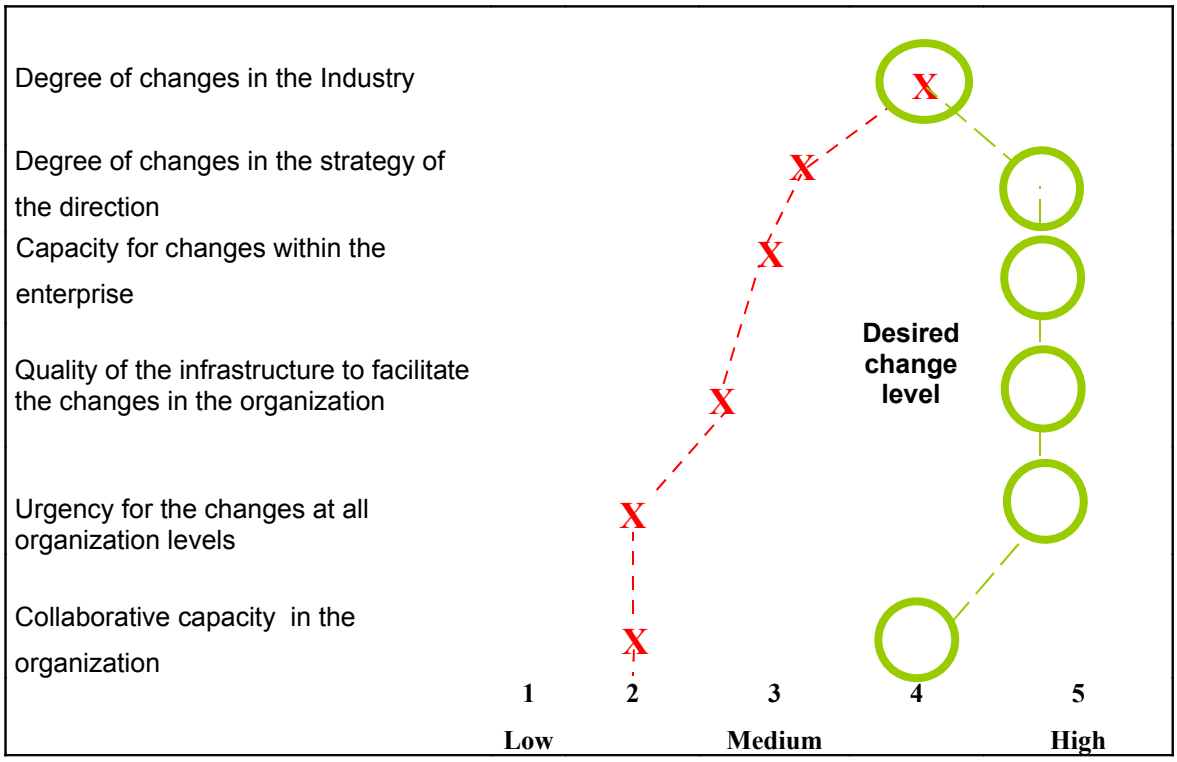

Figure Nº 2 - Vision of commercial control of the capacity of the IT infrastructure
Source: PRAHALAD, C. K.; KRISHNAN M. S.. The Dynamic Synchronization of Strategy and Information Technology. MIT Sloan Management Review, v. 43, n. 4, p. 24-33, 2002.

One observes that there is a great distance between reality and the desire of change among those that answered the research. To reduce this distance, Prahalad and Krishnan, affirm that "to understand the capacity, impediments and risks in their information infrastructure, the business managers and those of IT need a common working structure" (Prahalad and Krishnan, 2002, p.29). And they still suggest critical questions so that they be analyzed, enumerated as follows: a) Which is the rule of the uses in the strategy?, b) Are the business processes known?, c) How much does it cost for these uses to be modified?, d) Where does one develop the sources of the uses?, e) Which is the nature of the data?, f) Which is the quality of the problems?

According to Prahalad and Krishnan (2002), the enterprises that answer these questions and develop a list of infrastructure use, will be able to manage the distance between efficiency and innovation.

The organizations that have not yet incorporated this synchronism process in their culture, it is necessary to make use of some instruments, to begin this process in a planned way. Some of these instruments are presented in the sequence.

4. COMPETITIVE INTELLIGENCE

The concept of competitive intelligence - Focuses in the accompaniment of the external information to the organization, allied to technical information analysis based on the strategies of the intelligence services - it unchains in a definitive way, as indicated by the sources consulted, at the end of the 80's, in the United States. The 90's consider a great impulse of the diffusion of this concept, especially for American authors that exited from national intelligence services, and they formed large international consultancies.

The considerations regarding the accompaniment of the external environment begin long before this current concept of competitive intelligence was installed, due to what one learns according to the literature consulted. Porter (1980, 1985), draws the attention for a series of activities that should be carried out correctly, for the achievement of the competitive advantage starting off from a global competitive strategy. This strategy, mentioned previously, should identify the five competitive forces that are in the external environment: the entrance of new competitors; the threat of substitutes; the buyers' negotiation power; the power of negotiation of the suppliers; the rivalry among the existent competitors.

Therefore, it is necessary to highlight the importance of the competitive strategy in the enterprises, where Porter (1986) mentions that the competitive analysis is so important not only in the formulation of the managerial strategies, but also in the finances, commercialization, market analysis and in many other areas of the enterprise. The competitive strategy examines in this way how an enterprise can compete more effectively to strengthen its position in the market.

However the formulation of the managerial strategies after competitive analysis, should be based on the five forms of strategy definitions: plan; stratagem, model / standard, position and perspective. The strategy notion is the integration of these five definitions. As a plan it projects a guide for future action; as a stratagem, a guide to carry out competition dedicated to go to the competitors, being more a threat than an action in itself, as a model / standard it focuses the unexpected actions that appear due to the organization allowing to maintain the coherence through time; as a position it incorporates the external environment, it chooses a localization specifically within the environment, defining a place and there it lodges itself; and as a perspective it brings for

the analysis the internal environment, looking inside and upwards, towards a wider vision. (Mintzberg, 1987; Mintzberg and Quin, 2001).

Essentially, if the strategic concepts are to play an effective role in determining the growth and survival of an enterprise, then those concepts should be re-aligned, using an approach that stresses the basic foundations of the militant nature of the current conditions of the managerial environment. Given the market competitive nature and limitations, an attack and defense position requires a business strategy similar to a military one. In this situation, a strategic tool of analysis becomes naturally essential, the competitive intelligence.

According to Lesca (1996), competitive intelligence or the strategic vigil is the information process with which the organization carries out the "anticipation" listening of those "weak points" of its economy environment partner with the creative objective of discovering occasions and of reducing risks joined to uncertainty. The importance of the process is found in mounting the information puzzle, searching for the strategic use for the organizations.

For Kahaner (1997), the competitive intelligence is a systematic program that has as its objective the search and analysis of the information on its active competitors and business tendencies in general for the future of an enterprise. Teixeira Filho (2003) defines competitive intelligence as the systematic accompaniment of the business environment that supervises the information it has on clients, suppliers, competitors, regulator agents, government, new technologies and everything else that can influence in the enterprise market.

Finally, Riccardi and Rodríguez offer an important contribution for the agreement of competitive intelligence "it is understood by such, a pragmatic system of gathering, analyzing and distribution about the activities of the competitors and of the business tendencies, so as to be able to assure consistency in the enterprise's objectives" (Riccardi and Rodríguez, 2003, p.186).

4.1 Competitive intelligence in enterprises

The enterprises are, now facing the necessity of selecting strategies to stop an attack against their products or services and, on the other hand, to select strategies to attack their competitors.

For Suave (2003), competitive intelligence is used by the enterprises, in a collective and voluntary process, so they search for, activate and assimilate the information anticipating changes relative to its socio- economic environment. It is a true process of "vigil", carried out within the objective to create the business occasions and to reduce the risks joined to uncertainties.

It is important to observe that the objective of competitive intelligence is not to look for tendencies, but yes to guide the capacity to “foresee it" which will become a tendency in a near future. That is to say: when any behavior or phenomenon begins to be declared as a tendency, the competitive intelligence practicing enterprise will already have - in advance - the knowledge of the information. It will also have already, prepared for the necessary adaptations to its "fitting" to the new standards, established by the new tendency.

But it is important to specify that, Riccardi and Rodríguez (2003) draw the attention that when one speaks of competitive intelligence, one must make clear the difference between information and intelligence. Information is reality and intelligence is not a function, and yes a process that gathers pieces of information which are filtered, regrouped and analyzed and that they constitute what the managers need to make decisions.

In extreme, in the fight for enterprises’ competitiveness, they need to implant a competitive intelligence process, and for this they need to adopt a methodology. Following this, Riccardi and Rodríguez (2003) propose a systemic model of the competitive intelligence process, the MOSIPIC.

4.1.1 The MOSIPIC model

The systemic model of the process of competitive intelligence (MOSIPIC) was proposed by Riccardi and Rodríguez (2003), with the objective of satisfying the intention of an intelligent and competitive enterprise of reaching the results to act in the business world. It is divided into 3 stages and 8 phases that will be described as follows.

4.1.1.1 Constructive stage

This stage is concerned within the creation of the competitive conditions that should be reached with the following phases:

4.1.1.1.1 Phase 1: Conceptive portfolio

This phase is concerned with creating conditions that allow the enterprise to reach a backed and sustainable competitiveness. Divided into two blocks that converge with the competitive intelligence, where the first one expresses the contribution of the intellectual capital that represents the addition of three capitals: human capital; capital structures; commercial capital. The second block represents the actions that the enterprises should take seriously once it has assimilated and incorporate the practice of competitive intelligence, enumerated as follows: collects or gathers information; information protection; information destruction.

4.1.1.1.2 Phase 2: Environment and moment

The Environment and Moment phase says regarding the competitive orientation of the organization. In this phase, one looks for determining the environmental elements that influence the competitive placement, by means of the identification of the tendencies that contribute and of the forces that impede the business, existing within the environment (behavior of the industrial sector and of the directly influential macro-scenarios in business) of the organization. So, the current context is determined (globalization) and its possible scenes (from where our remuneration and our benefits will come). Starting off from this point, the competitive placement of the organization establishes itself. This allows to sharply identify the priorities and orientation of the investments (capacities and resources, essential capacity and commercialization placement). Environment and Moment therefore, require a system of environmental information that will be directly responsible for forging the business vision, formulation of the corporate strategy and of the necessities of organizational change.

4.1.1.1.3 Phase 3: Organization in learning

This phase is in charge of putting at the management's disposal, the intellectual vehicle that should introduce in the organization the new mentality required by the arrival of the knowledge wave, where the IT provided a jump of incalculable dimensions. The organizational learning is a systemic process that identifies the organizations that learn learning. This process is divided into two blocks of elements and activities. The first one is the search for the indispensable tools to correct the old habits used in the enterprises, by means of: continuous innovation; the individual and the group's creativity; the up-to-date technological development.

The second block, allows the enterprise to build the bases for knowledge management, where the qualification and formation processes originate, fomenting personal development, thus generating organizational knowledge.

4.1.1.2 The critical stage

The second stage is that which centers its efforts in assuring the business or the organization, a capacity to make decisions in critical situations. This stage has three phases, described as follows.

4.1.1.2.1 Phase 4: The policy election

This is the fourth phase of the MOSIPIC and the most excellent in the critical stage, responsible for the election of the enterprise's policy. These policies should cover the highest observation levels, with the main function as guideline and thought channel for actions. Different from strategy which is a concrete programming of an action, originating in a mission and it materializes, in strategic planning itself. These policies can be divided into internal and external policies.

4.1.1.2.2 Phase 5: Intelligent competitive strategies

Intelligent competitive strategies say regarding the strategies formulated with base in the information generated by the competitive intelligence system. They are made up of two essential dimensions. One refers to the organizational motivation generations (strategic thought and strategic intent). The other one refers to the development of the qualifications in the organization, necessary to successfully compete. Policies are directed by guidelines that the organization established and uses them to satisfy their internal and external routines. The constituent elements of this phase and their role within the context of the formulation of intelligent competitive strategies are: strategic thought; strategic intention; special capacities and resources: essential capacities.

4.1.1.2.3 Phase 6: Change Processes

This phase is the natural product of the elected strategies. Once adopted the decision of making the change process, one has to keep in mind as requirement, a deep knowledge of its development, therefore it can originate in a destructive process when one thinks to subject the enterprise to modifications that do not contemplate enough consolidation time to be able to be

evaluated correctly. This process can happen through the following forms: increase change; evolutionary change; revolutionary change; transforming change.

4.1.1.3 Operative stage

This stage is essentially concerned with two aspects. The first one is the necessity, demanded by the change process, of introducing in the enterprise new management technologies in relation to the current ones that can have been revealed as obsolete or inefficient. The second manifests itself in the modifications that should be produced in the strategic and organizational principles, affected by the change.

The phases of this stage are two, which will be described in the sequence.

4.1.1.3.1 Phase 7: New management technologies

Phase 7 of the operative stage is an unavoidable consequence of the change process and two questions should be considered: if the enterprise will be able to successfully benefit in its new globalization "moment" with the same previous technologies; if the new technologies that will be adopted will maintain the strategic and organizational principles that were used previously.

For that, this phase should treat the following topics: new management technologies; new strategic principles; new organizational principles.

4.1.1.3.2 Phase 8: Functionality evaluation

This phase is based on the evaluation process of a MOSIPIC systemic process type, facing a series of measurable parameters, which use or do not use structured data. This evaluation process implies three strategic components: participation, learning and evaluation.

According to the authors of the model, the execution of this phase should follow the following actions: evaluation criteria, corrective actions, anticipation of the future/future.

5. RESEARCH METHOD

Research is characterized as being of quantitative nature of the statistical-descriptive type. Quantitative for using a measuring method, to verify through the supposed non manipulated variables, by the questions of the collection instrument.

The population used for the realization of the research is constituted by the representatives of the executive committee and the coordinators of processes of the group of the organization, enterprise Y, composed of three business units and eight distribution centers. One of the three units is represented by an enterprise of the medium sized plastic injection segment, the Plastics of Enterprise Y, by 5 responders. The other two units are represented by the matrix and the branch of Enterprise Y, with 19 responders in the matrix and 7 in the branch, the industrial and hospital adhesives factory. Each distribution center had the participation of 1 responder, and the executive committee had the participation of 6 executives. Thus reaching a total of 45 responders that make up the population. The research was carried out among all those that composed the population considered here.

It should be considered that the MOSIPIC validation happened through a research in an organization under contextual conditions of transformation that showed to have a high degree of business strategy synchrony, of the IT infrastructure. This was checked by the preliminary research, commented in the introduction of the research problem. It is important to remember that, the preliminary research provided a static vision, in a certain moment, of the phenomenon.

Therefore, it is not advisable that researches be made in similar environments, without before repeating the research of previous synchronisms, although it be with the same population, for the revalidation of the MOSIPIC, therefore, the synchronism between the corporate strategy and that of IT, is a previous condition for the systemic implementation of the MOSIPIC.

Another consideration is the fact that a bias can exist in the research, since the author is a member of the team of employees of the group, enterprise Y.

6. ANALYSIS AND INTERPRETATION OF THE RESULTS

According to that considered in the objectives, this research has as objective to verify, essentially, if in fact there was adherence in the reorganization process of enterprise Y, to Riccardi and Rodríguez's (2003) MOSIPIC. The importance of this validation, results from two preliminary evidences. The first one is that, in a preliminary research a high degree of synchronism was verified between the corporate strategies and that of IT, in enterprise Y. The second was that the restructuring of enterprise Y was basically settled on its qualification in IT.

Graph 2 shows that 41.6% of the responders had demonstrated that enterprise Y observed all the process change requirements, contained in Riccardi and Rodríguez's (2003) MOSIPIC's model. Y 40.4% had demonstrated that the requirements are observed almost in their entirety. Therefore, in general, nearly 82% of the responders agree that enterprise Y has observed the MOSIPIC's elements, in their reorganization. A not very significant percentage of 18% represents the disagreement and opinion absence. In general, Chart 2 represents the verification that the elements contained in the MOSIPIC, are recognized by the organization in their reorganization process, with base in the systems of competitive intelligence.

Chart Nº 2

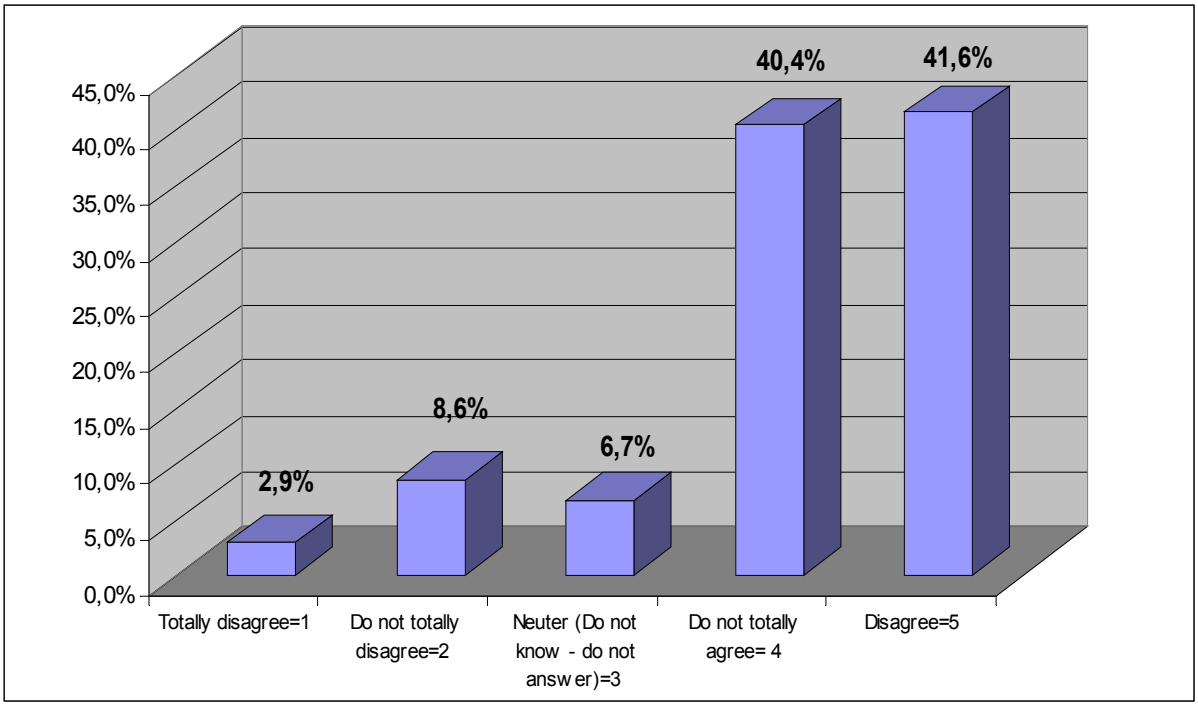

Chart 2 – Tachuela of enterprise Y and of the group to the MOSIPIC.
Source: Research.

Chart 2 was generated with base on the data of table 1 which represents the mean percentages of each MOSIPIC phase. The average percentage of each phase was generated with base in the questions of the research collection instrument, which represents the MOSIPIC's elements.

Table 1 –

MOSIPIC's validation research Data

STAGE	PHASE	1 (Totally disagree)	2 (Do not totally disagree)	3 (Neuter)	4 (Do not totally agree)	5 (Disagree)
Stage I	**Phase 1**	2,6%	8,5%	9,3%	41,1%	38,5%
Stage I	**Phase 2**	1,9%	11,5%	3,7%	42,6%	40,4%
Stage I	**Phase 3**	0,3%	6,3%	7,6%	39,4%	46,3%
Stage II	**Phase 4**	0,0%	7,8%	4,4%	44,4%	43,3%
Stage II	**Phase 5**	0,0%	9,4%	2,8%	33,3%	54,4%
Stage II	**Phase 6**	4,2%	10,9%	4,4%	38,2%	42,2%
Stage III	**Phase 7**	4,3%	5,9%	5,9%	42,8%	41,1%
Stage III	**Phase 8**	1,5%	11,1%	15,6%	34,1%	37,8%
GRAL		**2,9%**	**8,6%**	**6,7%**	**40,4%**	**41,6%**

Source: Research

In the sequence one tried to exemplify this article, with the development logic itself, of Aristotle and Descartes' contributions.

7. ARISTOTLE AND DESCARTES' CONTRIBUTIONS FOR RESEARCH LOGIC

Aristotle and Descartes' contribution in the logic of this research and others carried out by the scientific community is considerable. The first one to have innovated in the field of logic, where the empiric observation, i. e. - the experience of the real thing – thus gains, a central role in Aristotle's conception of science. This is evidenced in the elaboration of that supposed in the research, that demanded from the author of the current article, the comment of the environment of the organization looked for. The second for the essential contribution to the epistemology that created a method that consists on the realization of four basic tasks.

a) Verification, used in the use of the questionnaires to identify evidences of dynamic synchronism of the IT infrastructure, and the MOSIPIC's strategy and adherence in the organization;

b) Analysis, used in the analysis and interpretation of the results originated from the questionnaire data for verification of the adherence of the MOSIPIC.

c) Synthesis, used in the conclusion for verification of the fulfillment of the objectives;

d) Enumerate the conclusions, used by the chapter itself, of the essence.

Summing up Carpio (1995) and Coscodai (2002) make their considerations on the two philosophers in the following subchapters.

7.1 Aristotle's contribution

Of all the great thinkers from ancient Greece, Aristotle (384-322 BC) was the one that most influenced western civilization. Up to the present, the way to plan to produce knowledge, owes the philosopher a lot. He was the founder of the science that would become known as logic and its conclusions in this area would have no answer until the XVII century. Its importance in the field of education is also great, but in an indirect way. Few of his specific texts on the topic reached to our days. Aristotle's contribution on education are mainly in writings on the topics.

One of the foundations of the Aristotelian thought is that all things have a purpose. That is, according to the philosopher, it takes all the live beings to be developed in an imperfection state (seed or embryo) to another of perfection (that corresponds to the period of maturity and reproduction). Neither do all the beings obtain or have the occasion of satisfying the cycle in their fullness; however, by having multiple potentialities, the human being will only be happy and will give better contribution to the world if he enjoys the necessary conditions to develop the talent. The social and political organization and education in general, particularly, have the responsibility of providing those conditions.

Virtue, for Aristotle is a practice and not a data on each one's nature, neither the mere knowledge of what is virtuous, like it was for Plato (427-347 bc). To be constantly practiced, virtue needs to be a habit. Although no study by Aristotle is known on the topic, it is possible to conclude that the virtue habit should be acquired at school.

Great part of the work which originated the Aristotelian inheritance was developed in opposition to Plato's philosophy, teacher and founder of the Athenian academy that Aristotle frequented for two decades. Later on, he would establish his own school, the lyceum. One of the philosopher's two big innovations regarding the precursor was to deny the existence of a supra real world, where the ideas would inhabit. For Aristotle, on the other hand, the world that we perceive is enough and in it perfection is within reach of man. The opposition between the two philosophers - or the supremacy of ideas (idealism) or of things (realism) - would mark western thought forever.

Aristotle's second innovation was in the field of logic. According to the philosopher, to determine a truth common to all the components of a group of things is enough to conceive a theoretical system. For the construction of such a knowledge, Aristotle was not satisfied with Plato's dialectic, according to which the way to reach the truth was the purification of the arguments by means of the dialogue.

Aristotle wanted to create a surer method and developed the system that was well-known as syllogism. It consists of three propositions - two premises and a conclusion that derives necessarily from the two previous ones, without there being another option. A classic example of syllogism is the following one. All men are mortal. Socrates is a man. Socrates is mortal. That is not enough, however, so that logic becomes a science. A syllogism needs to set off from truths, as contained in the two initial offers. Not according to a reasoning that demonstrates them. They are demonstrated in themselves in reality and are called from axioms. The empiric commentary, this is the experience of the real thing – gains, in this way, a central role in Aristotle's conception of science, contrary to Plato's thought.

7.2 Descartes' contribution

René Descartes (31st March 1596, in Touraine, France – 11th February 1650, Sweden), also known as Cartesius, was a philosopher, a physicist and French mathematician. Became famous due to his revolutionary work on philosophy, also being famous for being the inventor of the coordinate system that influenced the development of modern calculation.

Descartes, sometimes called the founder of modern philosophy and the father of modern mathematics, is considered one of the most important and influential thinkers in human history. He inspired his contemporaries and generations of philosophers. According to the opinion of some commentators, he began the formation of what is today called, Continental Rationalism (supposedly in opposition to the school that prevailed in the British Isles, Empiricism), philosophical position of the XVII and XVIII centuries in Europe.

His contribution to epistemology is essential, as well as the natural sciences a method that helped to its development. Descartes created in his works Discourse on Method and Meditations -

both written in vernacular, contrary to traditional Latin of the philosophy works - the bases of contemporary science.

The Cartesian method consists on Methodological skepticism – every idea that can be doubted, is doubted. Contrary to the ancient Greek and the scholastic ones, which believed that the things simply exist because they need to exist, or because this is the way it should be, etc., Descartes instituted doubt: one can only say that exists, that which can be proven, being the act of doubting indubitable. Based on this, Descartes searches to prove the existence of one himself and of God.

The method also consists on the realization of four basic tasks: to verify if real and indubitable evidences exist, regarding the phenomenon or studied matter, to analyze, that is to say, to divide to the maximum the things, in their composition units, basics, and to study those simpler things that appear; to synthesize, that is to say, to group once again the units studied, in an all true one; and to enumerate all the conclusions and principles used, to maintain the thought order.

8. CONCLUSIONS AND RECOMMENDATIONS

The conclusions of the research analysis, are presented in the sequence, directed by the specific objectives described in the introduction to this paper.

The first objective was to re-evaluate the preliminary conditions of operation of the IC systems, having as objective the descriptive characterization of the IC systems, in the group of enterprise Y. This objective was reached before the current results and of the descriptive characterization of the IC systems of the group of enterprise Y, in the previous chapter. What leads to the conclusion that the organization presents good preliminary operation conditions of the IC systems. That is to say, the requirements to reach excellent operability are very well attended, almost in their entirety.

The second objective was to verify the adherence level of the conception process and operability of the IC systems of enterprise Y to the MOSIPIC. This objective was reached based on each one of the stages and phases that had been the observed elements that had presented high perceptibly indexes, according to that identified in the concordance behaviors that had contributed

to the high general index of adherence to the MOSIPIC. However, some elements of certain phases of the model, according to that identified in the behaviors of the disagreement, analyzed in the previous chapter, need adjustments. Such adjustments are discussed to follow, in recommendations for the observed organization. Also, the same phases of the model also possess elements with high adherence indexes. In general the researchers identify the MOSIPIC's elements in enterprise Y's reorganization process. One can conclude then that the adherence level of the conception operability process of the IC systems presented high indexes, mainly in the conception process.

Finally, the last objective was to identify incongruities and suggest alterations in the model. This objective was not reached because the adherence recovery process enterprise Y, with base in IT, characterizes the rationality of the model, not only for normal situations, but also for abnormal situations, where the events and articulation factors of the situation are not totally predictable. The MOSIPIC presents the elements that characterize the structural change process, within an organization carried out through induction of competitive intelligence's systemic process. Thus the MOSIPIC as a representative systemic model of the organizational change process, as a result of the TI's basic function, and abettor of corporate competitiveness, can be considered validated under conditions of articulated instability of the situation, typical of an organization in recuperation process.

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