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Where to Place Competitive Intelligence in Your Company

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Abstract

Competitive intelligence became an activity on the increase at the end of the 1990s for two reasons: the hypercompetition that demands, more than the simple monitoring of the competitor's behavior, the forecast of his future actions and the hyperinformation that makes it impossible to bring individuals up to date solely through reading. This subject proposes to provide executives with 'analysed information' to make decisions, based on a systematic program for the gathering and analysis of the information about the competition's activities and general business trends. This paper presents a method to choose the best position to place the competitive intelligence system in a company. Three approaches are presented to the organizational structure: conditional factors, components and levels. Moreover, the prominence of competitive intelligence's multidisciplinary character is discussed and the change to a network philosophy, promoting a new kind of organization, a real company.

Introduction

Organizations are live and intelligent beings. They compete among themselves in an environment in constant change. Some assume the leadership of their segment of business, many just survive and others die. As the turbulence of the environment increases, the competition becomes fiercer and more organizations fall victim to the constraints of their own formal structure. Competitive Intelligence (CI) is presented as a solution for this increase in competitiveness. How and where should one place it in the body of the company? (see Figure 1 below).



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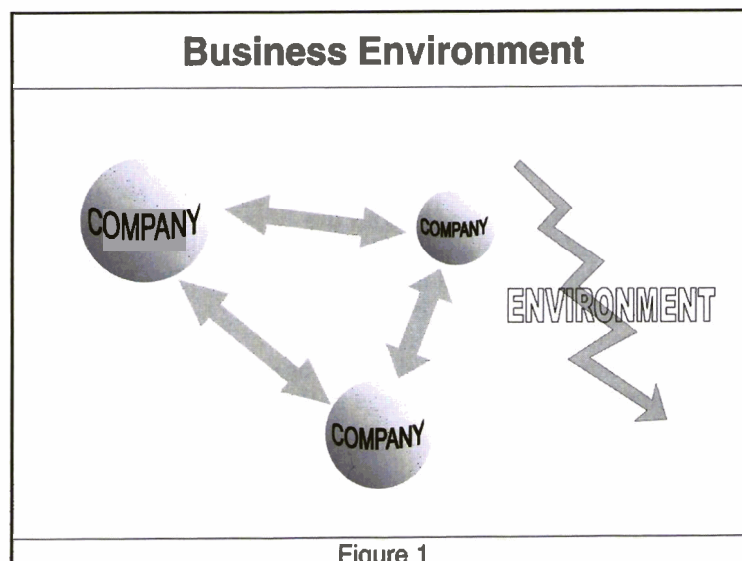


Figure 1

To answer this question, one can analyse the current environmental context, focussing on five phenomena: the society of information, globalization, glocalization, hyperin-formation and hypercom-petition. The contex-tualization continues with a description of the evolution of Administrative Systems in function of the increase of the complexity of the organizations as an answer to the environmental turbulence. One can conclude with a description of the effect of this complexity on the decision-making process as the origin of the multidisciplinary approach adopted by CI.

After this, a method is proposed to define the place of the activity of competitive intelligence in an organization through the analysis of the organizational structure. Concepts of the discipline of Organization and Methods are approached such as: conditional factors and components of the organizational structure, influence and range levels. Finally, the subject of the informal networks is treated and a 'network structure' is suggested to operate inside of an organization in real time.

The context of competitive intelligence

Competitive intelligence proposes itself to provide executives with 'analysed information' to make decisions, based on 'a systematic program for obtaining and analysing information about the activities of competitors and about the general trends of business, for the purpose of attaining the objectives of the company.' (Kahaner, 1996: 16).

We are in an epoch characterized by the advent of five phenomena: the information society, globalization, glocalization, hyperinformation, and hypercompetition.

The use of informatics and telecommunications has been a revolution in the forms of production, access, treatment, and dissemination of information. The impact of information technology has been so strong that one already speaks of an *information society*.

The term *globalization* was made popular with the objective of marking the advent of a unified world under the aegis of capitalism, after the fall of the Soviet Union and the sunset of the East/West bipolar model. The turbulence and the uncertainties which we are experiencing are a consequence of the adoption of a new pattern of accumulation, one more stage in the evolution of capitalism.

The economic globalization, defined as the worldwide production (global products) and the active integration of global trade, through the progressive dismantling of direct and indirect protection, is not occurring in this

way (without protection). Actually, such articulation shows remarkable differences between countries or blocks. Some authors reinforce the idea that it is necessary to establish a harmonic synchronization between local and global spaces, a phenomenon denominated *glocalization* by Marc Humbert, French researcher of the University of Rennes (1995 apud EQ/UFRJ, 1998: 197). That is to say, a synchronization between the capacity which a society has of articulating its different socio-institutional spaces (local space) to generate a successful response capacity in a more and more internationalized area (global space).

In this era of document explosion (*hyperinformation*), more than 300,000 magazines are published, about 20,000 publications are out every day, and every 10 minutes a network goes into the air - in the next 15 years there will be more publications than in the last 2500 years (Coelho, 1997: 1).

Price (1963: 5-32) studied the accumulation of scientific writings over time and concluded that that accumulation follows the model of the logistic curve (the S curve), still in a growth stage at a compound rate:

'In the real world things do not grow and grow until they reach infinity. Rather, exponential growth eventually reaches some limit, at which the process must slacken and stop before reaching absurdity.' (Price, 1963: 20).

The strategy for the 1980s and early 1990s sought a 'sustainable advantage' for a company in its industry. By the end of the 1990s, the increasing competition had led the companies to seek 'a series of temporary advantages'.

Richard D'Aveni, Ph.D., Columbia University, has studied that phenomenon and its consequences for competitive analysis. He called it 'hypercompetition'.

'Hypercompetition is an environment characterized by intense and rapid competitive movements, in which competitors have to move quickly to build up advantages and erode the advantages of their rivals. That speeds up the dynamic strategic interactions among the competitors.' (D'Aveni, 1995: 195).

Evolution of management systems

According to Ansoff and McDonnell (1993: 35-49), the analysis of the management systems adopted by the organizations since the early 20th century shows an increase in their complexity, in response to the growing environmental turbulence.

The level of turbulence of the environment (its speed of change) can be classified into five degrees: (1) stable, (2) reactive, (3) anticipatory, (4) exploratory,

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and (5) creative.

- The turbulence level of *degree 1* (stable) is characterized by the predictability of the future, by slow change, and repetitive processes, a situation already observed in the American and European economies in the first half of the 20th century. The most adequate managementsystem is Management by Control, the instruments of which are the manuals of systems and procedures, and financial control.
- *Degree 2* (reactive) is characterized by a faster change, but still with the possibility of extrapolating to the future. This is the growth period of the market posterior to World War II (the 1950s). Here, Management by Extrapolation is used, and its instrument is Long-Term planning.
- *Degree 3* (anticipatory) is characterized by familiar discontinuities, by predictable threats and opportunities. This period (the 1960s), presents reduction in the rates of growth of consumption, the consequent increase of the competition and the coming of technological progress. Here the Management by Predictability of Changes is used, and its instrument is planning by Strategic Business Units
- *Degree 4* (exploratory) in the 1970s is characterized by less familiar discontinuities, by the change of paradigms, and by threats and opportunities which are predictable only in part. The increase of competition, due to accentuated reduction in the growth rates of consumption, forces the companies to implant cost reduction programs through the adoption of support resources shared among several Strategic Business Units. The methodologies of Scenarios appear for the probabilistic analysis of the environment, and Corporate Strategic planning is adopted.
- Finally, *degree 5* (creative), starting from the 1980s, is characterized by new discontinuities and unpredictable surprises. The environmental turbulence and the competition are accentuated, the need for creative solutions is demanded through the emphasis on the human factor, and planning becomes an agent of change. It becomes necessary, then, to have a management system which will provide quick and flexible responses to changes in the environment, Management on Real Time. One can adopt Strategic Management (one kind of Management on Real Time), the instruments of which are the management of strategic questions (by low frequency signals) and the management of surprises.

The multidisciplinary approach of competitive intelligence

While a modest bookkeeper was capable of exercising Financial and Budgetary Managerial Control, appropriate for the first half of the last century, the Long-Term Planning of the 1950s already demanded a good accountant. The arrival of Management by Predictability of Changes in the 1960s started to

demand other specialists' participation besides the accountant, people with vision of the market and of technology, such as economists and engineers, for example. The breaking of paradigms, begun in the 1970s, demanded the involvement of other specialists to support the decision-making process. This multidisciplinary tendency was accentuated in the latter decades.

Competitive Intelligence, as a support instrument for the decision-making process appropriate to a hypercompetitive environment and to an administration system in real time, adopts a wide multidisciplinary approach; this is the only form to attend to the growing internal complexity of the organizations which is demanded by the high environmental turbulence.

Analysis of the organizational structure

Since the Fayol (1885) studies, at the beginning of the 20th century, Administration has consisted of five functions: planning, organization, direction, control and coordination. The organization function is in charge of the organizational structure. The Organizational Structure is a support instrument for the administrative system adopted by the organization

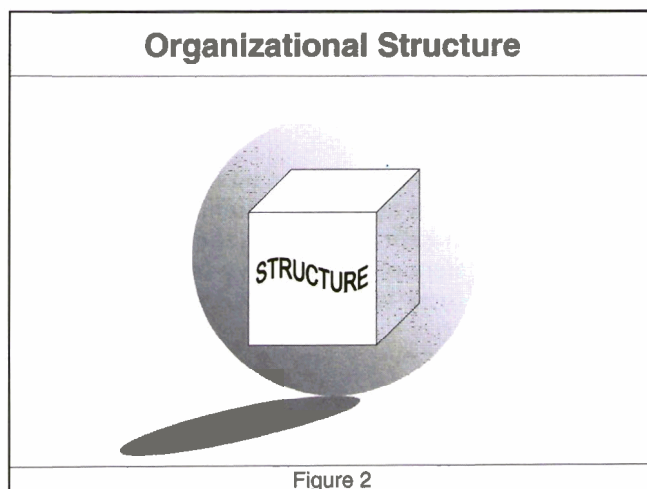


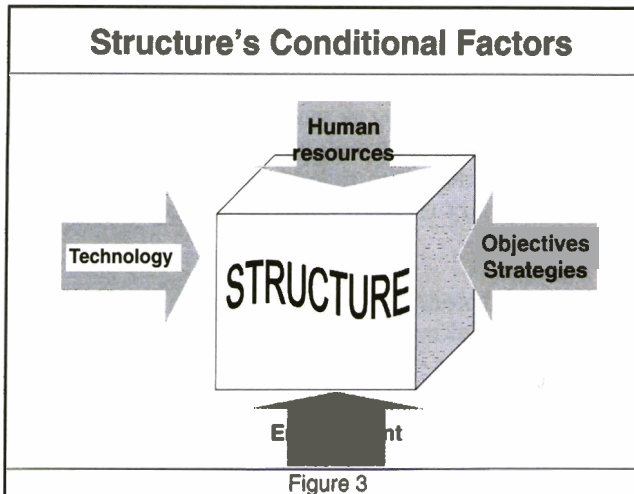
Figure 2

as an answer to the environmental demands (see Figure 2). One can study this structure under its several aspects: conditional factors, influence levels, range levels and components (Olivera, 1997: 86-89).

The organizational structure's conditional factors

According to Vasconcellos (1972: 1), there are four conditional factors of the organizational structure: objectives and strategies, environment, technology and human resources (see Figure 3 below).

The factor objectives and strategies expresses the 'why' of the existence of the organization, 'where' it is going and 'how' it will arrive there. These are fundamental definitions to be given by the owners or persons

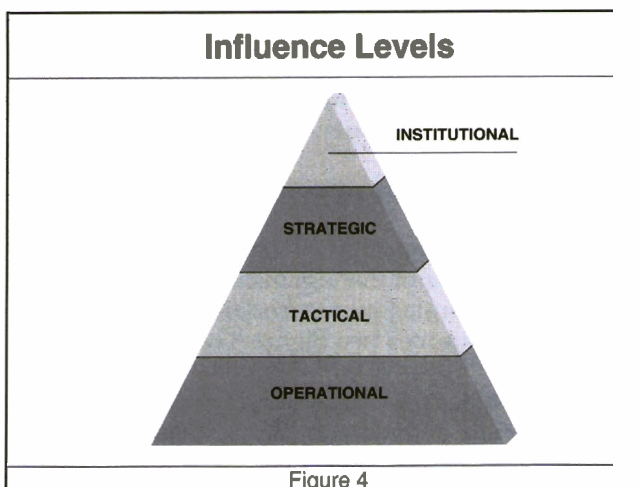


responsible for the organization, these being definitions that will condition the form as to how the organization will structure itself. The factor environment is constituted of those variables of the external environment of the organization that cause, or can come to cause, an impact on the objectives it seeks. The factor technology refers to the mass of knowledge that is used for making the activities operational according to the defined objectives and strategies. Finally, the factor human resources takes care of that portion of the intellectual capital' of the organization constituted by the capacity of persons to execute what was planned, and in proposing improvements and innovations that have an impact on the structure and the attainment of the objectives of the organization.

These four factors constantly act on the organization and its structure so that it adapts itself, contributing with efficiency and effectiveness in the search for the objectives. A System of Competitive Intelligence should monitor these factors and the variables that affect them.

Influence levels

According to Milani (1998: 21-22) there are four influence levels related to the decision-making



process: institutional, strategic, tactical and operational. Each level corresponds to a group of planning and control instruments to support decision (see Figure 4).

The institutional level is the decision environment of the owners, represented by the Administrative Council (AC). At this level one defines the business of the organization and the patterns of conduct by which it will manage its activities. Its elements suffer alterations only in function of great changes of the paradigm, a fact which occurs few times during the existence of the organization.

The strategic level is the decision area of the strategists, represented by the Executive Board (EB). It is contracted by the Owner to reach the objectives of the organization. At this level one defines the orientation of the company for a period of five to ten years (depending upon the time for its investments to mature), based on an analysis of the interactions between the variables of the external environment and the internal environment to the organization (strategic analysis). The EB seeks effectiveness: *'to do the right thing in the right way'*.

The tactical level is the decision area of the technicians, represented by the Functional Management areas (FM). At this level the Patterns of the Process are defined, and quantified the desired results for the next three to five years and the optimization of the allocation of the organization's resources (material and financial) is realized. The FM seek efficiency: *'to do things in the right way'*. Finally the operational level is the area of the executors, represented by the Operational Management areas (OM). At this level actions are executed. The OM seek efficacy: *'to do the right thing'*. Considering that competitive intelligence proposes to provide the executives with 'analyzed information' to make decisions, and that the most urgent decisions and those which cause the greatest competitive impact refer to those taken by the executives of the EB, it is advisable to place the activity of CI at the strategic level of influence.

Range levels

According to Certo and Peter (1993: 111), the development of the strategy of the organization should be given in three range levels: corporate, business and functional (see Figure 5). At the corporate level the strategies are formulated by the top-level administration of the organization to reach its global objectives. The process of formulation of the strategy begins with the definition of the Mission and of the Objectives of the organization and continues with external and internal environmental scanning. With this information a Strategic Analysis is developed where the Opportunities and Threats of the external environment are compared with the Strengths and Weaknesses of the internal environment.

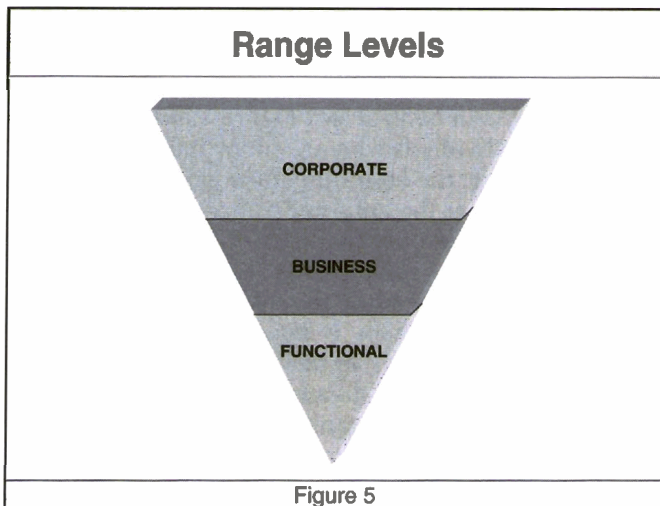


Figure 5

At the business level, strategies are formulated for each one of the transactions of the organizations that are segmented in Strategic Business Units (SBU). In this case the concept of Portfolio Analysis is used, a simplification of Strategic Analysis in that the characteristics of the external environment are represented by a variable related to the attractiveness of the activity area and the characteristics of the internal environment by a variable related to the capacity of competition of the organization.

At the functional level the strategies are formulated by specialists in each functional area of the organization (technical areas, such as operations, marketing, research and development, etc.). Considering that the structure should be at the service of the strategy, when developing and implanting the structure, these same range levels should be observed. Thus, the premise of 'considering the system as a whole, so as not to lose the global vision of the approach of the organizational structure' (Oliveira, 1997: 103) is respected. Therefore, in order that the activity of CI can serve as support for the decisions of larger global and systemic impact, it is advisable to place it at the corporate range level.

Components of the organizational structure

According to Oliveira (1997: 87-88) the organizational

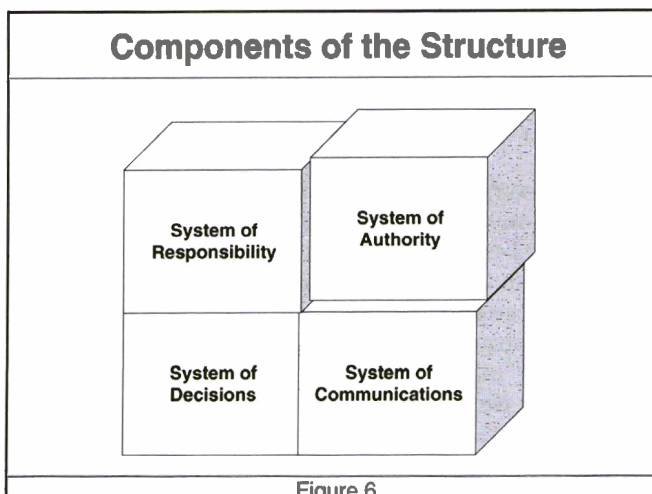


Figure 6

structure is composed of four systems: decisions, responsibility, authority and communications (see Figure 6).

The System of Decisions (see Figure 7) is about support for the decision-making process. Decision-

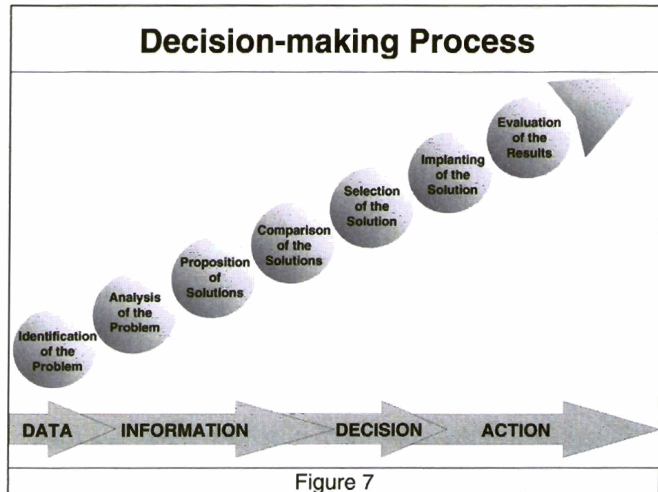


Figure 7

making is constituted of a sequence of stages as, for example: 1) identification of the problem; 2) analysis of the problem; 3) proposition of solutions; 4) comparison of the solutions; 5) selection of the solution; 6) implanting of the solution and 7) evaluation of the results.

During the first stage one can deal with data. At the second stage the data are organized, generating information. In stages 3 and 4 the information is linked to the context, generating intelligence. The fifth stage relates to the decision. The last two stages refer to the action. The activity of CI acts to support the decision. It is advisable, therefore, to place it in the stages from 1 to 4 of the decision-making process. The System of Responsibility refers to the location of the activities inherent to the obligation that a person has to do some thing for other(s) in a certain organization (Oliveira, 1997: 90). About this subject two important concepts should be considered: departmentalization and line/advisory.

Departmentalization		
CRITERION	TYPE	ORGANIZATIONAL UNITS
INTERNAL FUNCTIONS	CLASSICAL FUNCTIONS	Production, Finances, Marketing, Human Resources.
	ADMINISTRATIVE FUNCTIONS	Planning, Organizing, Control.
	AREAS OF KNOWLEDGE	Mechanics, Electricity, Hydraulics.
	PROCESS	Process phases of the industrial production.
MARKET	TERRITORIAL	
	STRATEGIC BUSINESS UNITS	Products Services
	CUSTOMERS	
	PROJECTS	
GRIDDED	Superposition of two or more types on the same person.	
MIXED	Different types in different parts of the organization.	
VIRTUAL	Structure adjustable to the needs of the moment and based on technological platform of communication.	

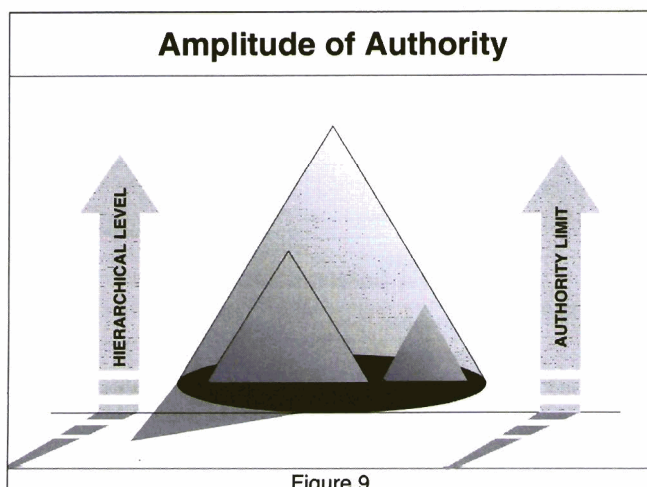
Figure 8

The departmentalization (see Figure 8) is the grouping of the activities and of the corresponding human resources in organizational units, according to some criterion of homogeneity. These criteria are basically two: internal functions and market. In the first criterion one can look inside the organization to see what generates types of departmentalization by function, by areas of knowledge, by process, etc. In the second criterion, one can look outside to see what generates territorial departmentalization, by strategic business units, by customers, by projects, etc. The mixture of those basic criteria generates gridded structures (superposition of two or more types on the same person) and mixed structures (different types in different parts of the organization). Nowadays, one can speak of virtual organizations², characterized by a structure adjustable to the needs of the moment and based on a technological platform of communication. It is advisable to place the activity of CI in organizations of the virtual type.

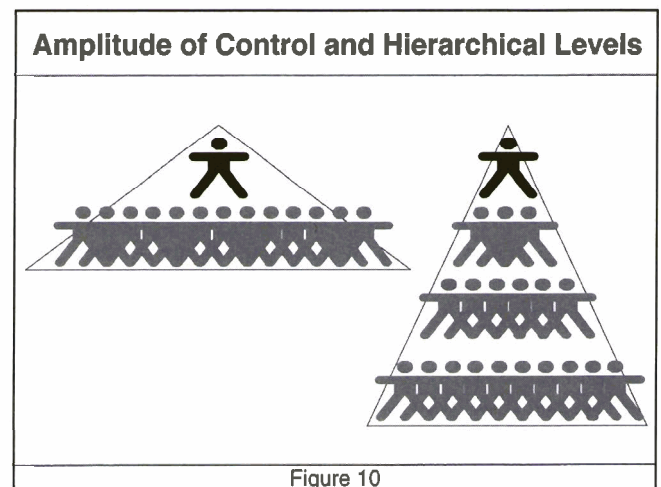
According to Oliveira (1997: 148-149) there are two forms of differentiating the concepts of line and advisory. In the first form, the line organizational units have 'command action' while the ones of advisory just 'advise' the first ones. In the second form, the line organizational units are linked to the 'end activities' while the advisory ones are linked to the 'means activities' of the organization. CI is a typical advisory activity, in any approach. It is advisable, therefore, to place the activity of CI as an advisory unit attached to the Executive Board of the organization.

The System of Authority is related to the right to do something: to make decisions, to command, to request obedience or, quite simply, to carry out a designated task (Jucius and Schelender, 1968: 234). Within this subject four important concepts should be considered: amplitude of authority, hierarchical/functional authority, amplitude of control, and formal/informal authority.

The larger the amplitude of authority (see Figure 9) is, the higher the individual's hierarchical level. The hierarchical authority follows the command lines



established by the structure while the functional authority corresponds to the authority established by the technical function exercised by the individuals. The amplitude of control (see Figure 10) refers to the number of individuals who are subordinated to a certain superior: the larger the number of hierarchical levels, the smaller the amplitude of control (for the same total number of individuals). Formal authority is that which was delegated by the immediate hierarchical superior while the informal is a kind of personal authority which 'is imposed by intelligence, by knowledge, by moral value, by talent for command, by experience' (Fayol apud Oliveira, 1997: 92). CI uses the informal aspect of the organizations a great deal, as will be seen following.



It is recommended that the activity of CI be placed close to the highest hierarchical level (maximum amplitude of authority) as advisory to individuals who have hierarchical authority, no matter what the amplitude of control is.

The System of Communications refers to the process through which a message is sent by a sender, through a certain channel, and understood by a receiver (Vasconcellos, 1972: 10). The two basic types of communication are the formal and the informal. Formal communication is consciously planned, facilitated, controlled and it follows the current of command of the hierarchical authority. Informal communication appears spontaneously, in reaction to the needs of the members of the organization.

Informal communication can be harmful to the organization when disclosing many rumours or when raising doubts and distrust in relation to the 'official' information. On the other hand, the informality allows a much more agile and rich communication. Because it has no commitment to accuracy and completeness, 'non-official' information can circulate in a still embryonic way through hierarchical barriers combining the most varied sources. Informal communication cannot be combatted, therefore, all opposition to the informal would only serve to take it

to a position further away from the formal position. Such a distance would cause a great loss of agility and wealth in communication. Thus, one can recommend the integration of leaders and decision-makers into the informal flow of communication by means of the use of such artifices as: the use of small 'coffee-break rooms', the elimination of physical barriers in making the physical layout adequate, the 'flattening' of the hierarchical structure, and the promotion of social events and sporting competitions. It is advisable, therefore, to base the activity of CI strongly on informal structure and communication.

Network structure

The current hyperinformation and hypercompetition context demands a high degree of agility and flexibility from organizations. The formal organizational structure, heavy and slow, has become an obstacle. The fundamental importance of the informal side of organizations for their appropriate operation leads one to propose a new kind of organizational structure, a network structure. In the same way, so that a System of Competitive Intelligence can be appropriate for this new organization, it should be based on an informal, multidisciplinary, and not hierarchical, network of specialists.

The Informal and not hierarchical network is for agility, flexibility and wealth. The network which is multidisciplinary and made up of specialists is to attend to the growing internal complexity of the organizations demanded by the high environmental turbulence. One of the possible formats is suggested here for these networks, formed by four actors: the providers, the analysts, the decision-makers, and the facilitator of the system (see Figure 11). Providers are the members of the network who act as 'receiving antennas', continually monitoring the trends of the environmental variables. These are curious and well informed people who have the ability to identify 'low frequency signals' and transmit them with clarity and

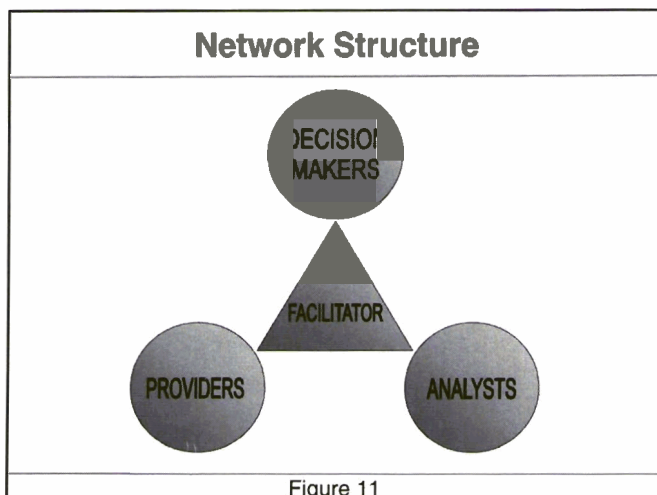


Figure 11

speed. Analysts are specialists in various areas of knowledge who are assembled to analyze 'strategic questions' in their fields of competence whenever such questions are identified. They are responsible for preparing analyses and drafting opinions to suggest lines of action to assist the decision-makers. Decision-makers are the beneficiaries and principal sponsors of a competitive intelligence system. They are responsible for the success or failure of the organization and are supported by the opinions of the analysts in making decisions. Facilitator, the manager of the system, watches over the operation and the speed of the network. He operates the competitive intelligence supporting system which involves data banks and softwares of automatic analysis of the information, suggests strategic questions to the top management, summons the specialists in the roster, coordinates the work of analysis and transmits the reports.

With the adoption of a network structure, the organization, that live and intelligent being, gets rid of the shackles of its formal, heavy, slow and inflexible structure, and it approaches the modern concepts of a virtual company and a real company (see Figure 12).

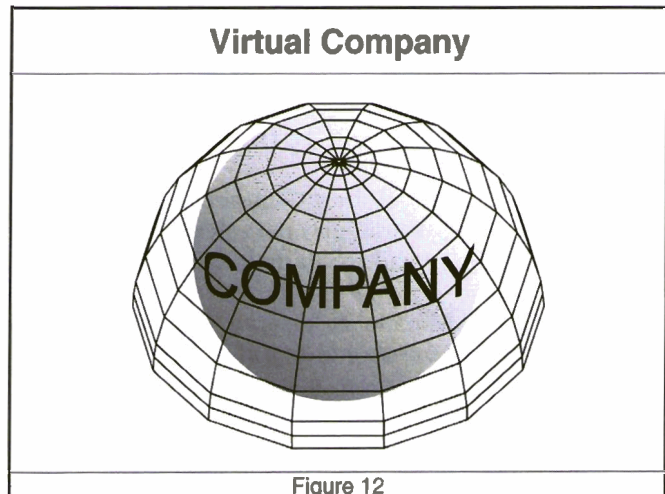


Figure 12

Conclusions

Summarizing the analysis developed above, one can conclude:

- The organizational environment is changing very quickly in function, mainly through two phenomena: hyperinformation and hypercompetition. Competitive Intelligence (CI) is an instrument that qualifies the companies to compete in an highly turbulent environment.
- The product of the activity of CI is analysed information to give support to the decision-making process.
- The complexity of the problems demands a multidisciplinary approach.
- Without the patronage of the decision-makers, the intelligence activity becomes innocuous.

- One can observe that CI has been entering the companies through its marketing and technology units. It is advisable, therefore, to place the activity of CI as an advisory unit attached to the main decision-makers of the organization.
- The planning unit, due to its having corporate scope and strategic influence, is advised to play the part of the Facilitator in the CI network.
- The formal structure of the organizations doesn't have enough agility and flexibility to accompany the speed of the changes. The activity of CI uses the informal structure, in the form of a multidisciplinary, and not hierarchical, network of specialists.
- The geographical dispersion of the network demands a technological platform of communication and this results in a Virtual Organization.

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Notes

1. According to Klein and Prusak (apud Stewart, 1998: 61), intellectual capital is the 'intellectual material that was formalized, captured and leveraged in order to produce assets of greater value'. On the other hand, for Edvinsson and Malone (1998: 40), 'the intellectual capital is the possession of knowledge, applied experience, organizational technology, relationship with customers and professional abilities that provide (...) a competitive advantage in the market'.
2. According to Porter (1993: 413) virtual companies are 'companies formed from electronically linked workers who remain employees of their regular firms'.
3. According to Ansoff and McDonnell (1993: 35-49), 'environmental monitoring identifies two types of information: 1) the High Frequency Signals which are sufficient to characterize clearly the strategic question, evaluate its impact and draw up specific reaction plans; 2) the Low Frequency Signals which are imprecise indications of important and imminent events. The Low Frequency Signals age with time and become high frequency signals. When the speed of change is high, some reaction becomes necessary when the signal is still weak'.
4. According to Milani (1998: 24) 'A strategic question is any environmental variable, internal or external to the organization, which can have a relevant and imminent impact on the pursuit of its objectives.'